

# National Academy of Agricultural Sciences



YEAR BOOK  
2021

### MISSION OF THE ACADEMY

*"To gain recognition as a credible think-tank to provide views of the scientific community on all agriculture related policy issues, to encourage talent and promote excellence in science, making it a powerful instrument for the growth of national economy with a vibrant farm sector."*

Compiled & Edited : Dr. Kusumakar Sharma  
: Dr. P.S. Birthal

Secretarial Assistance : Mr. P. Krishna  
: Ms. Minu Tiwari

Published by : Executive Director, on behalf of National Academy of Agricultural Sciences, NASC, DPS Marg, New Delhi - 110 012.

Printed by : Venus Printers and Publishers, B-62/8, Naraina Industrial Area, Phase - II, New Delhi - 28, Tel.: 011-45576780, Mob.: 9810089097, E-mail: pawannanda@gmail.com

# **YEAR BOOK 2021**



## **National Academy of Agricultural Sciences**

NASC, Dev Prakash Shastri Marg

New Delhi - 110 012, India

Tel: +91-11-25846051, 25846052; Fax: +91-11-25846054

Email: [naas-mail@naas.org.in](mailto:naas-mail@naas.org.in); Web site: [www.naasindia.org](http://www.naasindia.org)

# CALENDAR 2021

January 2021							February 2021							March 2021						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
31					1	2		1	2	3	4	5	6		1	2	3	4	5	6
3	4	5	6	7	8	9	7	8	9	10	11	12	13	7	8	9	10	11	12	13
10	11	12	13	14	15	16	14	15	16	17	18	19	20	14	15	16	17	18	19	20
17	18	19	20	21	22	23	21	22	23	24	25	26	27	21	22	23	24	25	26	27
24	25	26	27	28	29	30	28							28	29	30	31			

April 2021							May 2021							June 2021						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3							1		1	2	3	4	5	
4	5	6	7	8	9	10	2	3	4	5	6	7	8	6	7	8	9	10	11	12
11	12	13	14	15	16	17	9	10	11	12	13	14	15	13	14	15	16	17	18	19
18	19	20	21	22	23	24	16	17	18	19	20	21	22	20	21	22	23	24	25	26
25	26	27	28	29	30		23	24	25	26	27	28	29	27	28	29	30			
							30	31												

July 2021							August 2021							September 2021						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	1	2	3	4	5	6	7			1	2	3	4	
4	5	6	7	8	9	10	8	9	10	11	12	13	14	5	6	7	8	9	10	11
11	12	13	14	15	16	17	15	16	17	18	19	20	21	12	13	14	15	16	17	18
18	19	20	21	22	23	24	22	23	24	25	26	27	28	19	20	21	22	23	24	25
25	26	27	28	29	30	31	29	30	31					26	27	28	29	30		

October 2021							November 2021							December 2021						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
31					1	2		1	2	3	4	5	6			1	2	3	4	
3	4	5	6	7	8	9	7	8	9	10	11	12	13	5	6	7	8	9	10	11
10	11	12	13	14	15	16	14	15	16	17	18	19	20	12	13	14	15	16	17	18
17	18	19	20	21	22	23	21	22	23	24	25	26	27	19	20	21	22	23	24	25
24	25	26	27	28	29	30	28	29	30					26	27	28	29	30	31	

## LIST OF GOVERNMENT OF INDIA HOLIDAYS (Delhi/NCR Offices)

Republic Day	26 Jan	Tue	Muharram	19 Aug	Thu
Holi	29 Mar	Mon	Janmashtami	30 Aug	Mon
Good Friday	02 Apr	Fri	Mahatma Gandhi's Birthday	02 Oct	Sat
Ram Navami	21 Apr	Wed	Dussehra	15 Oct	Fri
Mahavir Jayanti	25 Apr	Sun	Milad-Un-Nabi or Id-E-Milad (Birthday of Prophet Mohammad)	19 Oct	Tue
Idu'lFitr	14 May	Fri	Diwali (Deepavali)	04 Nov	Thu
Buddha Purnima	26 May	Wed	Guru Nanak's Birthday	19 Nov	Fri
Id-ul-Zuha(Bakrid)	21 Jul	Wed	Christmas Day	25 Dec	Sat
Independence Day	15 Aug	Sun			



# CONTENTS

● EXECUTIVE COUNCIL 2021	iv
● SECRETARIAT	vi
● PAST OFFICE BEARERS	vii
● CALENDAR OF ACTIVITIES – 2021	ix
1. INTRODUCTION	1
1.1 Background	1
1.2 Objectives	1
1.3 Management Bodies	1
2. FELLOWSHIP	2
2.1 Fellowship	2
2.2 Guidelines for Award of Fellowship	2
2.3 Fellows Elected for 2021	2
2.4 Fellowship (Section-wise)	11
2.5 The Fellowship	21
2.6 Corporate Fellowship	124
2.7 Institutional Members	124
2.8 Fellows Deceased	126
3. NAAS ASSOCIATES	133
4. STATUTORY COMMITTEES	148
5. REGIONAL CHAPTERS	151
6. LINKAGES	159
7. MEDALS AND AWARDS	162
8. PROGRAMMES	167
8.1 Scientific Programmes upto 2020	167
8.2 Programmes for 2021	194
9. PUBLICATIONS	195
<b>Annexures</b>	
I Guidelines for Election of Fellows	203
I-A Guidelines for Award of Corporate Fellowship	206
I-B Guidelines for Award of Corporate Membership	207
I-C Guidelines for Award of Institutional Membership	208
I-D Guidelines for Associateship	209
II Guidelines for Academy Medals and Awards	210
III Guidelines for Organizing the Brainstorming Sessions (BSS)	213
IV Guidelines for Using Academy facilities	215
V TA/DA Rules of the Academy	216
VI Agricultural Science Congresses Organized	217

# EXECUTIVE COUNCIL - 2021

## PRESIDENT

**Dr. T. Mohapatra**  
(Delhi)

Off (011) 23382629, 23386711  
Cell 7840000542  
Fax (011) 23384773  
Email dg.icar@nic.in; tmnrcpb@gmail.com

## IMMEDIATE PAST-PRESIDENT

**Prof. Panjab Singh**  
(Varanasi)

Res (0542) 2575678  
Cell 9651666613  
Email panjabsingh03@yahoo.com; faardvaranasi@gmail.com

## VICE PRESIDENTS

**Dr. J.C. Katyal**  
(Gurugram)

Res (0124) 4148082  
Cell 9284755567, 8447806760  
Email jc\_katyal@rediffmail.com

**Dr. Anil K. Singh**  
(Delhi)

Cell 9425702142, 9873441488  
Email aksingh.icar@gmail.com

## SECRETARIES

**Dr. P.K. Joshi**  
(Noida)

Cell 9818506753  
Email pkj.ncap@gmail.com; pkj.in@outlook.com

**Dr. K.C. Bansal**  
(Gurugram)

Cell 9999105667  
Email kailashbansal@hotmail.com; kcbansal2001@yahoo.com

## FOREIGN SECRETARY

**Dr. U.S. Singh**  
(Delhi)

Cell 9958629944  
Email u.s.singh@cgiaar.org; umesh146@yahoo.com

## EDITORS

**Dr. P.S. BIRTHAL**  
(Delhi)

Cell 9910052752  
Email ps.birthal@icar.gov.in; psbirthal@yahoo.com

**Dr. Malavika Dadlani**  
(Delhi)

Res (011) 25120318,  
Cell 9868100549, 9899366565  
Email malavikadadlani.md@gmail.com;  
malavikadadlani@rediffmail.com

## TREASURER

**Dr. R.K. Jain**  
(Delhi)

Cell 9810887248  
Email rakeshjain56@yahoo.co.in

## MEMBERS

**Dr. Madhoolika Agrawal**  
(Varanasi)

Cell 9415628573  
Fax (0542) 2368174  
Email madhoo.agrawal@gmail.com

<b>Dr. J.S. Chauhan</b> (Jaipur)	Cell 9414025636, 7340219815 Email js_chau@yahoo.com; js_chau09@rediffmail.com
<b>Dr. M.S. Chauhan</b> (Karnal)	Off (0184) 2252800, 2259002 Cell 9991652455 Email chauhanabtc@gmail.com
<b>Dr. S.K. Datta</b> (Kolkata)	Cell 8768644777 Email swpndatta@yahoo.com
<b>Dr. Arvind Kumar</b> (Jhansi/Delhi)	Off (0510) 2730777 (Jhansi), (011) 25846034 (Delhi) Cell 9711008862 Email vcrlbcau@gmail.com
<b>Dr. W.S. Lakra</b> (Mumbai)	Cell 9920906001 Email lakraws@hotmail.com
<b>Dr. Rajender Parsad</b> (Delhi)	Off (011) 25841479 Res. (011) 25638564 Cell 9811647837 Fax (011) 25841564 Email rajender.parsad@icar.gov.in; rajender1066@yahoo.co.in
<b>Prof. A.R. Podile</b> (Hyderabad)	Off (040) 23132000, 20310121, (040) 23134503 (Lab) Cell 9100655777, 9490749922 Fax (040) 23010121 Email podilerao@gmail.com; podilerao@uohyd.ac.in
<b>Dr. (Ms) Taru Sharma</b> (Izatnagar)	Off (0581) 2301327 Cell 9412603840 Email gts553@gmail.com
<b>Dr. Brahma Singh</b> (Delhi)	Res (011) 22784782 Cell 9818313660 Email brahma88@gmail.com
<b>Dr. Rajeev K. Varshney</b> (Hyderabad)	Off (040) 30713305 Res (040) 30713674 Cell 9949994070 Fax (040) 30713074, 30713075 Email r.k.varshney@cgiar.org; varshney.raj@gmail.com
<b>Dr. R. Visvanathan</b> (Tamil Nadu)	Cell 9443129711, 7200029711 Email drrviswanathan@gmail.com; drrviswanathan@rediffmail.com
<b>Dr. Ch. Srinivasa Rao</b> ICAR Nominee (Hyderabad)	Off (040) 24015070, 24581350 Res (040) 24015654 Cell 9848848453 Fax (040) 24015912 Email chsrao_director@naarm.org.in; cherukumalli2011@gmail.com

## SECRETARIAT

<b>Executive Director</b>	Off	(011) 25846051-52 Ext. 103
<b>Shri Miraj Uddin</b> Budget and Accounts Executive	Off Cell	(011) 25846051-52 Ext. 115 9868215579
<b>Ms. Minu Tiwari</b> Programme Executive	Off Cell	(011) 25846051-52 Ext. 113 9313463853
<b>Shri P. Krishna</b> Programme Executive	Off Cell	(011) 25846051-52 Ext. 109 9899841800
<b>Shri Umesh Rai</b> Programme Executive	Off Cell	(011) 25846051-52 Ext. 114 9868904476
<b>Shri Jai Singh</b> Office Management Jr Executive	Off Cell	(011) 25846051-52 Ext. 110 9868552416
<b>Shri Banwari Lal Yadav</b> Driver cum Office Assistant	Off Cell	(011) 25846051-52 Ext. 107 9868215018
<b>Shri Kamal Singh</b> General Office Assistant	Off Cell	(011) 25846051-52 Ext. 111 9868991256

## PAST OFFICE-BEARERS

### **PRESIDENTS**

Prof. M.S. Swaminathan	01 Jan, 1992 to 31 Dec, 1996
Dr. R.S. Paroda	01 Jan, 1997 to 31 Dec, 2000
Prof. V.L. Chopra	01 Jan, 2001 to 31 Dec, 2004
Prof. M.S. Swaminathan	01 Jan, 2005 to 31 Dec, 2007
Dr. Mangala Rai	01 Jan, 2008 to 31 Dec, 2010
Prof. R.B. Singh	01 Jan, 2011 to 31 Dec, 2013
Dr. S. Ayyappan	01 Jan, 2014 to 31 Dec, 2016
Prof. Panjab Singh	01 Jan, 2017 to 31 Dec, 2019

### **VICE-PRESIDENTS**

Dr. N.S. Randhawa	01 Jan, 1992 to 25 Nov, 1996
Dr. R.S. Paroda	01 Jan, 1996 to 31 Dec, 1996
Prof. V.L. Chopra	10 Mar, 1997 to 31 Dec, 1999
Dr. J.S. Kanwar	10 Mar, 1997 to 31 Dec, 1999
Dr. K.L. Chadha	01 Jan, 2000 to 31 Dec, 2002
Dr. M.V. Rao	01 Jan, 2000 to 31 Dec, 2003
Dr. Panjab Singh	01 Jan, 2003 to 31 Dec, 2005
Dr. C.R. Bhatia	01 Jan, 2004 to 31 Dec, 2006
Dr. Mangala Rai	01 Jan, 2006 to 31 Dec, 2007
Dr. R.K. Singh	01 Jan, 2008 to 31 Dec, 2008
Dr. S.S. Acharya	01 Jan, 2007 to 31 Dec, 2009
Dr. H.K. Jain	01 Jan, 2009 to 31 Dec, 2011
Dr. S. Ayyappan	01 Jan, 2010 to 31 Dec, 2012
Dr. Lalji Singh	01 Jan, 2012 to 31 Dec, 2014
Dr. P.L. Gautam	01 Jan, 2013 to 31 Dec, 2015
Prof. Anupam Varma	01 Jan, 2015 to 31 Dec, 2017
Dr. C.D. Mayee	01 Jan, 2016 to 31 Dec, 2018
Dr. T. Mohapatra	01 Jan, 2019 to 31 Dec, 2019
Dr. A.K. Srivastava	01 Jan, 2018 to 31 Dec, 2020

### **SECRETARIES**

Prof. S.K. Sinha	01 Jan, 1992 to 31 Dec, 1995
Prof. Anupam Varma	01 Jan, 1992 to 31 Dec, 1998
Dr. N.C. Ganguli	01 Jan, 1992 to 31 Dec, 1999
Dr. Kirti Singh	01 Jan, 1999 to 31 Dec, 2001
Dr. K. Pradhan	01 Jan, 2000 to 31 Dec, 2002
Dr. R.P. Sharma	01 Jan, 2002 to 31 Dec, 2004
Dr. S. Ayyappan	01 Jan, 2003 to 31 Dec, 2005
Dr. R.K. Singh	01 Jan, 2005 to 31 Dec, 2007
Dr. M.L. Madan	01 Jan, 2006 to 31 Dec, 2008
Dr. P.K. Aggarwal	01 Jan, 2008 to 31 Dec, 2010
Dr. A.K. Srivastava	01 Jan, 2009 to 31 Dec, 2011
Prof. Anwar Alam	01 Jan, 2011 to 31 Dec, 2013
Dr. N.K. Singh	01 Jan, 2012 to 31 Dec, 2014

Prof. M.P. Yadav	01 Jan, 2014 to 31 Dec, 2016
Dr. K.V. Prabhu	01 Jan, 2015 to 31 Dec, 2017
Dr. J.K. Jena	01 Jan, 2017 to 31 Dec, 2019
Dr. A.K. Singh	01 Jan, 2018 to 31 Dec, 2020

### **EDITORS**

Dr. I. P. Abrol	01 Jan, 1992 to 19 Aug, 1995
Dr. V. Arunachalam	01 Jan, 1996 to 31 Dec, 1998
Dr. P.N. Bhat	01 Jan, 1996 to 31 Dec, 1998
Dr. K.L. Chadha	01 Jan, 1999 to 31 Dec, 1999
Dr. K. Gopakumar	01 Jan, 1999 to 31 Dec, 2001
Dr. H.K. Jain	01 Jan, 2000 to 31 Dec, 2002
Dr. J.C. Katyal	01 Jan, 2002 to 31 Dec, 2004
Dr. Y.P. Abrol	01 Jan, 2003 to 31 Dec, 2005
Dr. B.N. Johri	01 Jan, 2005 to 31 Dec, 2007
Dr. J.S.P. Yadav	01 Jan, 2006 to 31 Dec, 2008
Dr. Rajendra Prasad	01 Jan, 2008 to 31 Dec, 2010
Dr. P.S. Pathak	01 Jan, 2009 to 31 Dec, 2011
Dr. C. Devakumar	01 Jan, 2011 to 31 Dec, 2013
Dr. P.K. Chhonkar	01 Jan, 2012 to 31 Dec, 2014
Dr. (Ms.) Prem Dureja	01 Jan, 2014 to 17 May, 2015
Prof. V.K. Gupta	23 July, 2015 to 31 Dec, 2016
Dr. K.K. Vass	01 Jan, 2015 to 31 Dec, 2017
Dr. V.K. Bhatia	01 Jan, 2017 to 31 Dec, 2019
Dr. Kusumakar Sharma	01 Jan, 2018 to 31 Dec, 2020

### **FOREIGN SECRETARIES**

Prof. V.L. Chopra	01 Jan, 1992 to 31 Dec, 1997
Dr. R.B. Singh	01 Jan, 1998 to 31 Dec, 2000
Dr. G.S. Khush	01 Jan, 2001 to 31 Dec, 2003
Dr. S.M. Virmani	01 Jan, 2004 to 31 Dec, 2006
Dr. S.P. Ghosh	01 Jan, 2007 to 31 Dec, 2009
Prof. R.B. Singh	01 Jan, 2010 to 31 Dec, 2010
Dr. S.M. Virmani	01 Jan, 2011 to 31 Dec, 2015
Dr. P.K. Joshi	01 Jan, 2016 to 31 Dec, 2018

### **TREASURERS**

Dr. Prem Narain	01 Jan, 1992 to 31 Dec, 1997
Dr. J.P. Verma	01 Jan, 1998 to 31 Dec, 2000
Dr. B.S. Parmar	01 Jan, 2001 to 31 Dec, 2003
Dr. M.L. Lodha	01 Jan, 2004 to 31 Dec, 2006
Dr. P.K. Aggarwal	01 Jan, 2007 to 31 Dec, 2007
Dr. K.V. Prabhu	01 Jan, 2008 to 31 Dec, 2009
Dr. Suresh Pal	01 Jan, 2010 to 22 Aug, 2010
Dr. C. Devakumar	23 Aug, 2010 to 31 Dec, 2010
Dr. Himanshu Pathak	01 Jan, 2011 to 31 Dec, 2015
Dr. B.S. Dwivedi	01 Jan, 2016 to 31 Dec, 2018

## CALENDAR OF ACTIVITIES – 2021

Jan,1	Fri	- New Year Get Together; Release of Publications; Felicitation of outgoing EC Members
Feb, 19	Fri	- Executive Council Meeting (No. 116)
Mar, 31	Wed	- Last date of receipt of nominations for Fellowship/ Associateship
Apr, 16	Fri	- Executive Council Meeting (No. 117)
Jun, 4	Fri	- Executive Council Meeting (No. 118)
Jun, 5	Sat	- 28th Annual General Body Meeting and Foundation Day Programme
Jul, 31	Sat	- Last date for receipt of suggestions from Fellows for filling up vacancies of Office Bearers / Members of Executive Council
Sep, 14-15	Tue-Wed	- Meetings of Sectional Committees
Sep, 16	Thu	- Conveners' Group Meeting
Sep, 16	Thu	- Executive Council Meeting (No. 119)
Oct, 31	Sun	- Last date for receipt of ballots for election of Fellows / Executive Council Members
Nov, 12	Fri	- Executive Council Meeting (No. 120) (Pre ASC)
Nov, 25	Thu	- Executive Council Meeting (No. 121)





# 1. INTRODUCTION

## 1.1 Background

The **National Academy of Agricultural Sciences (NAAS)**, established in 1990, is among the youngest of the Science Academies in India. It owes its origin to the vision of the late Dr. B. P. Pal, FRS. The Academy focuses on the broad field of agricultural sciences including crop husbandry, animal husbandry, fisheries, agro-forestry and interface between agriculture and agro-industry. The Academy's role is to provide a forum to Agricultural Scientists to deliberate on important issues of agricultural research, education and extension and present views of the scientific community as policy inputs to planners, decision/opinion makers at various levels. To achieve this, the Academy organizes and supports national and international congresses, conferences, seminars, symposia, workshops and brainstorming sessions on critical issues in the field of agricultural sciences. The Academy accords recognition to scientists at various levels, and encourages cutting edge research in different fields of agricultural sciences. In 2001, the Academy instituted a scheme of NAAS-TATA Research Fellowships for Young Scientists (with one for the North East Region) with support from the Sir Dorabji Tata Trust. In 2003, 'Associateship' of the Academy was introduced for Young Scientists.

The Academy has emerged as a vibrant national level body devoted to agricultural sciences. The Fellows of the Academy, recognized for their contributions to science, include distinguished personalities in the field of Agriculture and Allied Sciences, both from India and abroad. The Academy has also established "Corporate Membership", "Corporate Fellowship" and "Institutional Membership" to attract involvement of Industry and Institutions in supporting the activities of the Academy.

## 1.2 Objectives

The major objectives of the Academy, inter-alia, are to:

- ◆ promote ecologically sustainable agriculture,
- ◆ recognize and promote excellence of individual scientists in the field of agriculture,
- ◆ promote interaction among research workers in different institutions and organizations within the country and with the world scientific community,
- ◆ organize inter-disciplinary analysis of issues of importance to farmers and farming, and prepare further policies designed to advance agricultural research, education and development
- ◆ carry out such activities as are relevant to the accomplishment of the above goals.

## 1.3 Management bodies

- ◆ The **General Body**: The *General Body of the Academy* is constituted by its Fellows. The details of the Fellowship are given in Chapter 2.
- ◆ The **Executive Council** is the main policy and decision-making body.
- ◆ **Statutory Committees** have been constituted to deal with various aspects of governance of the Academy as given in Chapter 4.
- ◆ **Twelve Regional Chapters** of the Academy are functioning at Barapani, Bengaluru, Bhopal, Cuttack, Coimbatore, Hyderabad, Karnal, Kolkata, Lucknow, Ludhiana, Pune and Varanasi

## 2. FELLOWSHIP

### 2.1 Fellowship

During 2020, thirty three new Fellows including two Foreign Fellows and two Pravasi Fellows were elected. Thus total number of Fellows as on 1.1.2021 (in the live register) has become 721, which include 57 Foreign Fellows, 11 Pravasi Fellow and one Corporate Fellow. Brief information about each Fellow is given in paras 2.3 to 2.7.

### 2.2 Guidelines for Award of Fellowships

The Fellows elected in accordance with the prescribed Rules and Regulations, constitute the General Body of the Academy. Detailed guidelines for the election of **Fellows** as approved by the Executive Council are given in **Annexure I**. With the approval of the General Body, new categories of **Corporate Fellows, Corporate Members and Institutional Members** were introduced in 1998, 2002 and 2015, respectively. The purpose of this initiative was to encourage and recognize corporate and other institutions who form an important component of the NARS family and provide strong support in terms of programmes and finances for furtherance of the objectives and activities of the Academy. Guidelines for election of these categories are given in **Annexure I-A, I-B and I-C**.

### 2.3 Fellows Elected for 2021

**Dr. Rakesh Chandra Agrawal** (*b 1 Jun, 1963*) Deputy Director General (Agricultural Education), Indian Council of Agricultural Research, New Delhi

Dr. Rakesh Chandra Agrawal is a leading Statistician and Biodiversity Informatics Expert of international repute. He has demonstrated leadership in the field of plant genetic resources (PGR) information documentation and dissemination, which resulted in creation of National Information Network of PGR in India (NISM). He initiated many processes in Plant Protection Variety & Farmers' Rights Authority for the benefit of the farmers, which resulted in recognition of more than 100 farmers and motivated others for submitting thousands of applications for seeking IPR on their varieties. Dr. Agrawal is the recipient of the first prestigious Dr. B.R. Barwale National Award for the Excellence in Plant Genetic Resources and Life Time Achievement Award for Community Mobilization for Sustainable Development.

**Dr. Dipak Ranjan Biswas** (*b 15 Apr, 1962*) Principal Scientist, Division of Soil Science and Agricultural Chemistry, ICAR-Indian Agricultural Research Institute, New Delhi

Dr. Biswas developed basic and applied nutrient management strategies as a viable option to improve soil fertility and fertilizer use, nutrient transformation, nutrient cycling for sustainable crop production and maintaining soil health under different crops and cropping systems. He synthesized a novel product of polymer coated controlled release formulation as promising slow release P-fertilizer for improving P use efficiency by crops. He developed a technology to solubilize insoluble K-minerals (waste mica) by K-solubilizing bacteria into plant available pools and used efficiently as potential K-fertilizer for wide-scale adoption. His significant contributions towards development of low-cost technology to prepare P and K enriched compost and value added organic manures could substitute 50% NPK fertilizers leading to crucial decision support to enhance crop production for efficient management of natural resources. He also assessed the impacts of long-term conservation agriculture practices on soil carbon accumulation and sequestration rates and appraised the oxidative stability and sequestration of SOC within soil aggregates.

**Dr. Indrajeet Chaubey** (*b 1 Jul, 1969*) Dean and Director, College of Agriculture, Health and Natural Resources, University of Connecticut, USA

Dr. Chaubey, an internationally recognized scientist, has made valuable contributions to improve water quality and watershed management by integrating research, teaching and public services. He has lead efforts nationally and internationally in quantifying how land use change due to recent demand for biofuel production, agricultural intensification and urbanization, will impact water availability, water quality and ecosystem services. His research has benefitted the modelling community by developing improved methods for model calibration and uncertainty analysis. He has been a leader in developing and strengthening collaboration with multiple institutions with an overall goal to improve agricultural and food production, environmental sustainability, human resource and economic development. He is a Fellow of ASABE, Arkansas Academy of Biological and Agricultural Engineering (AABAE) and ISAE and has received many awards for his outstanding contributions.

**Dr. S. Gopala Krishnan** (*b 12 Aug, 1976*) Principal Scientist (Plant Breeding), Division of Genetics, ICAR-Indian Agricultural Research Institute, New Delhi

Dr. Gopala Krishnan has made significant contributions towards basic and applied research in rice genetics and molecular breeding through development and release of nine rice varieties including six Basmati rice varieties, improved Pusa Basmati 1 (Improved PB1), PB 1509, PB 1609, PB 1637, PB 1728 and PB1718. These varieties account for 22.78% of total Basmati rice breeder seed indent and a revenue of 1.31 crores through commercialization. He has developed high-throughput screening protocols in rice and identified sources of Bakanae resistance, mapped QTLs governing bakanae resistance and grain quality, validated co-dominant marker for Pi9 (blast resistance).

**Dr. Sanjeev Gupta** (*b 16 Nov, 1964*) Project Coordinator, All India Coordinated Research Project (MULLaRP), ICAR-Indian Institute of Pulses Research, Kanpur, U.P.

Dr. Sanjeev Gupta has been involved in developing innovative crop varieties and useful information leading to advancement of genetics and breeding for the past 28 years. A total of 10 high yielding and most popular varieties of different crops were developed, five of which occupy top position based on area coverage. Wide hybridization tool has been extensively resorted to breed innovative plant types having better photo-thermo insensitivity in mungbean and urdbean. The impact of these varieties specially in revolutionizing the mungbean cultivation in newer niches in rabi/summer/spring is phenomenal. These efforts led to increase in area under mungbean in newer niches from 6.0 lakh ha to 10.0 lakh ha within last seven years.

**Dr. Vijai Kumar Gupta** (*b 19 Nov, 1981*) Associate Professor (Biochemistry), AgroBioSciences (AgBS) and Chemical & Biochemica Sciences (CBS) Department, Mohammed VI Polytechnic, University, Morocco

Dr. Vijai Kumar Gupta has made significant contributions in the area of bioactive natural products, microbial biotechnology, and glyco-biotechnology of microbe plant interactions. He has characterized the functional capacity of microbial enzymes/ proteins/ peptiabiobiotics/ glycans, and volatile compounds. He also elucidated the biotechnological potential of glycome-secretome interactions. Dr. Gupta has been interacting with scientists in several institutions in India. He is the editor of Microbiome BMC and Biotechnology Advances as well as Secretary of European Mycological Association. He has been elected Fellow of nine societies, including Academy of Microbiological Association, India and Linean Society, UK.

**Dr. Firoz Hossain** (b 11 Oct, 1975) Senior Scientist and Programme Leader (Maize), Division of Genetics, ICAR-Indian Agricultural Research Institute, New Delhi

Dr. Firoz Hossain has developed several nutritionally enriched maize hybrids, the most important being India's first multivitamin-rich maize genotype, 'Pusa Vivek QPM Improved' combining high quality protein with provitamin-A. In addition, he has also developed and got released three QPM hybrids, 'Pusa HM4 Improved', 'Pusa HM8 Improved' and 'Pusa HM9 Improved' and a sweet corn hybrid, 'Pusa Super Sweet Corn-1'. Dr. Hossain has combined opaque 2 and opaque 16 gene (s) for enhancing lysine and tryptophan levels, which further boosts the quality of maize endosperm protein. The closely linked markers for shrunken2 and sugary1 identified by him are being routinely used by sweet corn breeders.

**Dr. Dilip Jain** (b 26 Sep, 1961) Head and Principal Scientist (AS & PE), Division of Agricultural Engineering and Renewable Energy, ICAR-Central Arid Zone Research Institute, Jodhpur, Rajasthan

Dr. Dilip Jain has done commendable work on solar thermal engineering used for agriculture and modelling in food processing. He propounded complex theoretical concepts of heating and cooling in green houses and proved their utility in different agro-climatic zones for growing of fruits, vegetables and floriculture, crops drying and aquaculture. Dr. Jain pioneered the idea of solar crop dryers with energy storage and developed a solar dryer with thermal-energy-storage using phase-change-material for extending solar drying operation after sunset hours. He developed, commercialized and launched a green chilli puree and powder which added new concept in spice industry. Based on his basic research on fish cooling and drying, he designed and developed a mobile cool chamber on cycle rickshaw for cooling, storage, transport and marketing of fish.

**Dr. Sudisha Jogaiah** (b 29 Sep, 1974) Assistant Professor and Co-ordinator, Plant Healthcare and Diagnostic Center, PG Department of Biotechnology and Microbiology, Karnatak University, Dharwad, Karnataka

Dr. S. Jogaiah made significant contributions in understanding the molecular mechanisms of rhizosphere fungi mediated/induced systemic resistance (ISR) underlying SA/JA/ET cross talk, and developed biocontrol strategies for tomato and other vegetable crops. The formulation developed with a locally effective *Trichoderma* isolate has become popular with the farmers in Dharwad region. Dr. Jogaiah is also involved in the development of bio-priming for disease management, and deposited two ISSR sequences of pearl millet downy mildew in NCBI. He has also identified an actinomycete producing proteolytic enzyme associated with the induction of resistance to pearl millet to downy mildew. He has established Plant Health Care Centre at Karnataka University, Dharwad, which is helping the farmers in disease management of important crops grown in this region.

**Dr. Pandian Krishnan** (b 26 Jul, 1973) Principal Scientist, Division of Research Systems Management, ICAR-National Academy for Agricultural Research Management, Hyderabad, Telangana

Dr. Krishnan has worked extensively in the area of coastal zone management. He coordinated a national study for mapping coastal ecosystems and sensitivity thresholds along the Indian coast including the Islands, which has been integrated by Government of India in regulatory and management frameworks. He also contributed in building the coastal and marine biodiversity integration network database with futuristic features. He developed sea surface height based augmented PFZ advisories for fishermen. He also developed sustainable fisheries development plan for Lakshadweep, which has been notified by Government of India.

**Dr. Prameela Krishnan** (*b 24 May, 1967*) Head, Division of Agricultural Physics, ICAR-Indian Agricultural Research Institute, New Delhi

Dr. P. Krishnan has made pioneering contributions in digital agriculture, towards exploring crop simulation models for their multifaceted abilities as Decision Support Systems. She assessed the impact of climate change on crop production and identified the limitations on rice yield imposed by high CO<sub>2</sub> and temperature stress using crop simulation modelling; and reported significant role of adjusting planting date and developing cultivars with less spikelet sterility under high temperature stress as the best adaptation strategies to combat global warming. She demonstrated the successful application of crop simulation models to manage moisture, temperature and nutrient stress, which saved time and cost of conducting rigorous experimentations at different multi-locations. A web based crop simulation model was developed using InfoCrop - wheat that could simulate the crop management strategies, stress effects like moisture, temperature, CO<sub>2</sub> and nitrogen stress on wheat.

**Dr. Devendra Ram Malaviya** (*b 1 Jul, 1958*) Head & Principal Scientist, Crop Improvement Division, ICAR-Indian Institute of Sugarcane Research, Lucknow, U.P.

Dr. D.R. Malaviya has contributed towards forage crop improvement and seed technology. Interspecific hybrid through embryo rescue in Trifolium, guinea grass ploidy series and partitioning apomixis components are the first report. He has developed varieties of Berseem, guinea grass and Pennisetum interspecific hybrid. Novel genetic stocks of Berseem, guinea grass and pearl millet are significant for strategic research. He has to his credit the salt/shade tolerant lines of different grasses, Berseem and Oat. Interspecific transfer of desirable genes in Trifolium, maize, Pennisetum and Lens; partitioning of apomixis components in Pennisetum and Panicum; Hybridization-supplemented Apomixis-components Partitioning Approach; species relationship; sexual lines of grasses and forage PGR activities have been his focused area of research.

**Dr. Suseela Mathew** (*b 7 Apr, 1962*) Principal Scientist & Head, Biochemistry & Nutrition, ICAR-Central Institute of Fisheries Technology, Cochin, Kerala

Dr. Suseela Mathew has contributed significantly in the areas of nutritional biochemistry, marine biomolecules and biomaterial sciences. She is involved in elucidating the mechanisms of action of marine biomolecules as potential therapeutic drugs against diseases and disorders associated with aging and developed/ commercialized many high value products like collagen-chitosan membrane, iron-calcium enriched fish soup powder for combating malnutrition, seaweed nutri-drink, squalene, oyster peptide extract, collage peptide, etc., as food supplements and nutraceuticals.

**Dr. Vinay Kumar Mishra** (*b 3 Apr, 1963*) Principal Scientist & Head, ICAR-Central Soil Salinity Research Institute, Regional Research Station, Dilkusha, Lucknow, U.P.

Dr. Vinay Kumar Mishra has been the team leader for development of protocol for sodic land reclamation, use of industrial wastes as alternate source of gypsum, resource conservation practices, land modification for harnessing the production potential of water logged sodic soil, under climate resilient agriculture. He made significant contribution in development of integrated nutrient management for calcareous soil and consortia of salt tolerant microbial isolates cultured in a patented media (CSR-BIO) for increasing plant tolerance to sodicity. He has developed micro rain water harvesting structure (Jalkund) for hilly ecosystem of north eastern region and underground taming/transfer of floods for irrigation (UTFI) technology in dark zone areas and played an important role in development of salt tolerant rice and wheat varieties.

**Dr. Abhijit Mitra** (b 12 Nov, 1965) Director, ICAR-NRC on Mithun, Mexziphema, Dimapur, Nagaland

Dr. Abhijit Mitra an innovative researcher and an excellent teacher. He gave a better understanding of the genetic mechanisms underlying the expression of complex phenotypes, namely maternal recognition of pregnancy, host's genetic resistance and RNAi strategy for higher muscle growth. His significant contribution is in developing a novel and first-ever protocol of sperm/testes-mediated gene transfer for producing transgenic goat, which has received good peer recognition for its potential applications in future livestock improvement programmes.

**Dr. Manoranjan Mohanty** (b 18 Mar, 1972) Principal Scientist, ICAR-Indian Institute of Soil Science, Bhopal, M.P.

Dr. Mohanty simulated N release from the complex Indian farmyard manure using APSIM model which is of great importance in simulating nutrient dynamics in crops and cropping systems for integrated nutrient management and as well as for organic farming. He has developed a new methodology and software (SQI CAL) for soil quality index for rice-wheat cropping system considering the importance of zero-tillage and residue application on soil quality. Dr. Mohanty standardized tillage and crop residue management practices for improving water storage and transmission characteristics, soil quality and productivity of Vertisols. He developed enriched Phospho-Sulpho-Nitro compost technology for sustaining productivity and soil health. He also developed farmers' participatory integrated nutrient management technology using a novel concept of Mother - Baby Trial approach to enhance the productivity of soybean-wheat system under balanced and integrated nutrient management on black soils of Madhya Pradesh

**Dr. Pulok Kumar Mukherjee** (b 12 Dec, 1968) Director, Institute of Bioresources and Sustainable Development, A National Institute under DBT, Ministry of Science and Technology, Govt. of India, Takyelpat, Imphal, Manipur

Dr. PK Mukherjee has made significant contributions for understanding metabolomic approaches for quality evaluation of Indian medicinal and aromatic plants (IMAPs), pharmacovigilance, safety surveillance, and risk assessment. Dr. Mukherjee has studied chemoprofiling of medicinal plants for quality evaluation and their exploration for Alzheimer's disease based on Acetyl cholinesterase inhibition, anti-HSV and anti-HIV potential. He has transferred the technologies to several industries and the products have been marketed. He has made significant contributions in the area of Ethnopharmacology.

**Dr. Ravendra Naidu** (b 26 May, 1954) CEO and Managing Director, CRC CARE and Global Innovation Chair &, Faculty of Sciences, The University of, Newcastle (UON), University Drive, Australia

Dr. Naidu is a world leader in soil and environmental science and remediation of contaminated land. His pioneering innovative technologies have been extensively demonstrated in India and Bangladesh for arsenic and cadmium contaminated sites. Developed organic and metal contaminant bioavailability standard operating procedures that have been adopted as a National Measure in Australia. His scientific leadership has changed the way governments and industry deal with agricultural and industrial pollution, leading to widespread adoption of risk-based management of impoverished agricultural and contaminated land. He has established a critical mass of resources and human capital in Cooperative Research Centre for Contamination Assessment and Remediation of the Environment, Global Contamination Assessment and Remediation Alliance, Cooperative Research Centre for High Performance Soils, Global Centre for Environmental Remediation (the University of Newcastle) and these centres have produced 130 PhD and also provided training to 4,000 environmental managers.

**Dr. Manjanath Krishnappa Naik** (b 1 Jul, 1961) Vice Chancellor, University of Agricultural and Horticultural Sciences, Navile, Shivamogga, Karnataka

Dr. M. K. Naik has made significant contributions in identification of fluorescent strains of *Pseudomonas* possessing antibiotic genes, 2,4 DAPG, phenazine, pyrrolnitrin, pyoluteorin and pyoverdine. He has demonstrated the potential of PGPR strains as critical inputs on over 18,000 ha in the farmers' fields, and of *Azotobacter* species for biodegradation of pesticides; and identified three new races of *Fusarium udum* infecting pigeon pea and two new races of *F. solani* infecting chilli. He identified structural and functional genes for biosynthesis of aflatoxin and contributed to the development and release of rice varieties KPR-1 - moderately resistant to blast and tolerant to stem borer and BPH; KHP-13 - moderately resistant to blast disease, processing tomato variety PTR-6 - resistant to early blight and leaf curl, and chili varieties, KDC-1 and Bhagyaxlaxmi - resistant to anthracnose. He also contributed for the development of e-SAP - a novel ICT based expert system for real time diagnosis, which has been adopted in >1.0 lakh ha in 24 crops of Karnataka.

**Dr. B. Maheswarappa Naveena** (b 21 Jun, 1974) Principal Scientist, ICAR-National Research Centre on Meat, Chengicherla, Hyderabad, Telangana

Dr. Naveena B. Maheswarappa has contributed significantly in the area of proteomic tools for understanding muscle food quality, lipid-protein interaction and identified protein biomarkers for meat colour and texture. He has developed proteomic-based technology for authentication of meat in mixes up to 0.5% level as an alternative to DNA-based techniques. Dr. Naveena has collaborated with five industries for development, validation and commercialization of many meat processing technologies besides ensuring more than 25 MoU's with entrepreneurs for technical know-how of value-added meat products. He is involved in developing FSSAI standards for meat and poultry products and has also contributed for policy issues related to meat sector activities in the country.

**Dr. C.M. Parihar** (b 10 Oct, 1976) Senior Scientist, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi

Dr. Parihar has pursued innovative and pioneering research on sustainable intensification of agriculture and management of natural resources through conservation agriculture (CA). His researches focused on the use of crop residue recycling for C-sequestration and thermal sensitivity of sequestered-C at elevated temperature along with GHGs emission from soil, which have been very useful in quantification of environmental footprints. Dr. Parihar validated the utility of the Nutrient Expert decision support tool to guide site-specific nutrient management (SSNM) and explored the potential of the various slow release N fertilizer sources in maize-based cropping systems under conservation agriculture, leading to enhanced nutrient, water and energy use efficiency. As a team member, Dr. Parihar has also contributed significantly to the development of six single cross maize hybrids. He has also been associated with the development and registration of two unique maize germplasm lines (DQL 1019 and DML 339) for charcoal rot resistance in QPM and normal genetic back grounds, respectively.

**Dr. Hugh W. Pritchard** (b 10 May, 1957) Principal Scientific Officer, Royal Botanic Gardens, Kew, West Sussex, U.K.

Dr. Pritchard has done significantly advanced work on wild species, Crop Wild Relatives (CWR) and crop seed quality. He is an acknowledged world expert in his field, editing and reviewing hundreds of scientific papers, conducting four reviews of the GCIAR gene banks as a consultant for the Crop Trust, acting as special advisor to Technology Crops International, serving twice as a reviewer of gene bank science for the USDA, and undertaking Governor's

role at the Writtle University College, U.K. He has also collaborated, through two recent EU projects (c. € 3 m each), with seed companies, including Syngenta and Limograin. His research-led teaching to hundreds of scientists in c. 30 countries has been supported by competitive grants from the Darwin initiative (x4) and the Newton Fund (Σ 0.8 m). He has participated regularly in training Indian Scientists in India on plant genetic resources utilization by modern tools and in collaboration with NBPGR.

**Dr. Hifjur Raheman** (b 4 May, 1962) Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur, W.B.

Dr. Raheman has made significant contributions in research and development of agricultural machinery and production and use of biodiesel. A few of his notable achievements are use of tracks for improving tractive ability of power tiller; robotic arm for vegetable transplanter; development of sensor for detecting seed flow and choking of seed delivery tubes of seed drill; solar energy operated paddy thresher; electric reaper for cereal crops; production and utilisation of biodiesel from mixture of non-edible oils; and generation of biogas and electricity from jatropha seed cake.

**Dr. Nagendra Rai** (b 1 Mar, 1964) Principal Scientist, ICAR-Indian Institute of Vegetable Research, P.B. No. 01, P.O. Jakhini, Shahanshapur, Varanasi, U.P.

Dr. N. Rai has developed 08 varieties of tomato, 04 hybrids of brinjal, 04 of French bean, 06 of Indian bean and 02 of cowpea. He identified promising lines of tomato resistant to root knot nematode, heat tolerance upto 40 °C, high lycopene content and DYMV tolerance. These varieties are commercialized and cultivated by the farmers of Chhattisgarh, Tamilnadu, Assam, West Bengal, Bihar, Punjab and Jharkhand. He has four books to his credit. He is Fellow of four societies including Horticulture Society of India. Dr. N. Rai is a recipient of Dr. Kirti Singh Life Time Achievement award, Dr. Harabhajan Singh Memorial Award and Young Scientist Award.

**Dr. Mahender Singh Saharan** (b 10 Jun, 1967) Principal Scientist, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi.

Dr. M.S. Saharan has made significant contributions in the development of 14 disease-resistant varieties and 18 genetic stocks of wheat. He has also studied pathogenic and genetic variation of the pathogen, *Tilletia indica* isolates/monosporidial lines causing Karnal bunt of wheat. By evaluating > 50,000 wheat lines, multiple disease-resistant sources were identified. He has mapped HD 2189 / Agra Local population for leaf rust. Sequenced *Tilletia indica* and *Bipolaris sorokiniana* genomes, and deposited 37 sequences of wheat pathogens in NCBI. He has also studied genetics of resistance in linseed to powdery mildew, in guar to *Alternaria* blight, and in wheat to Karnal bunt and head scab. Dr. Saharan has developed prediction models for *Alternaria* blight of guar and powdery mildew of linseed, and management strategies for controlling wheat diseases.

**Dr. Neelamraju Sarla** (b 22 Apr, 1955) ICAR National Professor (Retired), ICAR-Indian Institute of Rice Research, Hyderabad, Telangana

Dr. Sarla has made significant contributions to basic and applied areas of crop genetics and biotechnology especially functional genomics in rice using wild species, mutants and recombinant inbred lines to improve yield, quality and abiotic stress tolerance. Several quantitative trait loci, candidate genes and novel microRNAs were identified for complex traits such as yield, iron and zinc in grains and blast tolerance. Two varieties using wild species were released for high yield in normal (DRR Dhan40) and coastal saline (Chinsurah Nona2Gosaba6) areas. She developed innovative methods to overcome incompatibility



among Brassica species and its wild relatives, germinate pigeon pea pollen in vitro and screen rice lines for tolerance to heat and low phosphorus in soil.

**Dr. Ashish Kumar Singh** (b 22 Apr, 1972) Principal Scientist & In-charge, Business Planning and Development Unit, Dairy Technology Division, ICAR-National Dairy Research Institute, Karnal, Haryana

Dr. Ashish Kumar Singh has contributed significantly in the areas of dairy by-product utilization, technological development for composite dairy foods, process development for functional dairy foods and nutraceuticals. He is among the pioneer in initiating the research on non-thermal processes including HHP & PEF for preservation and quality improvement of milk and other dairy products. Dr. Ashish has developed an extension model for strengthening the dairy value chain by promoting the processing at the producer's level. He is coordinating the entrepreneurship development programme and mentored more than 100 startups in establishing their business venture through technology transfer, consultancy, capacity building and business incubation. Dr. Ashish has developed and commercialized several technologies, and credited with linking the research to end users.

**Dr. Brajesh Singh** (b 16 Nov, 1970) Principal Scientist & Head, CPB & PHT Division, ICAR-Central Potato Research Institute, Shimla, H.P.

Dr. B. Singh has developed low cost technology for small-scale entrepreneurship and commercialization of potato chips, and low sugar potatoes. Besides, he has also developed storage technologies for various potato products. He developed protocols for nutritional profiling of potatoes, including the estimation of chlorophyll residues, glycoalkaloids, and flavouring compounds etc. specially for potato sector market in the country. Dr. Singh is a recipient of Dr. J.C. Anand Memorial gold medal in post-harvest technology and associateship of the National Academy of Agricultural Sciences.

**Dr. Dheer Singh** (b 14 Jun, 1966) Head, Animal Biochemistry Division, ICAR-National Dairy Research Institute, Karnal, Haryana

Dr. Dheer Singh, a distinguished biochemist and Fellow of the National Academy of Science India, has contributed significantly in the area of fundamental research addressing reproductive problems in buffalo. He has the credit of characterizing and elucidating regulation of *buffalo Cyp 19A1* gene encoding a rate limiting enzyme P450<sub>arom</sub> involved in biosynthesis of one of most important hormones, estrogen (E<sub>2</sub>) essentially required for efficient female reproduction, performance. He developed methods like salivary fern pattern-based estrus detection, developed and patented primers for a PCR based detection of *Ureaplasma diversum* for screening the animals with sub-clinical uterine diseases and developed and patented a peptide based Luteinizing hormone antibody for developing an easy and affordable strip based nanobiosensor for ovulation prediction at farmers' door for timely artificial insemination to improve conception.

**Dr. Naveen Prakash Singh** (b 15 Jul, 1970) Principal Scientist, ICAR-National Institute of Agricultural Economics and Policy Research (NIAP), New Delhi

Dr. Naveen P Singh's scientific research has largely concentrated on frontiers in agricultural economics research including agricultural marketing, price analysis, impact assessment and climate change adaptation. His research outputs have contributed to the evolution of several effective strategic plans and policies towards refining methodology for forecasting agricultural commodity prices, technology adoption and impact assessment, strengthening alternate MSP mechanism and strategies for doubling farmers' income. Further, his contributions are helping in developing farm practices and technologies suiting to different

agro-ecologies and mainstreaming of climate change adaptation into developmental programmes.

**Dr. Ram Kewal Singh** (*b 31 Mar, 1962*) Assistant Director General (CC), Indian Council of Agricultural Research, New Delhi

Dr. R.K. Singh has contributed significantly in the field of genetics, genomics & molecular breeding. He was instrumental in developing SSR markers linked to important traits in wide range of crops. He bred two KTI free soybean and three genetic stocks through MAS and developed mutants in black gram to enhance the yield potential. The KTI free lines have been commercialized for production of quality soya food products. He has also developed four sugarcane varieties which are very popular among the farmers. Likewise mapping of fertility restorer gene expedited hybrid breeding. For the first time ever, his efforts on development and utilization of novel functional SSR and conserved intron scanning markers in GWAS identified putative candidate gene(s) resistant to red rot in sugarcane.

**Dr. Gavaravarapu Maruthi Subbarao** (*b 18 Feb, 1975*) Scientist E (Communication), Group Leader, Communication & Extension, Extension & Training Division, ICMR-National Institute of Nutrition, Hyderabad, Telangana

Dr. G.M. Subbarao has widened the scope of the field of nutrition extension by pursuing research in nutrition and food safety communication, nutrition policy and advocacy for risk perceptions and risk communication. His research work critically evaluated the use of different methods and communication tools to promote nutrition in agricultural and rural community settings. Further, he is actively involved in development of Mobile App which can provide values of a large number of raw foods and recipes and Braille nutrition education materials for the benefit of the visually challenged people. His studies using Group Quizzes and Folk Media was featured as Great Education Material by the International Journal of Nutrition Education and Behaviour.

**Dr. (Ms.) Subbaraya Uma** (*b 1 Jun, 1962*) Director, ICAR-National Research Center for Banana, Trichy, Tamil Nadu

Dr. Uma has been instrumental in developing technology for conservation and commercialization of banana. She has developed DUS guidelines for banana for registration with PPV & FRA. She has also developed banana varieties, Kaveri and Sugandham. Her significant contribution to develop protocol for export quality of banana for transit of 35 days is well-recognized. She has received a number of awards including Biodiversity conservation award, J.C. Bose memorial award, Dr. G.L. Chadha Memorial award, Dr. M.H. Marigowda National Award etc. She had been Chair of Banana Network for Pacific Asia.

## 2.4 Fellowship (Section-wise)

**Section I - Crop Sciences**, covering Genetics and Plant Breeding, Plant Genetic Resources, Plant Biotechnology, Plant Physiology, Plant Biochemistry and Seed Technology

(182 Fellows)

1. Dr. P.K. Agrawal
2. Dr. V. Arunachalam
3. Dr. P.N. Bahl
4. Dr. H.S. Balyan
5. Dr. S.S. Banga
6. Dr. K.C. Bansal
7. Dr. S.C. Bhargava
8. Dr. C.R. Bhatia
9. Dr. Niranjan Chakraborty
10. Dr. (Ms) Subhra Chakraborty
11. Dr. Amaresh Chandra
12. Dr. R. Chatrath
13. Dr. J.S. Chauhan
14. Dr. J.B. Chowdhury
15. Prof. E.C. Cocking
16. Dr.(Ms) Malavika Dadlani
17. Dr. (Ms) Karabi Datta
18. Dr. S.K. Datta
19. Dr. H.S. Dhaliwal
20. Dr. M.K. Dhar
21. Dr. B.S. Dhillon
22. Dr. William Erskine
23. Dr. K.N. Ganeshaiah
24. Dr. P.L. Gautam
25. Dr. Bikram Singh Gill
26. Dr. S. Gopala Krishnan
27. Dr. Govindjee Govindjee
28. Dr. C.L.L. Gowda
29. Dr. Andreas Graner
30. Prof. P.M. Gresshoff
31. Dr. Anil Grover
32. Dr. H.S. Gupta
33. Prof. P.K. Gupta
34. Dr. Sanjeev Gupta
35. Dr. (Ms) Vidya Shrikant Gupta
36. Dr. R.R. Hanchinal
37. Dr. (Ms.) G. Hemaprabha
38. Dr. (Ms) Shailaja Hittalmani
39. Dr. F. Hossain
40. Dr. Zhai Huqu
41. Dr. A.M. Ismail
42. Dr. Mukesh Jain
43. Dr. K.K. Jena
44. Dr. A.K. Joshi
45. Dr. L. Kant
46. Dr. A.M. Kayastha
47. Prof. P.C. Kesavan
48. Dr. B.M. Khadi
49. Dr. (Ms) Renu Khanna-Chopra
50. Dr. S.P.S. Khanuja
51. Dr. A.S. Khehra
52. Dr. P.K. Khosla
53. Dr. J.P. Khurana
54. Prof. (Ms) Paramjit Khurana
55. Dr. G.S. Khush
56. Prof. P.B. Kirti
57. Prof. P.B. Kavi Kishor
58. Dr. S.L. Kothari
59. Dr. Arvind Kumar
60. Dr. Jagdish Kumar
61. Dr. Anand K. Kumar
62. Dr. M. Udaya Kumar
63. Dr. P. Ananda Kumar
64. Dr. Sanjay Kumar
65. Dr. Sushil Kumar
66. Prof. A.N. Lahiri Majumder
67. Prof. Wang Lianzheng
68. Dr. M.L. Lodha
69. Dr. M. Mahadevappa
70. Dr. D.R. Malaviya
71. Dr. C.P. Malik
72. Dr. S.S. Mehetre
73. Dr. S.L. Mehta
74. Dr. A.E. Melchinger
75. Dr. B. Mishra
76. Dr. Madan Mohan
77. Dr. T. Mohapatra
78. Dr. K.M. Naidu
79. Dr. Suresh Nair
80. Dr. G.S. Nanda
81. Dr. Y.S. Nerkar
82. Dr. Henry T. Nguyen

83. Dr. D. Pal
84. Dr. L.M.S. Palni
85. Dr. G.K. Pandey
86. Dr. M.P. Pandey
87. Dr. Ashwani Pareek
88. Dr. A.K. Parida
89. Dr. S.K. Parida
90. Dr. R.S. Paroda
91. Dr. J.V. Patil
92. Dr. S.E. Pawar
93. Prof. Deepak Pental
94. Dr. K.V. Prabhu
95. Dr. A.K. Pradhan
96. Dr. S.K. Pradhan
97. Dr. Manoj Prasad
98. Dr. B.M. Prasanna
99. Dr. (Ms) Shelly Praveen
100. Dr. H.W. Pritchard
101. Dr. A.N. Purohit
102. Prof. A.S. Raghavendra
103. Dr. Mangala Rai
104. Dr. S.K. Raina
105. Prof. M.V. Rajam
106. Dr. Sanjaya Rajaram
107. Dr. Ram Rajasekharan
108. Dr. Bakshi Ram
109. Dr. B.S. Rana
110. Dr. J.C. Rana
111. Dr. (Mrs.) G.J. Randhawa
112. Dr. P.K. Ranjekar
113. Dr. S.K. Rao
114. Dr. G.A. Ravishankar
115. Dr. A.K. Roy
116. Dr. R.C. Sachar
117. Dr. S.V. Sai Prasad
118. Dr. P.M. Salimath
119. Dr. J.S. Sandhu
120. Dr. P.V. Sane
121. Dr.(Ms) Neelam S. Sangwan
122. Dr. R.S. Sangwan
123. Dr. Debabrata Sarkar
124. Dr. K.R. Sarkar
125. Dr. N. Sarla
126. Dr. R.N. Sawhney
127. Dr. A. Seetharam
128. Dr. N. Seetharama
129. Dr. Balram Sharma
130. Dr. (Ms) Manju Sharma
131. Dr. P.C. Sharma
132. Dr. R.P. Sharma
133. Dr. S.K. Sharma
134. Dr. A.K. Shasany
135. Dr. I.S. Sheoran
136. Prof. K.R. Shivanna
137. Dr. E.A. Siddiq
138. Dr. K.H.M. Siddique
139. Dr. Anurudh K. Singh
140. Dr. Ashok K. Singh
141. Dr. B.B. Singh
142. Dr. B.B. Singh
143. Dr. Dhan Pal Singh
144. Dr. G.P. Singh
145. Dr. Kuldeep Singh
146. Dr. K.H. Singh
147. Dr. N.K. Singh
148. Dr. Narendra P. Singh
149. Dr. Rakesh K. Singh
150. Prof. R.B. Singh
151. Dr. Ram J. Singh
152. Dr. Ram K. Singh
153. Dr. Ram Kewal Singh
154. Dr. Randhir Singh
155. Dr. Rangil Singh
156. Dr. Ravi Prakash Singh
157. Dr. V.P. Singh
158. Dr. M. Sivasamy
159. Dr. S.K. Sopory
160. Dr. S.R. Sree Rangasamy
161. Dr. N.C. Subrahmanyam
162. Dr. R.M. Sundaram
163. Prof. M.S. Swaminathan
164. Dr. S.P. Tiwari
165. Dr. S.M.S. Tomar
166. Prof. B.C. Tripathy
167. Dr. P.K. Trivedi
168. Dr. Shigesaburo Tsunoda
169. Dr. Rakesh Tuli
170. Dr. Narendra Tuteja
171. Dr. Akhilesh K. Tyagi
172. Dr. H.D. Upadhyaya
173. Dr. R.K. Varshney
174. Dr. S.K. Vasal

175. Dr. Vinod  
176. Dr. B.C. Viraktamath  
177. Dr. D.S. Virk  
178. Dr. S.S. Virmani

179. Dr. Chinnusamy Viswanathan  
180. Dr. O.P. Yadav  
181. Dr. Sudesh Kumar Yadav  
182. Dr. D.K. Yadava

**Section II - Horticultural Sciences**, covering Fruit Science, Vegetable Science, Ornamental Horticulture & Landscape Gardening, Plantation Crops and Spices, Medicinal and Aromatic Crops (improvement, production and biotechnology)

*(46 Fellows)*

- |                               |                         |
|-------------------------------|-------------------------|
| 1. Dr. T.K. Behera            | 24. Dr. D. Prasath      |
| 2. Dr. D.R. Bhardwaj          | 25. Dr. Mathura Rai     |
| 3. Dr. K.L. Chadha            | 26. Dr. N. Rai          |
| 4. Dr. M.L. Chadha            | 27. Prof. D.P. Ray      |
| 5. Dr. S.K. Chakrabarti       | 28. Prof. G.R. Rout     |
| 6. Prof. P. Das               | 29. Dr. A.T. Sadashiva  |
| 7. Dr. O.P. Dutta             | 30. Dr. R.R. Sharma     |
| 8. Dr. S.P. Ghosh             | 31. Dr. S.D. Shikhamany |
| 9. Dr. Jai Gopal              | 32. Dr. Anand K. Singh  |
| 10. Dr. Rajendra Gupta        | 33. Dr. Arun K. Singh   |
| 11. Dr. Pritam Kalia          | 34. Dr. B. Singh        |
| 12. Prof. Gautam Kalloo       | 35. Dr. B.P. Singh      |
| 13. Dr. (Ms) K. Madhavi Reddy | 36. Dr. Brahma Singh    |
| 14. Dr. T.A. More             | 37. Dr. Brajesh Singh   |
| 15. Dr. A.D. Munshi           | 38. Dr. H.P. Singh      |
| 16. Dr. P.S. Naik             | 39. Dr. Kirti Singh     |
| 17. Dr. Prem Nath             | 40. Dr. Major Singh     |
| 18. Dr. R.K. Pal              | 41. Dr. S.K. Singh      |
| 19. Dr. S. Pandey             | 42. Dr. Shyam Singh     |
| 20. Dr. S.K. Pandey           | 43. Dr. P.S. Sirohi     |
| 21. Dr. R.K. Pathak           | 44. Dr. Vishnu Swarup   |
| 22. Dr. D. Pattanayak         | 45. Dr. Pious Thomas    |
| 23. Dr. K.V. Peter            | 46. Dr. (Ms.) S. Uma    |

**Section III - Animal Sciences**, covering Animal Genetics & Breeding, Animal Nutrition, Animal Physiology, Animal Biochemistry and Biotechnology, Animal Production, Animal Health, Animal Products Technology, Dairy Sciences and Poultry Sciences

*(79 Fellows)*

- |                           |                           |
|---------------------------|---------------------------|
| 1. Dr. R.M. Acharya       | 9. Dr. R. Bhatta          |
| 2. Dr. S.R. Anand         | 10. Dr. T.K. Bhattacharya |
| 3. Dr. V. Balamurugan     | 11. Dr. K.M. Bujarbaruah  |
| 4. Dr. S.K. Bandyopadhyay | 12. Dr. R.N. Chatterjee   |
| 5. Dr. V.K. Batish        | 13. Dr. M.S. Chauhan      |
| 6. Dr. (Ms) P.P. Bhat     | 14. Dr. V.P.S. Chauhan    |
| 7. Dr. J.S. Bhatia        | 15. Dr. S.K. Dwivedi      |
| 8. Prof. S.K. Bhatia      | 16. Dr. M.C. Goel         |

17. Dr. N.K.S. Gowda
18. Dr. (Ms) Sunita Grover
19. Dr. P.P. Gupta
20. Dr. Jag Mohan
21. Dr. V.C. Kalia
22. Dr. D.N. Kamra
23. Dr. J.M. Kataria
24. Dr. Lal Krishna
25. Dr. Amresh Kumar
26. Dr. N. Kumar
27. Dr. Vijay Kumar
28. Dr. M.S. Kwatra
29. Dr. (Ms) Sushila Maan
30. Dr. M.L. Madan
31. Dr. A.B. Mandal
32. Dr. B.N. Mathur
33. Dr. (Ms) Usha R. Mehra
34. Prof. A.K. Misra
35. Dr. A. Mitra
36. Dr. D.T. Mourya
37. Dr. A.S. Nanda
38. Dr. S.K. Nandi
39. Dr. S.M.K. Naqvi
40. Dr. Devareddy Narahari
41. Dr. B.M. Naveena
42. Dr. J.M. Nigam
43. Prof. K.M.L. Pathak
44. Dr. G.R. Patil
45. Dr. K. Pradhan
46. Dr. B.S. Prakash
47. Dr. C.S. Prasad
48. Dr. Gaya Prasad
49. Dr. (Ms) Minakshi Prasad
50. Dr. A.K. Puniya
51. Dr. R.B. Rai
52. Dr. Y.S. Rajput
53. Dr. S.N.S. Randhawa
54. Prof. A.T. Rao
55. Dr. Parimal Roy
56. Dr. P.P. Sengupta
57. Dr. (Ms) G. Taru Sharma
58. Dr. Kusumakar Sharma
59. Dr. M.C. Sharma
60. Dr. Rajan Sharma
61. Dr. Ashish K. Singh
62. Dr. D. Singh
63. Dr. Harpal Singh
64. Dr. Khub Singh
65. Dr. Kiran Singh
66. Dr. P. Singh
67. Dr. Raj K. Singh
68. Dr. R.R.B. Singh
69. Dr. S.K. Singla
70. Dr. R.C. Sobti
71. Dr. A.K. Srivastava
72. Dr. T. Subramoniam
73. Dr. V.K. Taneja
74. Dr. S.M. Totey
75. Dr. B.N. Tripathi
76. Dr. Amrish K. Tyagi
77. Dr. A.K. Verma
78. Dr. Rishendra Verma
79. Prof. M.P. Yadav

**Section IV - Fisheries Sciences**, covering Fish Genetics & Breeding, Fish Nutrition, Fish Pathology, Fish Biotechnology, Fish Biosystematics, Fish Processing & Technology, Fisheries Resource Management and Aquaculture

*(38 Fellows)*

1. Dr. K.C. Alagaraswami
2. Prof. S. Ayyappan
3. Dr.(Ms) Rina Chakrabarti
4. Dr. Kajal Chakraborty
5. Dr. S. Dam Roy
6. Dr. B.K. Das
7. Dr. K.V. Devaraj
8. Dr. K. Gopakumar
9. Dr. A. Gopalakrishnan
10. Dr. M.V. Gupta
11. Dr. B.B. Jana
12. Dr. J.K. Jena
13. Dr. Iddya Karunasagar
14. Prof. (Dr.) Indrani Karunasagar
15. Dr. Pandian Krishnan
16. Dr. K.K. Krishnani
17. Dr. W.S. Lakra
18. Dr. S. Mathew

19. Dr. B.P. Mohanty
20. Dr. P. Natarajan
21. Dr. A.K. Pal
22. Dr. T.J. Pandian
23. Dr. A.G. Ponniah
24. Dr. R. Ramamurthi
25. Dr. C.N. Ravishankar
26. Dr. P.K. Sahoo
27. Dr. A.S. Sahul Hameed
28. Dr. Joseph Selvin

29. Dr. K.M. Shankar
30. Dr. B.N. Singh
31. Prof. I.S.B. Singh
32. Dr. V.R.P. Sinha
33. Dr. Patrick Sorgeloos
34. Dr. P. Swain
35. Dr. S.D. Tripathi
36. Dr. K.K. Vass
37. Dr. Byrappa Venkatesh
38. Dr. V. Venugopal

**Section V - Natural Resource Management Sciences**, covering Agricultural Meteorology, Agronomy, Environmental Science, Forestry & Agroforestry, Soil Science, Water Management and Agricultural Physics

*(151 Fellows)*

1. Dr. P.C. Abhilash
2. Dr. I.P. Abrol
3. Dr. C.L. Acharya
4. Prof. S.P. Adhikary
5. Dr. P.K. Aggarwal
6. Prof. Madhoolika Agrawal
7. Dr. Masood Ali
8. Dr. V.K. Arora
9. Dr. A. Arunachalam
10. Dr. R.N. Athavale
11. Dr. M.S. Aulakh
12. Dr. M.S. Bajwa
13. Dr. K.K. Bandyopadhyay
14. Dr. S.K. Barik
15. Dr. U.K. Behera
16. Dr. D.K. Benbi
17. Dr. B.P. Bhatt
18. Dr. P. Bhattacharyya
19. Dr. Ranjan Bhattacharyya
20. Dr. Bijay Singh
21. Dr. A.K. Biswas
22. Dr. D.R. Biswas
23. Dr. D. Blaise
24. Dr. M.S. Brar
25. Dr. G.S. Buttar
26. Dr. P. Carberry
27. Prof. (Ms) C. Chatterjee
28. Dr. O.P. Chaturvedi
29. Dr. S.K. Chaudhari
30. Dr. T.N. Chaudhary
31. Dr. V.K. Dadhwal

32. Dr. J.C. Dagar
33. Dr. Anup Das
34. Dr. T.K. Das
35. Dr. S.P. Datta
36. Dr. S.K. De Datta
37. Prof. B.L. Deekshatulu
38. Prof. K.S. Dhillon
39. Dr. S.K. Dhyani
40. Dr. R. Dinesh
41. Dr. Dinesh Mohan
42. Dr. B.S. Dwivedi
43. Dr. R.S. Dwivedi
44. Dr. M.D. Gadgil
45. Dr. A.N. Ganeshamurthy
46. Dr. B. Gangwar
47. Dr. A.C. Gaur
48. Dr. Kunal Ghosh
49. Dr. P.K. Ghosh
50. Dr. N.N. Goswami
51. Dr. Raj K. Gupta
52. Dr. Ram K. Gupta
53. Dr. Umesh C. Gupta
54. Dr. D.M. Hegde
55. Dr. S.K. Jalota
56. Dr. M.L. Jat
57. Dr. Pawan K. Joshi
58. Dr. G. Kar
59. Dr. J.C. Katyal
60. Dr. M.L. Khan
61. Dr. R.K. Kohli
62. Dr. Prameela Krishnan

63. Dr. S.S. Kukal
64. Dr. Arvind Kumar
65. Prof. Ashok Kumar
66. Dr. Ashwani Kumar
67. Dr. B. Mohan Kumar
68. Dr. S. Kundu
69. Dr. J.K. Ladha
70. Dr. Murari Lal
71. Prof. Rattan Lal
72. Dr. Gulshan Mahajan
73. Dr. Biswapati Mandal
74. Dr. M.C. Manna
75. Dr. P.S. Minhas
76. Dr. V.K. Mishra
77. Dr. Chakrapani Misra
78. Dr. M. Mohanty
79. Dr. Ravi Naidu
80. Dr. P.K.R. Nair
81. Dr. A.K. Nayak
82. Dr. V.K. Nayyar
83. Dr. D.K. Pal
84. Dr. C.B. Pandey
85. Dr. C.M. Parihar
86. Dr. N.S. Pasricha
87. Dr. Himanshu Pathak
88. Dr. P.S. Pathak
89. Dr. A.K. Patra
90. Dr. D.D. Patra
91. Dr. Rajendra Prasad
92. Dr. T.J. Purakayastha
93. Dr. Sunil Puri
94. Dr. B.R. Rajeswara Rao
95. Dr. Ram Sakal
96. Dr. P.S. Ramakrishnan
97. Dr. P.W. Ramteke
98. Dr. D.L.N. Rao
99. Dr. E.V.S. Prakasa Rao
100. Dr. N.H. Rao
101. Dr. K. Sammi Reddy
102. Dr. P.S. Roy
103. Dr. M.S. Sachdev
104. Dr. Dinabandhu Sahoo
105. Dr. J.S. Samra
106. Dr. B.S. Sandhu
107. Dr. S.K. Sanyal
108. Prof. P.B.S. Sarma
109. Dr. K.G. Saxena
110. Dr. M.C. Saxena
111. Dr. A.R. Sharma
112. Dr. B.D. Sharma
113. Dr. D.K. Sharma
114. Dr. K.D. Sharma
115. Dr. Pradeep Kumar Sharma
116. Dr. Shriniwas Sharma
117. Dr. U.C. Sharma
118. Dr. Y.S. Shivay
119. Dr. A.K. Shukla
120. Dr. A.K. Sikka
121. Dr. Anil K. Singh
122. Dr. Dhyan Pal Singh
123. Dr. G.B. Singh
124. Dr. Gurbachan Singh
125. Dr. Nirmal Tej Singh
126. Prof. Panjab Singh
127. Dr. R.V. Singh
128. Dr. R.P. Singh
129. Dr. Ranjodh Singh
130. Dr. V.K. Singh
131. Dr. Yadvinder Singh
132. Dr. Y.P. Singh
133. Dr. M.V.K. Sivakumar
134. Dr. Ch. Srinivasa Rao
135. Dr. R.C. Srivastava
136. Dr. A. Subba Rao
137. Dr. L.D. Swindale
138. Dr. P.N. Takkar
139. Dr. J.C. Tarafdar
140. Prof. I.S. Thakur
141. Dr. H.S. Thind
142. Dr. O.P. Toky
143. Dr. V.S. Tomar
144. Dr. N.C. Turner
145. Dr. (Ms) Chandrika Varadachari
146. Dr. B. Venkateswarlu
147. Dr. A.C. Vig
148. Dr. K.P.R. Vittal
149. Dr. Paul L.G. Vlek
150. Dr. P.A. Wahid
151. Dr. R.L. Yadav



**Section VI - Plant Protection Sciences**, covering Agricultural Chemicals, Agricultural Entomology, Plant Pathology, Nematology, Microbiology and Organic Chemistry

(107 Fellows)

1. Dr. D.P. Abrol
2. Dr. T.K. Adhya
3. Dr. H.C. Agarwal
4. Dr. (Ms) Rashmi Aggarwal
5. Dr. Wasim Ahmad
6. Dr. S.K. Apte
7. Prof. D.K. Arora
8. Dr. D. Joseph Bagyaraj
9. Dr. Kaushik Banerjee
10. Dr. Q.H. Baqri
11. Dr. V.K. Baranwal
12. Dr. J.S. Bentur
13. Dr. S.C. Bhardwaj
14. Dr. P.K. Chakrabarty
15. Prof. Bishwanath Chakraborty
16. Dr. S. Chakraborty
17. Dr. C. Chattopadhyay
18. Dr. Ashim Chowdhury
19. Dr. J.K. Dandona
20. Dr. B.V. David
21. Dr. C. Devakumar
22. Dr. M.K. Dhillon
23. Dr. N.K. Dubey
24. Dr. C. Ganesh Kumar
25. Dr. S.S. Gnanamanickam
26. Dr. Madhuban Gopal
27. Dr. (Ms) Geetha Gopalakrishnan
28. Dr. A. Goswami
29. Dr. R.V. Guntaka
30. Dr. Vijai K. Gupta
31. Dr. Akhtar Husain
32. Dr. S. Ignacimuthu
33. Dr. R.K. Jain
34. Dr. M.S. Jairajpuri
35. Dr. B.L. Jalali
36. Dr. S. Jogaiah
37. Prof. B.N. Johri
38. Dr. R. Joseph
39. Dr. Alok Kalra
40. Dr. (Ms) P.D. Kamala Jayanthi
41. Dr. V.C. Kapoor
42. Dr. M.R. Khan
43. Dr. S.K. Khare
44. Dr. S.M. Paul Khurana
45. Dr. Opendar Koul
46. Dr. K.R. Kranthi
47. Prof. R.C. Kuhad
48. Dr. (Ms) Gita Kulshrestha
49. Dr. Jitendra Kumar
50. Dr. Rup Lal
51. Dr. (Ms) D. Lalithakumari
52. Dr. (Ms) Lata
53. Dr. V.S. Malik
54. Prof. C. Manoharachary
55. Dr. C.D. Mayee
56. Prof. V.V. Modi
57. Dr. (Ms) Irani Mukherjee
58. Dr. P.K. Mukherjee
59. Dr. P.K. Mukherjee
60. Dr. A.N. Mukhopadhyay
61. Dr. Senthil-Kumar Muthappa
62. Dr. M.K. Naik
63. Dr. C.S. Nautiyal
64. Prof. S.R. Niranjana
65. Dr. Rakesh Pandey
66. Prof. Hanu R. Pappu
67. Dr. B.S. Parmar
68. Prof. A.R. Podile
69. Dr. H.S. Prakash
70. Dr. S.N. Puri
71. Dr. K. Raghu
72. Dr. A.K. Rai
73. Dr. L.C. Rai
74. Dr. N. Ramakrishnan
75. Dr. M.S. Rao
76. Dr. V.R. Rao
77. Dr. N.K. Roy
78. Dr. M.S. Saharan
79. Prof. T. Satyanarayana
80. Dr. A.K. Saxena
81. Prof. K.N. Saxena
82. Dr. N. Sethunathan
83. Dr. H.C. Sharma
84. Dr. R.N. Sharma

- |                            |                                   |
|----------------------------|-----------------------------------|
| 85. Dr. T.R. Sharma        | 97. Dr. R. Sridhar                |
| 86. Prof. H. Shekar Shetty | 98. Dr. N.S. Subba Rao            |
| 87. Dr. P. Shukla          | 99. Prof. Krishna V. Subbarao     |
| 88. Dr. Ajay Singh         | 100. Dr. K.V.B.R. Tilak           |
| 89. Dr. B.P. Singh         | 101. Prof. Ajit Varma             |
| 90. Dr. D.V. Singh         | 102. Prof. Anupam Varma           |
| 91. Dr. H.B. Singh         | 103. Prof. Kadiyala Venkateswarlu |
| 92. Dr. (Ms) Neera Singh   | 104. Dr. P. Vidhyasekaran         |
| 93. Dr. P.K. Singh         | 105. Dr. Rasappa Viswanathan      |
| 94. Dr. Udai Pratap Singh  | 106. Dr. Suresh Walia             |
| 95. Dr. U.S. Singh         | 107. Prof. R.S. Zeigler           |
| 96. Dr. Ramesh V. Sonti    |                                   |

**Section VII - Agricultural Engineering and Technology**, covering Farm Machinery & Power, Soil and Water Engineering, Agricultural Process Engineering, Food Science & Nutrition, Food Technology, Textile Chemistry and Computer Application in Agriculture

*(57 Fellows)*

- |                               |                               |
|-------------------------------|-------------------------------|
| 1. Prof. Anwar Alam           | 30. Dr. K.V.G.K. Rao          |
| 2. Dr. C. Anandharamakrishnan | 31. Dr. N.K. Rastogi          |
| 3. Dr. (Ms) Rintu Banerjee    | 32. Dr. Ramesh C. Ray         |
| 4. Dr. A.S. Bawa              | 33. Dr. A. Sarangi            |
| 5. Dr. A.K. Bhattacharya      | 34. Dr. K.S. Sekhon           |
| 6. Dr. I. Chaubey             | 35. Dr. Sewa Ram              |
| 7. Dr. H.S. Chauhan           | 36. Dr. V.N. Sharda           |
| 8. Dr. T.K. Goswami           | 37. Dr. Arun K. Sharma        |
| 9. Dr. S.K. Gupta             | 38. Dr. L.N. Shukla           |
| 10. Dr. Dilip Jain            | 39. Dr. Bachchan Singh        |
| 11. Dr. C.S. Jaiswal          | 40. Prof. Gajendra Singh      |
| 12. Dr. D.S. Jayas            | 41. Dr. K.K. Singh            |
| 13. Dr. M.K. Jha              | 42. Dr. K.P. Singh            |
| 14. Dr. S.N. Jha              | 43. Dr. Narpinder Singh       |
| 15. Dr. S.K. Kamra            | 44. Dr. Rajendra Singh        |
| 16. Dr. R.S. Kanwar           | 45. Dr. Rakesh Kumar Singh    |
| 17. Dr. S.D. Khepar           | 46. Dr. S.R. Singh            |
| 18. Prof. S.N. Panda          | 47. Dr. Surendra Singh        |
| 19. Dr. (Ms.) Neelam Patel    | 48. Prof. V.P. Singh          |
| 20. Dr. B.S. Pathak           | 49. Dr. T.K. Srinivasa Gopal  |
| 21. Dr. R.T. Patil            | 50. Dr. N.S.L. Srivastava     |
| 22. Dr. V. Prakash            | 51. Prof. V.K. Tewari         |
| 23. Dr. G.S. Vijaya Raghavan  | 52. Dr. K.N. Tiwari           |
| 24. Dr. K.S.M.S. Raghavarao   | 53. Dr. N.K. Tyagi            |
| 25. Dr. N.S. Raghuwanshi      | 54. Dr. S. Varadarajan        |
| 26. Dr. H. Raheman            | 55. Dr. S.B. Varade           |
| 27. Dr. T.B.S. Rajput         | 56. Dr. S.R. Verma            |
| 28. Dr. Rama                  | 57. Dr. Rangaraju Visvanathan |
| 29. Dr. H. Ramaswamy          |                               |

**Section VIII - Social Sciences**, covering Agricultural Economics, Agricultural Statistics, Extension Education, Home Science and Bioinformatics

(56 Fellows)

- |                                  |                                |
|----------------------------------|--------------------------------|
| 1. Dr. S.S. Acharya              | 29. Dr. A.C. Kulshreshtha      |
| 2. Dr. R.C. Agrawal              | 30. Dr. Anjani Kumar           |
| 3. Dr. Y.K. Alagh                | 31. Dr. S. Kumar               |
| 4. Dr. S.C. Babu                 | 32. Dr. (Ms) Uma Lele          |
| 5. Dr. (Ms) Satinder Bajaj       | 33. Dr. Manmohan Singh         |
| 6. Dr. (Ms) M.S. Bamji           | 34. Dr. Mruthyunjaya           |
| 7. Dr. Narayan Bhaskar           | 35. Dr. K. Madhavan Nair       |
| 8. Dr. R.V. Bhat                 | 36. Prof. Prem Narain          |
| 9. Dr. V.K. Bhatia               | 37. Dr. Suresh Pal             |
| 10. Dr. P.S. Bithal              | 38. Dr. K. Palanisami          |
| 11. Prof. Ramesh Chand           | 39. Dr. R.K. Paul              |
| 12. Dr. Hukum Chandra            | 40. Dr. Prabhu L. Pingali      |
| 13. Dr. Mukul Das                | 41. Dr. Prajneshu              |
| 14. Dr. (Ms) Shylaja M Dharmesh  | 42. Prof. (Ms) Jamuna Prakash  |
| 15. Dr. Jacques Diouf            | 43. Dr. P. Pushpangadan        |
| 16. Dr. (Mrs) Nina Dodd          | 44. Dr. Anil Rai               |
| 17. Dr. (Ms) P. Geervani         | 45. Dr. Rajender Parsad        |
| 18. Dr. Ashok Gulati             | 46. Dr. C. Ramasamy            |
| 19. Prof. Anil Kumar Gupta       | 47. Dr. A.R. Rao               |
| 20. Dr. Vinod K. Gupta           | 48. Dr. Ismail Serageldin      |
| 21. Dr. C.H. Hanumantha Rao      | 49. Dr. D.S. Sidhu             |
| 22. Dr. (Ms) Seema Jaggi         | 50. Dr. Jose Graziano da Silva |
| 23. Dr. P.N. Jha                 | 51. Dr. Ashok K. Singh         |
| 24. Dr. S.S. Johl                | 52. Dr. Naveen P. Singh        |
| 25. Dr. Pramod K. Joshi          | 53. Dr. R.P. Singh             |
| 26. Dr. V.K. Juneja              | 54. Dr. Ranjay K. Singh        |
| 27. Dr. S.K. Khanna              | 55. Dr. G.M. Subbarao          |
| 28. Dr. (Ms) Kamala Krishnaswamy | 56. Prof. J.P. Tamang          |

**Section IX - Frontier Sciences**, including Basic Bio-sciences; Nano-sciences; Information Communication Technologies; Computer Science; Space technology; Climate change; and other basic areas, having bearing on agriculture (Discontinued since 2012)

(5 Fellows)

- |                      |                      |
|----------------------|----------------------|
| 1. Dr. R.K. Aggarwal | 4. Dr. K.M. Paknikar |
| 2. Prof. Arun Goyal  | 5. Dr. A.K. Tripathi |
| 3. Prof. B. Jha      |                      |

**Foreign Fellows**

(57 Fellows)

- |                       |                       |
|-----------------------|-----------------------|
| 1. Dr. P. Carberry    | 3. Prof. E.C. Cocking |
| 2. Dr. V.P.S. Chauhan | 4. Dr. S.K. Datta     |

- |     |                          |     |                            |
|-----|--------------------------|-----|----------------------------|
| 5.  | Dr. S.K. De Datta        | 32. | Dr. Sanjaya Rajaram        |
| 6.  | Dr. Jacques Diouf        | 33. | Dr. H. Ramaswamy           |
| 7.  | Dr. William Erskine      | 34. | Prof. K.N. Saxena          |
| 8.  | Dr. Bikram Singh Gill    | 35. | Dr. M.C. Saxena            |
| 9.  | Dr. Andreas Graner       | 36. | Dr. Ismail Serageldin      |
| 10. | Prof. P.M. Gresshoff     | 37. | Dr. K.H.M. Siddique        |
| 11. | Dr. R.V. Guntaka         | 38. | Dr. Jose Graziano da Silva |
| 12. | Dr. Umesh C. Gupta       | 39. | Dr. Ajay Singh             |
| 13. | Dr. Zhai Huqu            | 40. | Prof. Gajendra Singh       |
| 14. | Dr. A.M. Ismail          | 41. | Prof. R.B. Singh           |
| 15. | Dr. D.S. Jayas           | 42. | Dr. Ram J. Singh           |
| 16. | Dr. R.S. Kanwar          | 43. | Dr. Ravi Prakash Singh     |
| 17. | Dr. G.S. Khush           | 44. | Prof. V.P. Singh           |
| 18. | Dr. Jagdish Kumar        | 45. | Dr. M.V.K. Sivakumar       |
| 19. | Dr. J.K. Ladha           | 46. | Dr. Patrick Sorgeloos      |
| 20. | Prof. Rattan Lal         | 47. | Dr. L.D. Swindale          |
| 21. | Dr. (Ms) Uma Lele        | 48. | Dr. Shigesaburo Tsunoda    |
| 22. | Prof. Wang Lianzheng     | 49. | Dr. N.C. Turner            |
| 23. | Dr. V.S. Malik           | 50. | Dr. Narendra Tuteja        |
| 24. | Dr. A.E. Melchinger      | 51. | Dr. R.K. Varshney          |
| 25. | Dr. Ravi Naidu           | 52. | Dr. S.K. Vasal             |
| 26. | Dr. P.K.R. Nair          | 53. | Dr. Byrappa Venkatesh      |
| 27. | Dr. Suresh Nair          | 54. | Dr. D.S. Virk              |
| 28. | Dr. Prem Nath            | 55. | Dr. S.S. Virmani           |
| 29. | Dr. Henry T. Nguyen      | 56. | Dr. Paul L.G. Vlek         |
| 30. | Dr. H.W. Pritchard       | 57. | Prof. R.S. Zeigler         |
| 31. | Dr. G.S. Vijaya Raghavan |     |                            |

## Pravasi Fellows

(11 Fellows)

- |    |                         |     |                           |
|----|-------------------------|-----|---------------------------|
| 1. | Dr. S.C. Babu           | 7.  | Prof. Hanu R. Pappu       |
| 2. | Dr. I. Chaubey          | 8.  | Dr. Prabhu L. Pingali     |
| 3. | Dr. Govindjee Govindjee | 9.  | Dr. Rakesh K. Singh       |
| 4. | Dr. Vijai K. Gupta      | 10. | Dr. Rakesh Kumar Singh    |
| 5. | Dr. K.K. Jena           | 11. | Prof. Krishna V. Subbarao |
| 6. | Dr. V.K. Juneja         |     |                           |

## 2.5 Fellows' Brief Profile



2018: **ABHILASH, Purushothaman Chirakkuzhyil** (b 20 May, 1978), Sp: Land degradation & Restoration; Maintaining Biodiversity & Ecosystem Services in marginal / polluted / degraded and restored lands; Soil ecology & climate change; Assistant Professor (Stage II), Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi 221005, U.P.; B-31-83R, Rashmi Nagar, Professor Colony, Bhogaveer Lanka, Varanasi 221005, U.P.; [Tel: Off. (0542) 2366297; Cell: 9415644280; Fax: (0542) 2366711; Email: pcabhilash@hotmail.com; pca.iesd@bhu.ac.in]; NAAS Associate, 2014



2018: **ABROL, Dharam Pal** (b 6 Feb, 1959), Sp: Pollination biology, honeybee management, Integrated Pest Management; Dean, Faculty of Agriculture, Sher-e-Kashmir University of Agricultural Sciences & Technology, Faculty of Agriculture, Chatha, Jammu 180009, J&K; 351/4, Channi Himmat Housing Colony, Jammu 180015, Jammu & Kashmir; [Tel: Off. (0191) 2262119; Res. (0191) 2462451; Cell: 9419185305; Fax: (0191) 2262945; Email: dharam\_abrol@rediffmail.com; honeybee\_abrol@yahoo.com; deanfoa.skustajammu@gmail.com]



1990: **ABROL, Inder Pal** (b 13 Mar, 1939), Sp: Research and education for sustainable agriculture, natural resource management; Director, Centre for Advancement of Sustainable Agriculture, NASC Complex, DPS Marg, New Delhi 110012; A 34/2, DLF, Phase I, Gurugram 122001, Haryana; [Tel: Off. (011) 25848188, 9810772161; Res. (0124) 2358755, 2354267; Email: abrolip@gmail.com]; *Founder Member, Executive Council 5 Jun, 1990 to 30 Dec, 1991; Editor 1 Jan, 1992 to 19 Aug, 1995; Member Executive Council 17 Aug, 1995 to 31 Dec, 1999*



1998: **ACHARYA, Chuni Lal** (b 6 Apr, 1945), Sp: Natural resource management sciences, soil physics/soil water conservation/management, tillage, water management; Former Director, IISS, House No. 28, Nagarkot Colony, Thakurdwara P.O. Maranda, Palampur 176102, H.P.; [Tel: Cell: 9418105471, 7807205472; Email: cl\_acharya@yahoo.co.in]; *Member Executive Council 1 Jan, 2008 to 31 Dec, 2010; Dr. N.S. Randhawa Memorial Award 2005-2006*



1992: **ACHARYA, Radha Mohan** (b 14 Apr, 1934), Sp: Animal Genetics and Breeding, Biometrics, Research Planning, Monitoring and Evaluation; Former DDG (AS), ICAR, 784, Sector 9, Faridabad 121006, Haryana; [Tel: Cell: 9313062280, 9643227885; Email: acharyasanjiv9@gmail.com; radhamohanacharya9@gmail.com]; *Member Executive Council 1 Jan, 2000 to 31 Dec, 2001*



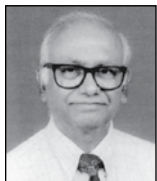
2001: **ACHARYA, Shabd Swaroop** (b 9 May, 1939), Sp: Agricultural economics, agricultural marketing and prices, agricultural policy analysis; Former Chairman, CACP, 5-K-44, Ramsingh Ki Bari, Sector-11, Udaipur 313002, Rajasthan; [Tel: Cell: 9829061534; Email: ssacharya95@yahoo.co.in]; *Vice-President 1 Jan, 2007 to 31 Dec, 2009; Member Executive Council 1 Jan, 2004 to 31 Dec, 2006; Member Executive Council (Casual Vacancy) 1 Jan, 2002 to 31 Dec, 2003*



2008: **ADHIKARY, Siba Prasad** (b 2 Apr, 1954), Sp: Biodiversity and Bioprospecting of Cyanobacteria, micro-algae and seaweeds, Biofertilizers and Organic farming, Aquatic Microbiology, Biodeterioration and conservation of stone monuments of cultural heritage; Former Professor of Biotechnology & Former VC, F.M. University, 200B, BDA Duplex Colony, Pragyan Vihar, Baramunda, Bhubaneswar 751003, Odisha; Village: Maniakati, Post Asurabandha, PS. Surada, Dist. Ganjam 761108, Odisha; [Tel: Cell: 9439431600; Email: adhikarysp@gmail.com]; *Member Executive Council 1 Jan, 2015 to 31 Dec, 2017*



1997: **ADHYA, Tapan Kumar** (b 4 Sep, 1949), Sp: Environmental microbiology with emphasis on climate change and carbon sequestration, pesticide biodegradation and bioremediation; Former Director, CRRI, Flat # 201, Alpine House, Sishu Vihar, Near ODM School Gate No. 4, Bhubaneswar 751024, Odisha; G-14/5 3rd Floor, Malviya Nagar, New Delhi - 110017; [Tel: Cell: 9437304299, 9910759627; Email: adhyas@yahoo.com; tkadhya@aol.in]; *Member Executive Council 1 Jan, 2005 to 31 Dec, 2007; Dr. N.S. Randhawa Memorial Award 2009-2010*



1994: **AGARWAL, Hari Charan** (b 1 Oct, 1933), Sp: Environmental pesticide pollution, insect biochemistry and toxicology, areas related to pollution of the environment such as pesticides in cold drinks, lead in paints, mercury pollution due to thermal power plants in Singrauli area, antibiotics in honey and chicken meat, phthalates in toys, junk foods, etc.; Former Professor, DU, B-4/23, Rajasthali Apartments, Madhuban Chowk, Pitampura, Delhi 110034; [Tel: Res. (011) 27019081, 27030869, Cell: 9891495003; Email: haricharanagarwal@yahoo.com]



2001: **AGGARWAL, Pramod Kumar** (b 28 Jun, 1954), Sp: Global climate change, environmental impact assessment; agricultural systems modeling, agro-meteorology; Regional Program Leader, CGIAR Research Program on Climate Change Agriculture & Food Security, BISA, CIMMYT India Office, NASC Complex, DPS Marg, New Delhi 110012; E-13/12, Vasant Vihar, New Delhi 110057; [Tel: Off. (011) 25842940; Cell: 9810261230; Email: p.k.aggarwal@cgiar.org]; *Secretary 1 Jan, 2008 to 31 Dec, 2010; Treasurer 1 Jan, 2007 to 31 Dec, 2007*



2009: **AGGARWAL, Ramesh K.** (b 9 Feb, 1958), Sp: Molecular Biology, Genetics, Evolution; Comparative Genomics [DNA markers - development & applications in Biodiversity, Wildlife conservation, Crop Improvement and Diagnostics; DNA Barcoding; Molecular basis of temperature-dependent sex determination; NGS based Whole Genome/Transcriptome sequencing]; Honorary Visiting Scientist, Centre for Cellular & Molecular Biology, Uppal Road, Tarnaka, Hyderabad 500007, Telangana; H-307, Indu Aaranya Pallavi, GSI Post, Bandlaguda, Nagole, Hyderabad 500068, Telangana; [Tel: Cell: 9849042817; Email: rameshka9@gmail.com]



2019: **AGGARWAL, Rashmi** (b 22 Aug, 1960), Sp: Fungal Pathology, Host Pathogen Interactions, Management of Plant Diseases, Pathogenomics; Head and Principal Scientist, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; T-304, Anupam Apartments, East Arjun Nagar, New Delhi 110032; [Tel: Off. (011) 25843474; Res. (011) 22307690; Cell: 9999675782; Email: rashmi.aggarwal2@gmail.com; head\_patho@iari.res.in]



2011: **AGRAWAL, Madhoolika** (b 1 May, 1958), Sp: Environmental Sciences, Air Pollution, Global Environmental Change; Head, Department of Botany, Banaras Hindu University, Varanasi 221005, U.P.; B-97, Brij Enclave Colony, Sunderpur, Varanasi 221005, U.P.; [Tel: Cell: 9415628573; Fax: (0542) 2368174; Email: madhoo.agrawal@gmail.com]; *Member Executive Council 1 Jan, 2019*



2020: **AGRAWAL, Pawan Kumar** (b 2 Jan, 1964), Sp: Molecular and Conventional Breeding in Crops; Vice Chancellor, Orissa University of Agriculture and Technology, Bhubaneswar 751003, Odisha; H 142, Lumbini Vihar, Chandrasekharapur, Bhubaneswar 751021, Odisha; [Tel: Off. (0542) 2575678; Res. (0542) 2575678; Cell: 9868275277; Fax: (0542) 2397780; Email: pawankagrawal@hotmail.com; vcouat@gmail.com]



2021: **AGRAWAL, Rakesh Chandra** (b 1 Jun, 1963), Sp: Biodiversity Informatics; Information Management; Intellectual Property Rights; Farmers' Rights; Agricultural Education; DDG (Agril. Education), Division of Agriculture Education, Indian Council of Agricultural Research, New Delhi 110012; C-II/72, Bapa Nagar, New Delhi 110003; [Tel: Off. (011) 25841760; Res. (011) 23071457; Cell: 9899008855; Email: ddg.edu@icar.gov.in; agrawal\_rakesh\_chandra@yahoo.com]



2005: **AHMAD, Wasim** (b 10 Apr, 1957), Sp: Nematology: biodiversity, nematode taxonomy, ultrastructure, molecular taxonomy, ecology, phylogenomics; Professor, Section of Nematology, Department of Zoology, Aligarh Muslim University, Aligarh 202002, U.P.; 4/1176 J, New Sir Syed Nagar, Aligarh 202002, U.P.; [Tel: Off. (0571) 2700920-23 Ext.3441; Res. 2506865, Cell: 9897397412, 9917007547; Email: ahmadwasim57@yahoo.co.in]; *Recognition Award 2011-2012*



1999: **ALAGARSWAMI, K.C.** (b 13 Aug, 1937), Sp: Fisheries; Former Director, CIBA, Flat No. C-2, Sri Ramana Apartments, New No. 12 (Old No. 82), Bazullah Road, T. Nagar, Chennai 600017, Tamil Nadu; [Tel: Res. (044) 28342104]



1992: **ALAGH, Yoginder K** (b 14 Feb, 1939), Sp: Quantitative modelling, policy analysis; Vice Chairman, Sardar Patel Institute of Economic and Social Research, Thaltej Road, Ahmedabad 380054, Gujarat; Former Member, Planning Commission of India, 45, Surdhara, Behind Goyal City, Near Doordarshan, Thaltej, Ahmedabad 380054, Gujarat; [Tel: Off. (079) 26851428; Res. (079) 26859950, 26855984; Fax: (079) 26851714; Email: yalagh@gmail.com]



2000: **ALAM, Anwar** (b 5 Jul, 1945), Sp: Agricultural engineering, agricultural processing, structure & environmental control, farm machinery & power and energy in agriculture; Former VC, SKUAST-K, S-319, Vivekanand Apartments, Sector 5, Plot-II, Dwarka, New Delhi 110075; [Tel: Res. (011) 25082897, Cell: 9891272094; Email: prof.anwar.alam@gmail.com]; *Secretary 1 Jan, 2011 to 31 Dec, 2013; Member Executive Council 1 Jan, 2005 to 31 Dec, 2007*



2002: **ALI, Masood** (b 18 Jul, 1947), Sp: Pulse Agronomy, cropping system, dryland agriculture; Former Director, IIPR, Flat No. 305, Ratan Presidency-2, Parvati Bagla Road, Tilak Nagar, Kanpur 208002, U.P.; [Tel: Cell: 9450344220, 9956794097; Email: masoodali53@rediffmail.com; masoodali\_iipr@yahoo.co.in]



1992: **ANAND, Siri Ram** (b 13 Nov, 1933), Sp: Enzymology, molecular biology, male reproduction; Former Professor Emeritus CSIR, C4C 062, Carlton Estate, DLF City Phase V, Gurugram 122002, Haryana; [Tel: Res. (0124) 4377850, Cell: 9810056587; Email: usha\_anand@rediffmail.com]



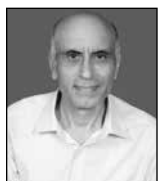
2019: **ANANDHARAMAKRISHNAN, C.** (b 10 May, 1973), Sp: Food engineering, Micro and nanoencapsulation of food bioactive compounds and probiotic bacteria, 3D food printing, computational modeling of food processing, engineered human dynamic gastrointestinal system and glycemic index studies; Director, Indian Institute of Food Processing Technology, (IIFFT) Ministry of Food Processing Industries (MoFPI), Pudukottai Road, Thanjavur 613005, Tamil Nadu; Director's Quarters, Indian Institute of Food Processing, Technology, Pudukkottai Road, Thanjavur 613005, T.N.; [Tel: Off. (04362) 226676; Cell: 9750968404; Fax: (043620) 227971; Email: c.anandharamakrishnan@gmail.com; director@iifft.edu.in]



1999: **APTE, Shree Kumar** (b 18 Oct, 1952), Sp: Molecular biology and biotechnology of stress and adaptive responses of bacteria and plants; Distinguished Professor & DST JC Bose National Fellow, R.No. PF-BG-28, UM-DAE-CEBS, Vidyanagari, Kalina, Mumbai 400098, Maharashtra; 404, Runwal Hills, Deonar Farm Road, Deonar, Mumbai 400088, Maharashtra; [Tel: Off. (022) 26530229; Res. (022) 25580177, Cell: 9869480205; Fax: (022) 25505189; Email: aptesk@cbs.ac.in; aptesk@yahoo.com]



2006: **ARORA, Dilip K.** (b 29 Jun, 1952), Sp: Molecular Identification and Biodiversity Analysis of Agriculturally Important Microbes (AIMs), Plant-Microbe Interaction and Development of Molecular Probes for AIMs; Former VC, SKUAST-Jammu, 85/5, Trikuta Nagar, Jammu, J&K; [Email: aroradilip@yahoo.co.in]



2004: **ARORA, Vijay Kumar** (b 17 Jan, 1958), Sp: Soil and water management, crop modeling; 272-A, Aggar Nagar, Ludhiana 141004, Punjab; [Tel: Res. (0161) 2553502; Cell: 8427960907; Email: vkarora58@yahoo.com]



2016: **ARUNACHALAM, Ayyanadar** (b 8 May, 1970), Sp: Agroforestry, Restoration Ecology & Natural Resource Management; Director, ICAR-Central Agroforestry Research Institute, Jhansi 284003, U.P.; Director's Bungalow, ICAR-Central Agroforestry Research Institute, Jhansi 284003, U.P.; [Tel: Off. (0510) 2730214; Cell: 9212441230; Fax: (0510) 2730364; Email: arun70@gmail.com; arun.icar@yahoo.com]; NAAS Associate, 2010



1991: **ARUNACHALAM, Vaidheeswara** (b 28 Jan, 1938), Sp: Plant breeding, participatory plant breeding and biodiversity, quantitative and population genetics; Former ICAR National Fellow, Flat No. 1, Rams Bridgeview Apartments, 3, Central Avenue, Kodambakkam, Chennai 600024, Tamil Nadu; [Tel: Res. (044) 24724198, Cell: 8939139327; Email: vaiarunachalam@hotmail.com]; Editor 1 Jan, 1996 to 31 Dec, 1998



1995: **ATHAVALA, R.N.** (b 26 Jul, 1938), Sp: Water management, water harvesting, artificial recharge; 30 Photinia Court, San Ramon, CA 94582, USA; D-3, Shreyas Apartments, Shreyas Tekra, Amba Wadi, Ahmedabad 380015, Gujarat; [Tel: Res. 518-888-5667; Email: rathavale@gmail.com]





1996: **AULAKH, Milkha Singh** (b 15 Aug, 1950), Sp: Soil biochemistry, soil fertility & plant nutrition, integrated nutrient management, leaching of nutrients, cycling/transformations of nutrients in soils, greenhouse gases flux, agriculture-induced environmental pollution; Former Vice-Chancellor, 41-B, Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 4615941; Cell: 9988090942; Email: msaulakh2004@yahoo.co.in]; *Dr. N.S. Randhawa Memorial Award 2015-2016*



1998: **AYYAPPAN, S.** (b 10 Dec, 1955), Sp: Fisheries, freshwater aquaculture, aquatic microbiology; Chancellor, CAU, Imphal, 106, Sankalp Basant, #40 & 41, Akka Mahadevi Road, Industrial Suburb, Mysuru South, Mysuru 570008, Karnataka; [Tel: Cell: 9582898989; Email: sayyappan1955@gmail.com]; *President 1 Jan, 2014 to 31 Dec, 2016; Vice-President 1 Jan, 2010 to 31 Dec, 2012; Secretary 1 Jan, 2003 to 31 Dec, 2005; Member Executive Council 1 Jan, 2002 to 31 Dec, 2002; Recognition Award 2001-2002; Dr. B.P. Pal Memorial Award 2009-2010*



2018: **BABU, Suresh Chandra** (b 9 May, 1961), Sp: Agricultural Economics, extension, nutrition economics and policy, institutional development, policy process and political economy, bio-economy and renewable energy, education system; Senior Research Fellow and Head of Capacity Strengthening, DGO, IFPRI, 1201 Eye Street, NW Washington DC 20005-3915, USA; 10813, Tara Road, Potomac MD 20854, USA; [Tel: Off. +1 202-8622-5608; Res. 3013305533; Cell: +240 602-0809; Fax: +1 202-467-4439; Email: s.babu@cgiar.org]



1993: **BAGYARAJ, D. Joseph** (b 9 Oct, 1940), Sp: Agricultural microbiology, plant - microbe interactions, mycorrhizal symbiosis; INSA Honorary Scientist, 41, RBI Colony, Anand Nagar, Bengaluru 560024, Karnataka; [Tel: Off. (080) 23335368; Res. (080) 23335368, Cell: 9448465368; Email: djbagyaraj@gmail.com]



1995: **BAHL, Prem Nath** (b 28 Mar, 1933), Sp: Crop genetics and breeding (food legumes and cereals); Former DDG, ICAR, A-9, Nirman Vihar, Vikas Marg, Delhi 110092; House No. 34, Housing Board Colony, Bindraban, Palampur 176061 (H.P.); [Tel: Res. (011) 22541880; Cell: 9891628418 (Palampur); Email: pnbahl@hotmail.com]; *Dr. K. Ramiah Memorial Award 2009-2010*



1994: **BAJAJ, Satinder** (b 25 Sep, 1939), Sp: Nutrition education, women's education, nutrition counseling, software for counseling; Former Director, Lady Irwin College, A-274, Sector 19, Noida 201301, U.P.; [Tel: Res. (95120) 2521739, Cell: 9958182330; Email: satibajaj@gmail.com]; *Member Executive Council 1 Jan, 2006 to 31 Dec, 2008*



1993: **BAJWA, Mohinder Singh** (b 28 Aug, 1941), Sp: Soil fertility, Soil chemistry, Management of salt affected soils and saline/sodic irrigation water, Agricultural education and research management; Former Dean & Director of Research, PAU, House No. 2103, Sector 69, S.A.S. Nagar, Mohali 160069, Punjab; [Tel: Res. (0172) 2216103; Cell: 9814709845; Email: msbajwa41@gmail.com]



2017: **BALAMURUGAN, Vinayagamurthy** (b 22 Oct, 1973), Sp: Veterinary Sciences, Veterinary Virology, Veterinary Microbiology; Principal Scientist, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics, P.O. 6450, Ramagondanahalli, Yelahanka, Bengaluru 560064, Karnataka; C-403, G.K. Lake View Apartments, 94/2, Ananthapura, Yelahanka, Bengaluru 560064, Karnataka; [Tel: Off. (080) 23093100; Cell: 9481807438; Email: balavirol@gmail.com; b.vinayagamurthy@icar.gov.in]



2011: **BALYAN, Harindra Singh** (b 11 Aug, 1951), Sp: Genetics, plant breeding and crop biotechnology; Hon. Emeritus Professor & INSA Sr. Scientist, Department of Genetics & Plant Breeding, Ch. Charan Singh University, Meerut 250004, U.P.; 1/239, Rakshapuram, Mawana Road, Meerut 250001, U.P.; [Tel: Off. (0121) 2768195; Res. (0121) 2623564, Cell: 9412515497; Fax: (0121) 2768195; Email: hsbalyan@gmail.com; hsbalyan@ccsuniversity.ac.in]



1991: **BAMJI, Mahtab S.** (b 5 Oct, 1934), Sp: Biochemistry, nutrition, community health and nutrition; INSA Emeritus Scientist, 211, Sri Datta Sai Apartments, RTC Cross Road, Musheerabad, Hyderabad 500020, Telangana; Rural Centre; Dangoria Charitable Trust Hospital, Village Narsapur, Medak District, Telangana; [Tel: Off. & Res. (040) 27615148, 27661422, Cell: 9246886442, 9505838921; Rural centre (08458) 287841, 286241; Email: msbamji@gmail.com; mahtabbamji@yahoo.com]; *Member Executive Council 1 Jan, 1996 to 31 Dec, 2000*



2016: **BANDYOPADHYAY, Kalikinkar** (b 1 Mar, 1969), Sp: water and nitrogen dynamics in soil-plant system and improving input use efficiency, carbon sequestration and soil physical health under different conservation agriculture practices, crop simulation modeling; Principal Scientist, Division of Agricultural Physics, ICAR-Indian Agricultural Research Institute, New Delhi 110012; Scientist Apartment, D-11, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25841178; Cell: 7428647361; Email: kk.bandyopadhyay@gmail.com]; *NAAS Associate, 2008*



2004: **BANDYOPADHYAY, Santanu Kumar** (b 16 Jan, 1953), Sp: Animal virology, diagnostics and vaccines, molecular virology, epidemiology, animal disease prevention and control; 9B, Bangur Avenue, D-Block, Kolkata 700055, W.B.; [Tel: Cell: 9831292870; Email: santanu.bandy@gmail.com]; *Member Executive Council 1 Jan, 2008 to 20 Nov, 2009*



2014: **BANERJEE, Kaushik** (b 3 Aug, 1967), Sp: Agricultural Chemicals, Food Safety, Food Chemistry; Principal Scientist, National Reference Laboratory (NRL), ICAR-National Research Centre for Grapes, P.O. Manjri Farm, Pune 412307, Maharashtra; [Tel: Cell: 9890940914; Fax: (020) 26956099; Email: kbgrape@yahoo.com; kaushik.banerjee@icar.org.in]; *Recognition Award 2017-2018*



2006: **BANERJEE, Rintu** (b 21 May, 1963), Sp: Enzyme Technology, Biofuel and Bioenergy; Professor, Department of Agricultural & Food Engineering, Indian Institute of Technology, Kharagpur 721302, W.B.; Qr No. B-166, Indian Institute of Technology, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283104; Res. (03222) 283105, Cell: 9434014609; Fax: (03222) 282244; Email: rb@agfe.iitkgp.ernet.in]; *Member Executive Council 1 Jan, 2009 to 31 Dec, 2011; Recognition Award 2009-2010; Dr. (Ms) Prem Dureja Endowment Award 2015-2016*



2005: **BANGA, Surinder Singh** (b 6 Aug, 1955), Sp: Plant breeding and genetics; ICAR National Professor, Department of Plant Breeding and Genetics, Punjab Agricultural University, Ludhiana 141004, Punjab; G-439, BRS Nagar, Ludhiana, Punjab; [Tel: Off. (0161) 2411330; Res. (0161) 2463972, Cell: 9463319390; Fax: (0161) 2409891; Email: nppbg@pau.edu; surin11@rediffmail.com]



2008: **BANSAL, Kailash Chander** (b 24 Apr, 1955), Sp: Functional Genomics and Gene Discovery, Plant Genetic Engineering, Plant Physiology, Plant Genetic Resources; Former Director, NBPGR, A-81, Carlton Estate 4, DLF Phase 5, Sector 53, Gurugram 122001, Haryana; [Tel: Cell: 9999105667; Email: kailashbansal@hotmail.com; kcbansal2001@yahoo.com]; *Secretary 1 Jan, 2021; Member Executive Council 1 Jan, 2017 to 31 Dec 2019; Recognition Award 2009-2010; Dr. K. Ramiah Award 2017-2018*



2001: **BAQRI, Qaiser Husain** (b 2 Jan, 1944), Sp: Nematology, biodiversity, ecology of the Thar desert; Village & Post Office: Said Nagli, Tehsil: Hasanpur, Amroha 244242, U.P.; [Tel: Res. (05924) 240077; Cell: 9319731160; Email: qaiserbaqri@gmail.com]



2016: **BARANWAL, Virendra Kumar** (b 10 Jul, 1960), Sp: Serological & Molecular diagnostics and deep sequencing for characterization of plant viruses and virus like pathogens; Professor, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-40, Type V, IARI Campus, New Delhi 110012; [Tel: Off. (011) 25843113, 25848418; Res. (011) 25843336, Cell: 9818756899; Email: vkbaranwal@iari.res.in; vkbaranwal@iari.res.in]



2020: **BARIK, Saroj Kanta** (b 12 Apr, 1965), Sp: Plant Ecology, Environmental Science, Biodiversity Conservation, Forestry; Director, CSIR-National Botanical Research Institute, Rana Pratap Marg, Lucknow 226001, U.P.; F4, CSIR Colony, Nirala Nagar, Lucknow 226020, U.P.; [Tel: Off. (0522) 2297802; Res. (0522) 2789965; Cell: 9436100688, 7617001965; Fax: (0522) 2205839; Email: sarojkbarik@gmail.com]



2012: **BATISH, Virender Kumar** (b 7 Jul, 1947), Sp: Probiotics as biotherapeutics, Molecular Diagnostics (PCR, qPCR), Recombinant proteins, Genetics and Molecular Biology of Lactic Starters; Secretary, Probiotic Association of India, Flat No. B-04, Dream World, Opp. Arpana Dispensary, Village & P.O. Budhakhera, Karnal 132001, Haryana; [Tel: Res. (0184) 2268004; Cell: 9896329190; Email: vkbatish@gmail.com]



2009: **BAWA, Amarinder Singh** (b 17 Apr, 1952), Sp: Food Science and Technology, Food engineering and Meat processing; Former Director, DFRL, DRDO, 103, Begonia, Sankalp Central Park, Jawa Main Road, Yadavgi, Mysuru 570020, Karnataka; [Tel: Cell: 9845230047, 8360161392; Email: amarinderbawa@yahoo.co.in]



2015: **BEHERA, Tusar Kanti** (b 17 Mar, 1968), Sp: Vegetable Breeding, Molecular Breeding; Principal Scientist, Division of Vegetable Science, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 3-B, Scientist Apartment, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25841533; Res. (011) 25840306, Cell: 9868342628; Fax: (011) 25847148; Email: tusariari@gmail.com; tusar@rediffmail.com]; *NAAS Associate, 2005*



2014: **BEHERA, Umakanta** (b 21 Jun, 1962), Sp: Farming System Research (integrated farming systems and optimization methodology) and Conservation Agriculture; Dean, College of Agriculture, (Central Agricultural University), CPGS Campus, Umiam 793103, Meghalaya; Type IV-A, New block, CPGS campus, Umiam 793103, Meghalaya; [Tel: Cell: 9968130091; 9485111553; Email: ukb2008@gmail.com; ukbehera2008@yahoo.com]



2005: **BENBI, Dinesh Kumar** (b 16 Dec, 1954), Sp: Soil science, organic matter dynamics, biotic carbon sequestration, climate change mitigation, soil quality assessment and management, fertilizer-environment interactions, natural resource management; ICAR National Professor, Department of Soil Science, Punjab Agricultural University, Ludhiana 141004, Punjab; 261-D, Model Town Extn., Ludhiana, Punjab; [Tel: Off. (0161) 2401960 Ext. 317; Res. (0161) 2501321; Cell: 9464035154; Fax: (0161) 2400945; Email: dkbenbi@yahoo.com]



2015: **BENTUR, Jagadish Sanmallappa** (b 22 Jul, 1951), Sp: Insect-plant interactions with special reference to gall midge and rice, Host-Plant Resistance to insects in rice, IPM in rice, Molecular Entomology; Professor - Plant Biotech., Agri Biotech Foundation, Rajendranagar, Hyderabad 500030, Telangana; 5-4-118, Bhavani Colony, Rajendranagar, Hyderabad 500030, Telangana; [Tel: Off. (040) 24002147; Res. (040) 64515635, Cell: 9391379573; Fax: (040) 24002147; Email: jbentur@yahoo.com; jbentur@gmail.com]



2020: **BHARDWAJ, Dangar Ram** (b 15 Aug, 1963), Sp: Genetics, breeding and biotechnology of vegetable crops and augmentation of genetic resources; Principal Scientist (Vegetable Science), ICAR-Indian Institute of Vegetable Research, Post Bag No. 01, P.O. Jakkhini (Shahanshahpur), Distt. Varanasi 221305, U.P.; Jwala Nagar Colony, Chitaurpur-Chunar Road, Village and PO Kandwa, Varanasi 221106, U.P.; [Tel: Off. (0542) 2635236; Cell: 9415301823; Fax: (05443) 229007; Email: dram\_iivr@yahoo.com]



2018: **BHARDWAJ, Subhash Chander** (b 12 May, 1960), Sp: Plant Pathology, Molecular Plant Pathology, Plant Breeding; Principal Scientist and In-charge, ICAR-Indian Institute of Wheat & Barley Research, Regional Station, Flowerdale, Shimla 171002, H.P.; Panchjanya Niketan, Sadhnaghati, Near Tel. Exchange, Chotta Shimla, Shimla 171002, H.P.; [Tel: Off. (0177) 2621978; Res. (0177) 2623982; Cell: 9418129900; Fax: (0177) 2620108; Email: scbdfd@hotmail.com; subhash.bhardwaj@icar.gov.in]



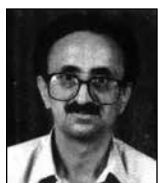
1992: **BHARGAVA, Suresh Chandra** (b 22 Apr, 1936), Sp: Plant/crop physiology, regulation of flowering under controlled environment; Fellow, NAAS, Block N - 19 D, SFS Flats, Saket, New Delhi 110017; [Tel: Res. (011) 40349744, 29561579, Cell: 9810996714; Email: scbhargava2004@yahoo.co.in]



2017: **BHASKAR, Narayan** (b 1 Jun, 1969), Sp: Aquatic Biofunctional Materials, Industrial Fishery Technology, Fisheries Microbiology & Biochemistry, Processing waste (animal/fish processing) utilization; Advisor, FSSAI, Kotla Road, New Delhi 110002; #5, Prerana, Block-5, Health Block, Ramakrishna Nagar H-Block, Mysore 570022, Karnataka; [Tel: Off. (011) 23237418; Res. (0821) 2462084; Cell: 9448672408; Fax: (011) 23237418; Email: bhasnarayan@gmail.com]



1999: **BHAT, Pran P.** (b 23 Jul, 1944), Sp: Animal genetics and breeding, animal biotechnology (production and health); Former ADG, ICAR, Apartment No. 600A, Hamilton Court, DLF Phase IV, Gurugram 122002, Haryana; [Tel: Res. (0124) 4057003; Email: pnbhat@bol.net.in; wbtoida@vsnl.net]



1998: **BHAT, Ramesh Venkataramana** (b 24 Nov, 1944), Sp: Food safety, food quality and food toxicology; Former Deputy Director, NIN, M-11, Kakateyanagar, Habshingua (Near Resource Source), Hyderabad 500007, Telangana; [Tel: Res. (040) 27173754, Cell: 9441065981; Email: rameshbhatv@gmail.com]



1992: **BHATIA, Chittranjan** (b 1 Jan, 1936), Sp: Plant genetics and breeding, biotechnology; Former Secretary, DBT, 17 Rohini, Plot No. 29-30, Sector 9-A, Vashi, Navi Mumbai 400703, Maharashtra; [Tel: Res. (022) 27655178; Cell: 9820502810; Email: crbhatia.bhatia@gmail.com]; *Vice-President 1 Jan, 2004 to 31 Dec, 2006; Member Executive Council 1 Oct, 1992 to 31 Dec, 1998*



2000: **BHATIA, Jitendra Singh** (b 29 May, 1942), Sp: Veterinary physiology-polygastric digestion, renal and neuro physiology; Former ADG, ICAR, B -101, Sector 2, Plot 3C, Mandakani Apartment, Dwarka, New Delhi 110075; Former ADG, ICAR, A-4/405 Adora Akshaya Home, OMR Road, Paddur, Chennai 603613, Tamil Nadu; [Tel: Cell: 9316612588; Email: bhatiajs05@rediffmail.com; bhatiajs05@gmail.com]



1999: **BHATIA, Sudershan Kumar** (b 20 Jun, 1945), Sp: Ruminant nutrition, rumen function and metabolism; Former Professor, HAU, 1662, Sector 7, Urban Estate, Karnal 132001, Haryana; [Tel: Res. (0184) 2286349; Cell: 9896747144; Email: skbhatia20@yahoo.com]; *Recognition Award 1999-2000; Dr. P. Bhattacharya Award 2017-2018*



2011: **BHATIA, Vijay Kumar** (b 7 Feb, 1951), Sp: Agricultural Statistics, Statistical Genetics and Applied Statistics; Former Director, ICAR-IASRI, Adjunct Professor, ICAR-IARI (Agril. Statistics), B-279, Derawal Nagar, Near Model Town, Delhi 110009; [Tel: Res. (011) 27115163, Cell: 9868141062; Email: vkb7251@gmail.com; vkbhatia7251@yahoo.co.in]; *Editor 1 Jan, 2017 to 31 Dec 2019*



2009: **BHATT, Bhagwati Prasad** (b 5 Feb, 1965), Sp: Farming System Research, Conservation Agriculture and Agroforestry; OSD, NRM Division, Indian Council of Agricultural Research, KAB-II, Pusa, New Delhi 110012; [Tel: Cell: 9473199366; Email: bhattbp.65@gmail.com]



2020: **BHATTA, Raghavendra** (b 2 Sep, 1965), Sp: Animal Nutrition; Director, ICAR-National Institute of Animal Nutrition and Physiology, Bengaluru 560030, Karnataka; [Tel: Off. (080) 25711303; Res. (080) 65950019; Cell: 9035665594; Fax: (080) 25711420; Email: ragha0209@yahoo.com; directornianp@gmail.com]



2003: **BHATTACHARYA, Ashim Kumar** (b 17 Jan, 1944), Sp: Agricultural land drainage, hydrology; Former Emeritus Scientist, WTC, IARI, # 805, Pocket 3, Sector 19, Dwarka, New Delhi 110075; [Tel: Cell: 9818764990; Email: b\_ashimkumar@yahoo.co.in]



2017: **BHATTACHARYA, Tarun Kumar** (b 4 Sep, 1970), Sp: Animal Genetics & Breeding, Molecular Genetics, Genomics, Biotechnology; National Fellow, ICAR-Directorate of Poultry Research, Rajendranagar, Hyderabad 500030, Telangana; Flat No. 104, Raja's Courtyard, Upperpally, Hyderabad 500048, Telangana; [Tel: Off. (04) 24015651; Res. (040) 40059388; Cell: 9490792635; Fax: (040) 24017002; Email: bhattacharyatk@gmail.com]; *Young Scientist Award 2003-2004; NAAS Associate, 2005*



2017: **BHATTACHARYYA, Pratap** (b 16 Jun, 1973), Sp: Climate Change; Greenhouse Gas Emission; Carbon-Nitrogen Dynamics; Soil Quality; Soil-Microbes-Plant Interactions, Resource Conservation Technologies; ICAR-National Fellow and Principal Scientist, Crop Production Division, ICAR-National Rice Research Institute (NRRI), Cuttack 753006, Odisha; #23/2 Bindu Basini Road, P.O. Bhatpara, Dist. 24 Parganas (North) 743123, W.B.; [Tel: Off. (0671) 2367768; Cell: 9438213108; 6370642492; Fax: (033) 25350415; Email: pratap162001@gmail.com; pratap162001@yahoo.co.in]



2014: **BHATTACHARYYA, Ranjan** (b 28 Jun, 1972), Sp: Soil Science, Carbon sequestration, Conservation agriculture, Soil conservation, Climate change; Principal Scientist, Center for Environment Science and Climate Resilient Agriculture, NRL Building, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 9D, Scientists' Apartment, IARI, Pusa, New Delhi 110012; [Tel: Off. (011) 25846359; Cell: 7838781447; Fax: (011) 25844254; Email: ranjan\_vpkas@yahoo.com; ranjan@iari.res.in; ranjanvpkas@gmail.com]; *NAAS Associate, 2011*



1998: **BIJAY SINGH** (b 20 Dec, 1950), Sp: Soil fertility, nitrogen fertilizer use efficiency, environmental and health effects of fertilizers; INSA Honorary Scientist, Department of Soil Science, Punjab Agricultural University, Ludhiana 141004, Punjab; 69, Green Field, Ludhiana 141002, Punjab; [Tel: Off. (0161) 2401960 Ext. 317; Cell: 9815569369; Fax: (0161) 2400945; Email: bijaysingh20@hotmail.com; bijay.pau@gmail.com]; *Recognition Award 1999-2000; Dr. N.S. Randhawa Memorial Award 2007-2008*



2010: **BIRTHAL, Pratap Singh** (b 5 Dec, 1963), Sp: Technology policy, institutional economics and livestock economics; ICAR National Professor, National Institute of Agricultural Economics and Policy Research, DPS Marg, Pusa, New Delhi 110012; [Tel: Cell: 9910052752; Email: ps.birthal@icar.gov.in; psbirthal@yahoo.com]; *Editor 1 Jan, 2020; Recognition Award 2013-2014*



2016: **BISWAS, Ashis Kumar** (b 5 May, 1963), Sp: Soil Chemistry & Fertility; Soil & Water Pollution; Soil Health & Conservation Agriculture; Principal Scientist & I/C Head, Division of Soil Chemistry & Fertility, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; PL-68, Indus Park-II, Ayodhya Bypass, Narela Shankari, Bhopal 462041, M.P.; [Tel: Off. (0755) 2730970, Ext. 214; Res. (0755) 4916782; Cell: 9993600268; Fax: (0755) 2733310; Email: akb63@yahoo.com]



2021: **BISWAS, Dipak Ranjan** (b 15 Apr, 1962), Sp: Soil Chemistry & Fertility; Utilization of non-conventional P and K-minerals by enriched compost technology and microbial intervention by P and K-solubilizing bacteria; Synthesis of novel fertilizers; Principal Scientist, Div. of Soil Science and Agricultural Chemistry, Indian Agricultural Research Institute, New Delhi 110012; NRC-13, Type-IV, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25841991, 25841494; Cell: 9868554968, 9718811245; Email: dipakbiswas.iari@gmail.com; drb\_ssac@yahoo.com]



2020: **BLAISE, Desouza** (b 3 Feb, 1967), Sp: Allelopathy, Conservation Agronomy; Head, Division of Crop Production, ICAR-Central Institute for Cotton Research, Panjri Farm, Wardha Road, Nagpur 441108, Maharashtra; [Tel: Off. (07103) 275536; Cell: 9822567062; Fax: (07103) 275529; Email: blaise\_123@rediffmail.com]



2005: **BRAR, Mukand Singh** (b 1 Apr, 1948), Sp: Soil fertility-chemistry, environment pollution; DX-4, Omaxe Royal Residency, Pakhowal Road, Ludhiana 142022, Punjab; [Tel: Res. (0161) 2450226, Cell: 9872835130; Email: brarms@yahoo.co.in]



2009: **BUJARBARUAH, Kamal Malla** (b 11 Nov, 1950), Sp: Agricultural and allied Sciences (Livestock Production & Management); Former Vice Chancellor, Assam Agricultural University, Jorhat 785013, Assam; [Tel: Off. (0376) 2340013; Cell: 9868245370, 9435050050; Fax: (0376) 2340001; Email: km\_bujarbaruah@rediffmail.com]; *Member Executive Council 1 Jan, 2014 to 31 Dec, 2016*



2014: **BUTTAR, Gurmeet Singh** (b 10 Nov, 1963), Sp: Agronomy, Water Management; Additional Director of Extension Education, Punjab Agricultural University, Ludhiana 141004, Punjab; 6/13, PAU Campus, Ludhiana 141004, Punjab; [Tel: Off. (0161) 2401074; Cell: 9417648885; Email: buttargs@rediffmail.com; buttargs@pau.edu]



2020: **CARBERRY, Peter** (b 20 Aug, 1959), Sp: Systems Research and Modelling; Former Director General, ICRISAT, Unit 201, 1331 Gold Coast Hwy, Palm Beach, QLD 4221, Australia; [Tel: +61 419656955; Email: carberryps@gmail.com]



1992: **CHADHA, Krishan Lal** (b 15 Nov, 1936), Sp: Horticulture; President, Indian Academy of Horticulture Sciences, F1- National Societies Block, NASC Complex, DPS Marg, New Delhi 110012; H.No. 7281, B-10, Vasant Kunj, New Delhi 110070; [Tel: Off. (011) 25842127; Res. (011) 26896529, Cell: 9312005646; Email: klchadha@gmail.com]; *Vice-President 1 Jan, 2000 to 31 Dec, 2002; Editor 1 Jan, 1999 to 31 Dec, 1999; Dr. B.P. Pal Memorial Award 2003-2004*



2013: **CHADHA, Madan Mohan Lal** (b 7 Mar, 1946), Sp: Vegetable Breeding, home gardening, indigenous vegetables, protected cultivation; Chairman, Madan Chadha Safe Healthy Vegetable Foundation (MCSHFV), 1625, Sector 13, Hisar 125005, Haryana; [Tel: Off. 8295951625; Res. (01662) 249625, Cell: 8295951625; Email: madanchadha75@gmail.com]



2007: **CHAKRABARTI, Rina** (b 1 Apr, 1960), Sp: Larviculture; maintenance of water quality, aquahouse, recirculating system; Professor, Aqua Research Lab, Department of Zoology, University of Delhi, Delhi 110007; B-2 Riedes Line, University of Delhi, Delhi 110007; [Tel: Off. (011) 27666496; Res. (011) 27667127, 27666446; Fax: (011) 27666486; Email: aquaresearchlab@yahoo.co.in]



2016: **CHAKRABARTI, Swarup Kumar** (b 5 Mar, 1958), Sp: Plant Pathology, Plant Biotechnology, Plant Genomics; Former Director, ICAR-CPRI, 59A/4 Bose Pukur Road, Flat 202, Santanu Apartment, Kolkata 700042, W.B.; [Tel: Cell: 9400014400; Email: Chakrabarti.sk@icar.gov.in; directorcpri@gmail.com]; *Shri L.C. Sikka Endowment Award 2013-2014*



2017: **CHAKRABARTY, Pranjib Kumar** (b 12 Oct, 1958), Sp: Mycology & Plant Pathology; Molecular Plant Pathology and Biotechnology, host-pathogen interaction, Molecular diagnosis; Member, Agricultural Scientists Recruitment Board, R.No. 202, Krishi Anusandan Bhavan-I, New Delhi 110012; [Tel: Off. (011) 25840017; Cell: 9540029275; Email: pranjibc@gmail.com; member.ps@asrb.org.in]



2016: **CHAKRABORTY, Bishwanath** (b 12 Jul, 1955), Sp: Molecular Plant Immunity, Microbial Biotechnology, Harnessing beneficial microbial resources for crop improvement; Upohar Condoval, Flat - 1001, Tower - 05, 2052 Chak Garia, Kolkata 700094, W.B.; [Tel: Cell: 9800266298, 9434715402; Fax: (0353) 2699001; Email: bncnbu@gmail.com]





2018: **CHAKRABORTY, Kajal** (b 24 Dec, 1973), Sp: Fish Biotechnology, Marine Bioprospecting, Aquatic Food Product Technology; Senior Scientist (ARS), ICAR-Central Marine Fisheries Research Institute, Ernakulam North P.O., Cochin 682018, Kerala; H.No. 98 PWRA, Shantigram Road, Chembumukku, Cochin 682030, Kerala; [Tel: Off. (0484) 2394867; Res. (0484) 4069936; Cell: 9446418432; Fax: (0484) 2394909; Email: kajal\_cmfri@yahoo.com; kajal.chakraborty@icar.gov.in; chakrabortycmfri@gmail.com]



2016: **CHAKRABORTY, Niranjana** (b 24 Feb, 1958), Sp: Stress Physiology, Plant Proteomics and Plant Biotechnology; Professor of Eminence, National Institute of Plant Genome Research, Jawaharlal Nehru University Campus, Aruna Asaf Ali Marg, New Delhi 110067; C-9/9428, Vasant Kunj, New Delhi 110070; [Tel: Off. (011) 26735178; Res. (011) 26139428, Cell: 9873208264; Fax: (011) 26741658; Email: nchakraborty@nipgr.ac.in; nchakraborty@hotmail.com]



2013: **CHAKRABORTY, Subhra** (b 25 Sep, 1964), Sp: Nutritional Genomics, Plant Immunity, Plant Proteomics, Molecular Biology, Genetic Engineering & Biotechnology; Director, National Institute of Plant Genome Research, Jawaharlal Nehru University Campus, Aruna Asaf Ali Marg, New Delhi 110067; C9/9428, Vasant Kunj, New Delhi 110070; [Tel: Off. (011) 26742267, 26735169; Lab. (011) 26735186; Res. (011) 26139428, Cell: 9971923777; Fax: (011) 26741658; Email: director@nipgr.ac.in; schakraborty@nipgr.ac.in; subhrac@hotmail.com]



2017: **CHAKRABORTY, Supriya** (b 13 Dec, 1969), Sp: Biology of plant-virus interactions. Transgenic resistance to geminiviruses; Professor, Molecular Virology Laboratory, Room No. 405/416, School of Life Sciences, Jawaharlal Nehru University, New Delhi 110067; 16, Dakshina Puram, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704153, Cell: 9868628684; Fax: (011) 26742558; Email: supriyachakrasls@yahoo.com; schakraborty@mail.jnu.ac.in]



2008: **CHAND, Ramesh** (b 18 Jun, 1956), Sp: Food Policy; Agricultural Marketing, Trade and WTO; and Agricultural Growth and Development; Member, NITI Aayog, NITI Bhawan, Parliament Street, New Delhi 110001; B-11, IARI Campus, New Delhi 110012; [Tel: Off. (011) 23096756; 23096774; Res. (011) 25841705; Cell: 9818235571; Fax: (011) 23730678; Email: rc.niti@gov.in; rcncap@gmail.com]



2010: **CHANDRA, Amaresh** (b 1 Jan, 1962), Sp: Plant biochemistry, molecular marker, plant biotechnology and source-sink molecular dynamics in sugarcane; Principal Scientist, Division of Plant Physiology & Biochemistry, Indian Institute of Sugarcane Research, Rai Bareilly Road, Lucknow 226002, U.P.; D2-301 Akash Enclave, Vrindavan Yojaya Sector 6A, RB Road, Lucknow 226029, U.P.; [Tel: Off. (0522) 2480735-37 Extn 172; Cell: 9450041285; Fax: (0522) 2480738; Email: amaresh\_chandra@rediffmail.com; amaresh.chandra@icar.gov.in; amaresh62@yahoo.com]



2017: **CHANDRA, Hukum** (b 7 Nov, 1972), Sp: Small Area Estimation, Sample Survey Design and Analysis, Poverty Mapping, Statistical Methodology for Improvement of Agricultural Statistics including Livestock; ICAR National Fellow, ICAR-Indian Agricultural Statistics Research Instt, Library Avenue, Pusa, New Delhi 110012; B-137, Ashok Vihar, Phase - IV, Delhi 110052; [Tel: Off. (011) 25843398; Res. (011) 47571929, Cell: 9999450020; Fax: (011) 25841564; Email: hchandra12@gmail.com; hukum.chandra@icar.gov.in]; *Recognition Award 2017-2018*



2019: **CHATRATH, Ravish** (*b 18 Apr, 1957*), Sp: Wheat improvement, wheat biofortification, root phenotyping, database; Professor and Dean, Faculty of Agricultural Sciences, DAV University, Sarmastpur, Jalandhar 144012, Punjab; [Tel: Cell: 9416177625; Email: r.chatrath@gmail.com]



2005: **CHATTERJEE, Chitrallekha** (*b 6 Feb, 1943*), Sp: Plant nutrition, plant physiology and plant-soil relationship; Former Dean, Lucknow University, Hari Sadan 7-A, Rana Pratap Road, Lucknow 226001, U.P.; [Tel: Res. (0522) 3203204; Cell: 9554033917; Email: chitrallekhaliko@gmail.com]



2015: **CHATTERJEE, Rudra Nath** (*b 1 Jan, 1965*), Sp: Animal Genetics & Breeding, Poultry Breeding, Molecular Genetics; Director, ICAR-Directorate of Poultry Research, Rajendranagar, Hyderabad 500030, Telangana; Flat No.101, Moghal Meadows-1, Upperpally, Hyderabad 500048, Telangana; [Tel: Off. (040) 24015650 & 24011313; Res. (040) 24011314, Cell: 9652052462, 9441295044; Fax: (040) 24017002; Email: rnch65@gmail.com; rncchat@rediffmail.com]



2013: **CHATTOPADHYAY, Chirantan** (*b 6 Oct, 1962*), Sp: Host resistance to plant diseases (oilseed crops), disease and insect-pest forecasting, bio-intensive integrated pest management; Vice-Chancellor, Uttar Banga Krishi Viswavidyalaya, Pundibari, Coochbehar 736165, W.B.; [Tel: Cell: 9582289566, 9453042439; Fax: (03582) 270249; Email: chirantan\_cha@hotmail.com; chirantan\_cha@yahoo.co.uk]



2007: **CHATURVEDI, Om Prakash** (*b 10 Jan, 1956*), Sp: Forestry; Agroforestry; Agrisilvicultural Systems; Agrihorticultural Systems; Silvopastoral Systems; Quality Plant Production; Growth and Production Modeling of Trees; Wasteland Reclamation and Development; Watershed Management and Development on Ecosystem basis; Former Director, ICAR-Central Agroforestry Research Institute, Opp. Pahuj Dam, Gwalior Road, Jhansi 284003, U.P.; DHB-203 D, Ansal Orchid Green Apartment, Parag Chungi Road, Sector - M, Aashiyana, Lucknow 226012, U.P.; [Tel: Off. (0510) 2730214; Res. (0510) 2730366, Cell: 9415590768; 9140680797; Fax: (0510) 2730364; Email: chaturvediopc@gmail.com]; *Recognition Award 2007-2008*



2021: **CHAUBEY, Indrajeet** (*b 1 Jul, 1969*), Sp: Non-point source pollution, water quality, watershed management, ecohydrology; Dean and Director, College of Agriculture, Health and Natural Resources, University of Connecticut, 1376 Storrs Road, Storrs, CT 06269-4066, USA; 27 Liberty Drive, S. Glastonbury, CT 06073; USA; [Tel: Off. (001) 8604862917; Res. (001) 8604306018; Email: indrajeet.chaubey@uconn.edu; indrajeet.chaubey@gmail.com]



2010: **CHAUDHARI, Suresh Kumar** (*b 5 Mar, 1963*), Sp: Soil Physics, Agricultural Water Management, Management of salt affected soils and poor quality water, Climate Change impact on Agriculture; DDG (NRM), Indian Council of Agricultural Research, KAB-II, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25848364; Cell: 9729559063; Email: ddg.nrm@icar.gov.in; surchaudhari@hotmail.com]; *Recognition Award 2015-2016*



1993: **CHAUDHARY, Tej Narain** (b 5 Sep, 1936), Sp: Soil and water management; Former ADG, ICAR, R-159, Vani Vihar, Uttam Nagar, New Delhi 110059; [Tel: Cell: 9958408113, 9818314045; Email: sushil.chaudhary159@gmail.com]



1994: **CHAUHAN, Harendra Singh** (b 17 Nov, 1936), Sp: Irrigation and drainage, ground water, microirrigation, soil and water conservation; Former Dean, GBPUAT, C/o Col Y.S. Bhadoria, # DM 30/4, Dronanchal Top, Neori Hills, Airport Road, Bhopal 462038, M.P.; [Tel: Res. (0522) 2395718; Email: hchauhan368@gmail.com]



2012: **CHAUHAN, Jitendra S.** (b 10 Jan, 1955), Sp: Genetics and Plant Breeding-rice and rapeseed-mustard yield and quality improvement; genetic resources management and research management; Former ADG (Seed), ICAR, A/36, ARG Puram, Naiala Road, Kanauta, Agra Road, Jaipur 303012, Rajasthan; [Tel: Cell: 9414025636, 7340219815; Email: js\_chau@yahoo.com; js\_chau09@rediffmail.com]; *Member Executive Council 1 Jan, 2020*



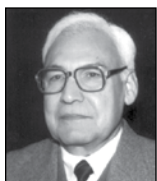
2015: **CHAUHAN, Manmohan Singh** (b 5 Jan, 1960), Sp: Animal Biotechnology, Reproductive Physiology and Biotechnology; Director, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; 1068, Sector-9, Urban Estate, Karnal 132001, Haryana; [Tel: Off. (0184) 2252800, 2259002; Cell: 9991652455; Email: chauhanabtc@gmail.com]; *Member Executive Council 1 Jan, 2021*



1994: **CHAUHAN, V.P.S.** (b 1 Jul, 1952), Sp: Animal breeding, quantitative genetics, biostatistics in clinical research; Senior Director (Biostatistics), Alpha Stats Inc., 21 Demarest Place, Piscataway, New Jersey 08854, USA; [Tel: Off. 001-732-261-3931; Res. 001-732-424-6171; Email: v\_chauhan@hotmail.com; vijay@alphastatsinc.com]



1999: **CHOWDHURY, Ashim** (b 27 Jan, 1947), Sp: Agricultural chemicals and Agricultural chemistry, Developing phytochemicals as biocides, Pesticides residue & degradation & effect on Soil microbiological parameters, Soil health and bioremediation, Medicinal plant development & quality standardization, value addition; Emeritus Fellow - UGC, Institute of Agricultural Sciences, University of Calcutta, 52/1 Hazra Road, 35-Ballygunge Circular Road, Kolkata 700019, W.B.; 36, Gorakshabasi Road, Subarnabhoomi Bengal D.C. Pal Housing Complex, Building-Koli-1, Flat A-302, Kolkata 700028, W.B.; [Tel: Off. (033) 24615445 Ext 355; Res. (033) 2529-2045, Cell: 9830243208; Fax: (033) 24614849; Email: ashimchowdhury@gmail.com]



1999: **CHOWDHURY, Jai Bhagwan** (b 27 Sep, 1938), Sp: Plant biotechnology, crop genetics/cytogenetics; Former Vice Chancellor, X 044, Regency Park II, DLF Phase IV, Gurugram 122002, Haryana; [Tel: Cell: 9811619758; Email: jaibchowdhury@yahoo.com]



2000: **COCKING, Edward Charles Daniel** (b 26 Sep, 1931), Sp: Plant biotechnology, especially symbiotic nitrogen fixation of cereals; Director, University of Nottingham, Centre for Crop Nitrogen Fixation, Plant Science Division, Schools of Biosciences & Biology, University Park, Nottingham NG7 2RD, UK; 30, Patterdale Road, Woodthorpe, Nottingham NG 54LQ, U.K.; [Tel: Off. 44 (0) 1159513056; Fax: 44 (0) 1159513240; Email: edward.cocking@nottingham.ac.uk]



2008: **DADHWAL, Vinay Kumar** (b 9 Apr, 1957), Sp: Crop modeling, Remote Sensing Applications in Agriculture, Terrestrial Carbon Cycle, Land Cover Land Use Change Modelling, Land Surface Processes; Director, Indian Institute of Space Science and Technology, (Dept. of Space, Govt. of India), Valiamala, Thiruvananthapuram 695547, Kerala; TC 85/75, Palkulangara Road, Pettah, Thiruvananthapuram; [Tel: Off. (0471) 256842; Cell: 9652110003; Fax: (0471) 2568401; Email: dadhwalvk@hotmail.com]



2010: **DADLANI, Malavika** (b 20 Aug, 1951), Sp: Seed Science and Technology; Seed Systems and Regulations; Plant Variety Protection; Farmers' Participatory Seed Production; On-farm Conservation of Agro-biodiversity; EC-60, Maya Enclave, New Delhi 110064; III/1, Chatushkon, 17, Golf Garden Road, Kolkata 700033, W.B.; [Tel: Res. (011) 25120318, Cell: 9868100549, 9899366565; Email: malavikadadlani.md@gmail.com; malavikadadlani@rediffmail.com]; *Editor 1 Jan, 2021*



2007: **DAGAR, Jagdish Chander** (b 20 Oct, 1950), Sp: Agroforestry, biosaline agriculture, plant ecology & environmental sciences, biodiversity, mangrove ecology, halophytes, biodrainage, ethnobotany, rehabilitation of degraded lands including salt-affected lands, management of natural resources, conservation agriculture, climate change, sustainable agriculture and policy; Chief Editor, Journal of Soil Salinity & Water Quality, ICAR-Central Soil Salinity Research Institute, Karnal 132001, Haryana; Ex. ADG (ICAR), House # 506, Surya Enclave, Sector 7, Urban Estate, Karnal 132001, Haryana; [Tel: Off. (0184) 2209312; Res. (0184) 3550257, Cell: 9416301661; Fax: (0184) 2292489; Email: dagarjc@gmail.com]



2017: **DAM ROY, Sibnarayan** (b 31 Dec, 1959), Sp: Mangrove and Coral Ecological Studies, Eco-friendly Brackishwater Aquaculture, Integrated Farming System for tropical Islands; Resource Assessment and Management, Biodiversity and conservation, Climate change and its impact on Island ecosystem, Socioeconomic studies on Island Fishers, Policy Research pertaining to Island Fisheries; Principal Scientist and Former Director, ICAR-Central Island Agricultural Research, Institute, P.B. 181, Port Blair 744101, A&N Islands; C/o Late Sukla Dam, Jail Road, Shillong-1, Meghalaya 793001; [Tel: Off. (03192) 233370; Cell: 8348001000; Email: sibnarayan@gmail.com; directorcaripb@gmail.com]



2015: **DANDONA, Jatinder Kumar** (b 27 Mar, 1956), Sp: Pathogen population characterization and population genetics, biological control of biotic and abiotic stresses and plant disease management on small farms; Registrar, G.B. Pant University of Agriculture & Technology, Pantnagar 263145, Uttarakhand; I/3/5, Phool Bagh, GBPUAT, Pantnagar 263145, Uttarakhand; [Tel: Off. (05944) 233640, 233473; Res. (05944) 233471, 233813; Cell: 7500241401; Fax: (05944) 233640, 233473; Email: jkumar56@gmail.com]



2019: **DAS, Anup** (b 18 Aug, 1974), Sp: Crop production, Hill farming system, Conservation agriculture, Organic farming, Climate resilient agriculture; Principal Scientist (Agronomy), ICAR Research Complex for NEH Region, Tripura Centre, Lembucherra, Agartala 799210, Tripura; [Tel: Off. (0381) 2865537; Cell: 873002833, 9436336070; Fax: (0381) 2865537; Email: anup\_icar@yahoo.com; anupicar@gmail.com]; *NAAS Associate, 2015*



2019: **DAS, Basanta Kumar** (b 20 Mar, 1966), Sp: Aquaculture & Molecular Immunology, Fish Health Management; Director, ICAR-Central Inland Fisheries Research Institute, Barrackpore, Kolkata 700120, W.B.; Director's Bungalow, ICAR-Central Inland Fisheries Research Institute, Residential Complex, Barrackpore, Kolkata 700120, W.B.; [Tel: Off. (033) 2590177; Res. (033) 25920029; Cell: 8420229567; Fax: (033) 25920388; Email: Basantadas@yahoo.com; director.cifri@gmail.com; basantakumard@gmail.com]



2007: **DAS, Mukul** (b 9 Jul, 1956), Sp: Food contamination and adulteration; Xenobiotic biotransformation; Chemical carcinogenesis; Nanotoxicology; Scientist G (Director Grade) & Area Coordinator, Food, Drugs & Chemical Toxicology Group, Indian Institute of Toxicology Research, P.O. Box 80, Mahatma Gandhi Marg, Lucknow 226001, U.P.; 215/19 Ka Kamal Sarovar, Subhash Marg, Lucknow 226003, U.P.; [Tel: Off. (0522) 2963826, 2620207, Ext 241; Res. (0522) 2745313; Fax: (0522) 2628227, 2211547; Email: mditrc@rediffmail.com]



1995: **DAS, Premananda** (b 6 Nov, 1942), Sp: Biotechnology of Horticultural Crops, Biodiversity Conservation, Mangrove Biology, Restoration Ecology in Mined Land, Biomass Production on Wastelands, Biofuels; Chairman & Director, The Science Foundation for Tribal & Rural Resource Development, C-122 (HIG), State Housing Board Colony, Baramunda, Bhubaneswar 751003, Odisha; [Tel: Off. (0674) 2355505; Res. (0674) 3552860; Cell: 9437007970, 7978157944; Fax: (0674) 2355505; Email: profpdas@yahoo.co.uk; premanandad887@gmail.com]; *Member Executive Council 1 Jan, 2001 to 31 Dec, 2003; Dr. K. Ramaiah Memorial Award 1999-2000*



2019: **DAS, Tapas Kumar** (b 3 Nov, 1964), Sp: Crop production agronomy, weed management and conservation agriculture; Professor & Principal Scientist, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi 110012; WZ 256D/1, 2nd Floor, Front Portion, Inderpuri, New Delhi 110012; [Tel: Off. (011) 25842776, 25841488; Cell: 9868128266; Fax: (011) 25842283; Email: tkdas64@gmail.com]



2012: **DATTA, Karabi** (b 25 Sep, 1951), Sp: Crop Biotechnology (Transgenic Research) emphasizing rice and jute; Reader, Department of Botany, University of Calcutta, 35, Ballygunge Circular Road, Kolkata 700019, W.B.; Apt # UD02-0302, 1050/1 Survey Park, Kolkata 700075, W.B.; [Tel: Off. (033) 24615445 Ext. 296; Res. (033) 24188625, Cell: 9830538205; Fax: (033) 24614849; Email: krbdatta@yahoo.com]



2018: **DATTA, Siba Prasad** (b 2 Mar, 1963), Sp: Soil Chemistry, Fertility and Pollution; Principal Scientist, Div. of Soil Science and Agricultural Chemistry, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 1 A Scientist Apartments, Pusa Campus, ICAR-Indian Agricultural Research Institute, New Delhi; [Tel: Off. (011) 25841494; Cell: 8376836507; Fax: (011) 25841529; Email: spdatta@yahoo.com]



2005: **DATTA, Swapan Kumar** (b 28 Jan, 1953), Sp: Plant biotechnology, gene technology, molecular breeding of rice, IPR-international agricultural science policy and management; Former DDG (Crop Science), Bengal Ambuja-Udita, Flat # 020302, 1050/1 Survey Park, Kolkata 700075, W.B.; [Tel: Cell: 8768644777; Email: swpndatta@yahoo.com]; *Member Executive Council 1 Jan, 2021; Member Executive Council 1 Jan, 2011 to 31 Dec, 2013*



1998: **DAVID, Vasantharaj Baliah** (b 17 Nov, 1935), Sp: Taxonomy of Aleyrodidae, agricultural entomology, crop protection and toxicology, GLP facility establishment and training; Plot No. 76/2, Sree Ramulu Street, E.V.P. Santosh Nagar, Madanandapuram, Chennai 600125, Tamil Nadu; [Tel: Cell: 9840164099; Email: drbv david@gmail.com; vasantharaj david@yahoo.com]; *Member Executive Council 1 Jan, 2004 to 31 Dec, 2006; Dr. K.C. Mehta Memorial Award 2011-2012*



1995: **DE DATTA, Surajit Kumar** (b 1 Aug, 1936), Sp: Soil science, agronomy, weed science, IPM, natural resources management; Emeritus Professor and Adjunct Research Faculty, OIRED, Virginia Tech, 526 Prices Fork Road (0378), Blacksburg, VA, 24061, USA; 5725 Guthrie Place, Davis, California 95618, USA; [Tel: Res./Off. 1-530-758-2259; 1-530-574-5894; Fax: 1-530-758-2259; Email: dedatta@vt.edu; skdedatta@gmail.com]



1995: **DEEKSHATULU, Bulusu Lakshmana** (b 31 Oct, 1936), Sp: Digital Image Processing. Remote Sensing, Pattern recognition, neural Networks and Machine Learning; Former Director NRSA, House 10-3-123/3, East Marredpally, Teachers Colony, Secunderabad 500026, Telangana; [Tel: Res. (040) 27732423, Cell: 9908499081; Email: deekshatulu@hotmail.com]; *Member Executive Council 1 Jan, 2002 to 31 Dec, 2004*



2010: **DEVAKUMAR, Chakravarthi** (b 2 Jun, 1951), Sp: Agrochemicals (covering aromachemicals, botanical pesticides, insecticides, antifungal and nematocidal products, insecticide synergists, chemical hybridizing agents and neem coated urea); Policy envisioning, mentoring, analytics, MOOC, planning and development of higher education and skill development; Former ADG, ICAR, A-61, Second Floor, Inderpuri, New Delhi 110012; [Tel: Res. (011) 25833879, Cell: 8010509335, 9811859111; Email: cdevakumar@gmail.com; cdevakumar@yahoo.com]; *Editor 1 Jan, 2011 to 31 Dec, 2013; Treasurer (Casual Vacancy) 23 Aug, 2010 to 31 Dec, 2010*



2001: **DEVARAJ, Kamarath Viduran** (b 29 Jan, 1937), Sp: Aquaculture and fisheries management; Former Vice-Chancellor, UAS, #39, 7th Cross, UAS Layout, Sanjaynagar, R.M.V. 2nd Stage, Bengaluru 560094, Karnataka; [Tel: Res. (080) 23411666, Cell: 9845088818; Email: drkvdevaraj@gmail.com; devarajkv1937@gmail.com]



1993: **DHALI WAL, Harcharan Singh** (b 1 Mar, 1946), Sp: Plant biotechnology, wide hybridization, molecular cytogenetics and breeding, genomics; Vice-Chancellor, Eternal University, Baru Sahib via Rajgarh, Sirmour 173101, H.P.; H.No. 1523, Sector 32-A, Chandigarh Road, Ludhiana 141010, Punjab; [Tel: Off. (01799) 276012; Cell: 9805098702; Email: hsdhaliwal07@gmail.com]



2016: **DHAR, Manoj Kumar** (b 17 Nov, 1964), Sp: Plant Genomics, Molecular Cytogenetics, Metabolomics; Director, School of Biotechnology, University of Jammu, Jammu 180006, J&K; House No. 74, Shanker Vihar, Near Easy Day Store, Talab Tillo, Jammu 180002, J&K; [Tel: Off. (0191) 2456534; Cell: 9419182766; Fax: (0191) 2456534; Email: manojkdhar@rediffmail.com; md.jusbt@gmail.com]



2014: **DHARMESH, Shylaja Mallaiah** (b 1 Jun, 1957), Sp: Nutraceuticals against various chronic diseases, particularly cancer and ulcer; Glycobiology; Food Security; Preparation of health products for the benefit of the society; Addressing a global problem of Malnutrition and development of strategies to overcome the same; Principal Scientist, Department of Biochemistry & Nutrition, CSIR-Central Food Technological Research Institute, Mysore 570020, Karnataka; House No. 7, "DHAKSHA", Opposite to Basaveshwara Temple, Hebbal 6th Main Road, Mysore 570016, Karnataka; [Tel: Off. (0821) 2514876; Res. (0821) 2418434, Cell: 9945759755; Email: shylaakshum@yahoo.co.uk; shylaakshu@yahoo.com]



1999: **DHILLON, Baldev Singh** (b 27 Jun, 1947), Sp: Plant breeding, quantitative genetics, plant genetic resources, IPR and biotechnology; Vice-Chancellor, Punjab Agricultural University, Ludhiana 141004, Punjab; Vice Chancellor Residence, Punjab Agricultural University, Ludhiana 141004, Punjab; [Tel: Off. (0161) 2401794; Res. (0161) 2401795; Fax: (0161) 2402483; Email: vc@pau.edu; dhillonbaldevsingh@gmail.com]; *Member Executive Council 1 Jan, 2012 to 31 Dec, 2014; Member Executive Council 1 Jan, 2003 to 31 Dec, 2005; Dr. B.P. Pal Memorial Award 2013-2014; Recognition Award 2001-2002*



2003: **DHILLON, Karaj Singh** (b 1 Apr, 1946), Sp: Soil chemistry and fertility, environmental pollution, selenium toxicity and phytoremediation; Former Emeritus Scientist, PAU, 288 F, Shaheed Bhagat Singh Nagar, Pakhowal Road, Ludhiana 141013, Punjab; [Tel: Res. (0161) 4361919, Cell: 9872419199; Email: dhillon\_karaj@yahoo.com]



2019: **DHILLON, Mukesh Kumar** (b 20 Jul, 1972), Sp: Insect-plant interactions, insect physiology, host plant resistance and biosafety of GMOs to non-target organisms; Principal Scientist, Division of Entomology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; H.No. D-II/4, Janak Vihar, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25842482; Ext. 4471; Cell: 9013473641; Fax: (011) 25842482; Email: mukeshdhillon@rediffmail.com; mukeshdhillon@iari.res.in]



2013: **DHYANI, Shiv Kumar** (b 17 Sep, 1956), Sp: Forestry, Agroforestry, Watershed & Natural Resource Management; Senior Agroforestry Specialist, World Agroforestry Centre, 1st Floor, C Block, NASC Complex, DPS Marg, New Delhi 110012; Qtr. DII/Block B-10, 5A 1st Floor, Moti Bagh, South West Delhi, New Delhi 110021; [Tel: Off. (011) 25847885/86; Res. (011) 26881507; Cell: 9451658346; Fax: (011) 25847884; Email: shivkdhyani@gmail.com; s.dhyani@cgiar.org]



2018: **DINESH, R.** (b 21 Apr, 1965), Sp: Soil Fertility / Soil Chemistry / Soil Microbiology; Principal Scientist, ICAR-Indian Institute of Spices Research, Marikunnu PO, Kozhikode 673012, Kerala; 33/148B, 'Aditya', Florican Hill, Kannadikal-Providence College Road, Calicut 673009, Kerala; [Tel: Off. (0495) 2731410; Res. (0495) 2375655; Cell: 9447296781; Fax: (0495) 2731187; Email: rdinesh2005@gmail.com]; *Young Scientist Award 1999-2000; Recognition Award 2017-2018*



2020: **DINESH MOHAN** (b 4 Jul, 1968), Sp: Environmental Chemistry, Water and Soil management, Soil fertility, Climate change mitigation, Carbon Sequestration, Bioenergy and biofuels, Agricultural residues management; Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi 110067; H.No. 1309, Type V, Poorvanchal, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704616; Cell: 9717196214; Email: dm\_1967@hotmail.com]



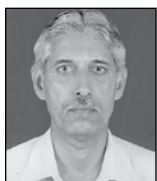
1998: **DIOUF, Jacques** (b 1 Aug, 1938), Sp: Agricultural economics, agricultural development and management; Former Director General, Food and Agriculture Organization of United Nations (FAO), Viale delle Terme di Caracalla, 00100 Rome, Italy; [Tel: Off. (+39) 06 57051; Fax: (+39) 06 570 53152; Email: FAO-HQ@fao.org]



2000: **DODD, Nina** (b 28 Oct, 1954), Sp: Food Security and Nutrition, Food Aid Nutritional Surveillance, micronutrients; 2009, Branard Street, Houston, Texas 77098, USA; [Tel: Cell: +1 281 948 6096; Email: drninadodd@gmail.com; ndodd@usaid.gov]



2018: **DUBEY, Nawal Kishore** (b 1 Jul, 1957), Sp: Botanical Pesticides; Professor, Department of Botany, Banaras Hindu University, Varanasi 221005, U.P.; B 34/130 A-13, Manas Nagar Extension, Durga Kund, Varanasi 221005, U.P.; [Tel: Cell: 9415295765; Fax: (0542) 2368174; Email: nkudubeybhu@gmail.com]



1997: **DUTTA, O.P.** (b 2 Jan, 1941), Sp: Vegetable breeding / Hybrid Seed Production in Vegetables; #70, Chiranjeevi Layout, 3rd Main, Hebbal - Kempapura, Bengaluru 560024, Karnataka; [Tel: Res. (080) 40908529, Cell: 9845131792; Email: opdutta@hotmail.com]



2011: **DWIVEDI, Brahma Swaroop** (b 4 Nov, 1960), Sp: Site-specific nutrient management, nutrient use efficiency, soil testing and fertilizer recommendation, conservation agriculture; Director, ICAR-National Bureau of Soil Survey and Land Use, Planning, Amravati Road, Nagpur 440033, Maharashtra; Director's Bungalow, ICAR Residential Complex, Bajaj Nagar, Nagpur 440010, Maharashtra; [Tel: Off. (0712) 2500545, 2500664; Cell: 9654809309, 9811365124; Email: bsdwivedi@yahoo.com; director.nbsslup@icar.gov.in]; *Member Executive Council (Casual Vacancy) 1 Jan, 2019 to 31 Dec, 2020; Treasurer 1 Jan, 2016 to 31 Dec, 2018*



2001: **DWIVEDI, Ravi Shankar** (b 9 Jan, 1951), Sp: Soil resources inventory and mapping and studying the dynamics of degraded lands, precision farming using spaceborne multispectral data from both indigenous and foreign earth observation missions; Former Group Director, Land Resources, NRSC, 24, Sai Ansh Arcade, Trimulgherry, Secunderabad 500015, Telangana; [Tel: Cell: 9052407590; Email: rsdwivedi51@gmail.com]



1999: **DWIVEDI, Shailendra Kumar** (b 28 Jan, 1947), Sp: Ethno-Veterinary Research and Development for Veterinary Practice; Environmental Pollutants and Livestock Health Hazards; Former Director, NRC on Equines, B-3 Kiran Residency, Plot-79, Sector 56, Gurugram 122001, Haryana; [Tel: Res. (0124) 4212016; Cell: 9910399809; Email: shailendraj47@gmail.com]





2007: **ERSKINE, William** (b 6 Jul, 1952), Sp: Legume improvement; Director, Centre for Legumes in Mediterranean Agriculture (CLIMA), University of Western Australia, 35 Stirling Highway, Crawley WA 6009, Australia; [Email: william.erskine@uwa.edu.au; werskine@cyllene.uwa.edu.au]



1991: **GADGIL, Madhav Dhananjaya** (b 24 May, 1942), Sp: Ecology; A 18, Springflower Apartments, Panchavati, Pashan, Pune 411008, Maharashtra; [Tel: Off. (020) 25893424, Cell: 9881153413; Email: madhav.gadgil@gmail.com]; *Member Executive Council 1 Oct, 1992 to 19 Aug, 1995*



2016: **GANESH KUMAR, Chityal** (b 16 Apr, 1965), Sp: Microbial Biotechnology, Biocontrol, Biofuels and Bioenergy; Enzymology; Senior Principal Scientist, Chemical Biology Laboratory, Dept. of Organic Synthesis and Process Chemistry, CSIR-Indian Institute of Chemical Technology, Uppal Road, Tarnaka, Hyderabad 500007, Telangana; H. No. 1-9-341/17, Sri Sai Krishna Enclave, V.N. Reddy Nagar, Kushaiguda, Hyderabad 500062, Telangana; [Tel: Off. (040) 27193105; Cell: 9550092394; Fax: (040) 27193189; Email: cgkumar@iict.res.in; cgkumar5@gmail.com]



2004: **GANESHAIAH, Kotiganahalli Narayanagowda** (b 10 May, 1953), Sp: Biodiversity - GIS and RS, Insect-Plant Interaction and Ecology; Eco Informatics, Kannada Literature; Professor, School of Ecology and Conservation, University of Agricultural Sciences, GKVK, Bengaluru 560065, Karnataka; Professor, UAS, # 7, Pungavee, Santhosh Vihar, 1st Phase, 19th Cross, Jakhur Road, Bengaluru 560092, Karnataka; [Tel: Off. (080) 23636276; Res. (080) 41275765, Cell: 9342160639; Fax: (080) 23636276; Email: knganeshiah@gmail.com]; *Member Executive Council 1 Jan, 2017 to 14 Sept, 2018*



2009: **GANESHAMURTHY, Arakalagud Nanjundaiah** (b 24 Apr, 1957), Sp: Soil Chemistry, Nutrient Dynamics, Soil Quality, Micronutrient management, Microbial interventions in horticulture; Emeritus Scientist, Division of Soil Science, Indian Institute of Horticultural Research, Hessaraghatta Lake Post, Bengaluru 560089, Karnataka; No. 35, 10th Cross, I Main, Maruti Nagar, Yelahanka, Bengaluru 560064, Karnataka; [Tel: Cell: 9449816282; Fax: (080) 28466291; Email: angmurthy@gmail.com]



2014: **GANGWAR, Babooji** (b 10 Jan, 1953), Sp: Farming System Research & Management, Cropping Systems Management, Complimentary Bio-intensive Systems, Organic Farming Systems, Diaraland Improvement and System based Conservation Agriculture; Professor, Agronomy & Academic Co-ordinator, Institute of Agricultural Sciences, Bundelkhand University Campus, Jhansi 284128, U.P.; 44 Golden Avenue, Phase-III, Roorkee Road, Dorli, Meerut 250105, U.P.; [Tel: Cell: 9412202070, 8318232083; Email: bgangwar53@gmail.com; bgangwarpdfsr@gmail.com]



1993: **GAUR, A.C.** (b 20 Jul, 1933), Sp: Soil microbiology, biofertilizers, organic farming, biotechnological advances in composting & waste management; Former Professor, AMU, Pusa Apartments, E-7, Plot-2, Sector 15, Rohini, Delhi 110085; [Tel: Res. (011) 27876516; Cell: 9968073957; Email: acgaaur2007@rediffmail.com; acgaaur8@gmail.com]



2001: **GAUTAM, Prem Lal** (b 12 Dec, 1947), Sp: Genetics and plant breeding, plant genetic resources, biodiversity and IPR. As a Rotarian, involved in many social welfare activities; House No. 118, Housing Board Colony, Bindraban, District: Kangra, Palampur 176061, H.P.; [Tel: Cell: 8261001310, 9459376233, 7018322344; Email: plgautam47@gmail.com]; *Vice-President 1 Jan, 2013 to 31 Dec, 2015*



1999: **GEERVANI, Pasala** (b 15 Nov, 1936), Sp: Food science and Nutrition, Technology for child nutrition; Former VC, SPMVV, 201, Dreams Apartments, Road No. 3, Banjara Hills, Hyderabad 500034, Telangana; [Tel: Res. (040) 23544944; Email: pgeervani@gmail.com]; *Member Executive Council 1 Jan, 2009 to 31 Dec, 2011; Member Executive Council 1 Jan, 2001 to 31 Dec, 2003*



2006: **GHOSH, Kunal** (b 19 Nov, 1946), Sp: Soil physical chemistry; Soil analytical chemistry; Clay mineralogy; Soil organic matter; Organic agriculture; Forest soils; Fertilizer technology; Patents-IPR; INSA Honorary Scientist, Raman Centre for Applied and Interdisciplinary Sciences, 16A Jheel Road, Kolkata 700075, W.B.; Director, Agtec Innovations Pvt. Ltd., Building IV, 2nd Floor, South Block, Behala Industrial Estate (Government of West Bengal), 620 Diamond Harbour Road, Kolkata; 4A Ratnabali, 7A Judges Court Road, Alipore, Kolkata 700027, W.B.; [Tel: Off. (033) 24467048, 24830029; Res. (033) 24791112, 24480537; Cell: 9433010233, 8336042420; Email: kghoshcu@gmail.com]



2011: **GHOSH, Probir Kumar** (b 13 Dec, 1962), Sp: Cropping system, Soil fertility and fertilizer use, crop nutrition and soil quality, Conservation agriculture, soil water conservation, Feed and Fodder resources; Director and Vice Chancellor, ICAR-National Inst. of Biotic Stress Management, Baronda, Raipur 493225, Chhattisgarh; [Tel: Off. (0771) 2225352, 2225333; Cell: 9453042870; Fax: (0771) 2225351; Email: ghosh\_pk2006@yahoo.com; director.nibsm@icar.gov.in]; *Dr. M.S. Randhawa Award 2017-2018*



1999: **GHOSH, Saurindra Prasad** (b 5 Jan, 1941), Sp: Horticulture; E-22/2 Karunamoyee, Salt Lake City, Kolkata 700091, W.B.; Former DDG, ICAR, Flat No. 68, Qutab View Apartments, Katwaria Sarai, Delhi 110016; [Tel: Res. (033) 23343324, (011) 26528170, Cell: 7291896891; Email: spghosh100@gmail.com]; *Foreign Secretary 1 Jan, 2007 to 31 Dec 2009; Member Executive Council 1 Jan, 2004 to 31 Dec, 2006*



2002: **GILL, Bikram Singh** (b 31 Oct, 1943), Sp: Plant genetics, cytogenetics, genomics, biotechnology, pathology and crop improvement; Distinguished Professor and Director, Wheat Genetic and Genomic Resources Center, Plant Pathology Department, Throckmorton Hall, Kansas State University, Manhattan, KS 66506-5502, USA; 3905 Erin Circle, Manhattan, KS 66503, USA; [Tel: Off. 785-532-1391; Res. 785-776-5962; Fax: 785-532-5692; Email: bsgill@ksu.edu]



2005: **GNANAMANICKAM, Samuel S.** (b 18 Jul, 1945), Sp: Plant pathology, rice biotechnology, Plant Growth-Promoting Rhizobacteria (PGPR), Discovery microbiology, Biofungicides, Turf breeding, Life insurance; 5312 Scenic Point Drive, Fort Worth, Texas 76244, USA; [Tel: Res. 817-230-4304; Cell: 858-231-6037; Email: samgnanam@gmail.com]



2002: **GOEL, Mam Chand** (b 8 Jun, 1941), Sp: Veterinary immunology and microbiology; Former Dean, CCSHAU, Promila Kutir, 514, Sector 15 A, Hisar 125001, Haryana; [Tel: Res. (01662) 214894; Cell: 9896063665; Email: mcgoelhsr@yahoo.co.in]



1998: **GOPAKUMAR, Kumara Panicker** (b 14 Apr, 1942), Sp: Biochemistry, microbiology, fish processing technology, food science, drugs from marine organism, fish waste utilization; Former DDG, ICAR, Nandanam, CC 55/2696, Indraprastha Lane, Cheruparambath Road, P.O. Kadavanthara, Kochi 682020, Kerala; [Tel: Res. (0484) 2315515; Cell: 9447415415; Email: kgopa@yahoo.com]; *Member Executive Council 1 Jan, 2012 to 31 Dec, 2014; Editor 1 Jan, 1999 to 1 Dec, 2001*



2003: **GOPAL, Jai** (b 25 Oct, 1954), Sp: Potato, Onion & Garlic production, genetics and breeding, plant biotechnology; Ex-Director, DOGR, C-58, Kendriya Vihar 2, Sector-25, Panchkula 134109, Haryana; [Tel: Cell: 7588626523; 7635093344; Email: jaigopal2009@gmail.com; jai\_gopal54@yahoo.co.in]; *Recognition Award 2007-2008*



2011: **GOPAL, Madhuban** (b 17 Oct, 1951), Sp: Plant Protection, Agricultural Chemicals, Pesticide Management, Decontamination of xenobiotic, Organic Chemistry; Consultant (Resource Person), MPRNL, Room 204, Division of Agricultural Chemicals, ICAR-Indian Agricultural Research Institute, New Delhi 110012; B-133, Swasthya Vihar, Vikas Marg, Delhi 110092; [Tel: Cell: 9313709180; Email: madhubangopal@gmail.com]



2021: **GOPALA KRISHNAN, S.** (b 12 Aug, 1976), Sp: Genetics, Plant Breeding, Genomics, Molecular Breeding, Rice Improvement; Principal Scientist (Plant Breeding), Division of Genetics, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-41, Pusa, IARI, New Delhi 110012; [Tel: Off. (011) 25841481; Res. (011) 25843550 Cell: 9873545505; Fax: (011) 25841481; Email: gopal.s@icar.gov.in; gopal\_icar@yahoo.co.in]; *NAAS Associate 2016*



2012: **GOPALAKRISHNAN, Achamveetil** (b 5 Jul, 1962), Sp: Fish Conservation Genetics; Population Genomics; DNA Barcoding; Fish Reproduction; Director, ICAR-Central Marine Fisheries Research Institute, P.B. No. 1603, P.O. Ernakulam North, Kochi 682018, Kerala; "Pranavam", Opp: Sanskrit College, Tripunithura P.O., Kochi 682301, Kerala; [Tel: Off. (0484) 2394798; Res. (0484) 2776015; Cell: 9847115515; Fax: (0484) 2394909; Email: agopalkochi@gmail.com; director.cmfri@icar.org.in]



2003: **GOPALAKRISHNAN, Geetha** (b 19 Jan, 1955), Sp: Agricultural chemicals, chemistry of natural products, organic synthesis process development, combinatorial chemistry, bio-assay development for combinatorial libraries; Chemistry Lead, MSD International GmbH (Singapore Branch), 50, Tuas West Drive, Singapore 638408; Fellow, NAAS, 55, First Link Street, Raghavan Colony, Ashok Nagar, Chennai 600083, Tamil Nadu; [Tel: Off. 01-65-66972394; Res. (044) 24891576; Fax: (65) 6869 2359; Email: geethagopal@hotmail.com]



2020: **GOSWAMI, Arunava** (b 25 Oct, 1966), Sp: Genetics, Plant breeding, Biochemistry, Molecular Biology, Nanobiotechnology; Professor, AERU, Biological Sciences Division, Inst. of National Importance, Indian Statistical Institute, 203 B.T. Road, Kolkata 700108, W.B.; E/2-301 & E/2-303, Peerless Nagar, 29F B.T. Road, Kolkata; [Tel: Off. (033) 25753227 / 3225; Res. (033) 25835226; Cell: 09433479088; Fax: (033) 25773049; Email: agoswami@isical.ac.in; sgmaitra@gmail.com]



1994: **GOSWAMI, Nagendra Nath** (b 1 Aug, 1934), Sp: Soil science, agricultural chemistry, plant nutrition; Former VC, CSAUAT, 46, Kabi Jasimuddin Path, City Center, Durgapur 713216, W.B.; [Tel: Cell: 9810799002; Email: nagengoswami@gmail.com; argoswami@hotmail.com]



2015: **GOSWAMI, Tridib Kumar** (b 4 Mar, 1958), Sp: Food process engineering, cryogenics, cold storage, control and modified atmosphere storage; Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur 721302, W.B.; A -118, IIT Campus, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283122; Res. (03222) 283123; Cell: 9647485515; Fax: (03222) 282244; Email: tkg@agfe.iitkgp.ernet.in]



2018: **GOVINDJEE, Govindjee** (b 24 Oct, 1933), Sp: Basics and Applications of Plant, Algal and Cyanobacterial Photosynthesis; Use of Chlorophyll a Fluorescence in predicting plant performance and productivity; Photosynthesis Education; Professor Emeritus, Plant Biology, Biochemistry and Biophysics, University of Illinois at Urbana-Champaign, 286 Morrill Hall, 505 South Goodwin Avenue, Urbana, IL 61801, USA; 2401 S. Boudreau Drive, Urbana, IL 61801, USA; [Tel: Off. 1-217-333-1794; Res. 1-217-337-0627; Cell: 1-217-721-9954; Email: gov@illinois.edu]



2015: **GOWDA, Cholenahalli Laxmipathi** (b 13 Jun, 1949), Sp: Genetics, Plant Breeding and Statistics; Research Management; Former DDG-Research, ICRISAT, No. 7, Block-13, SBM Colony, Srirampura II Stage, Mysuru 570023, Karnataka; [Tel: Res. (0821) 2979975; Cell: 9440399970; Email: clgowda@gmail.com]



2016: **GOWDA, N.K. Shivakumar** (b 12 Feb, 1966), Sp: Newer Feed Resources, Micronutrients, Feed Safety, Environmental Issues, Nutrigenomics; Principal Scientist, ICAR-National Institute of Animal Nutrition and Physiology (NIANP), Adogodi, Bengaluru 560030, Karnataka; C3 202, South City Apartment, Arekere, Mico Layout, Bannerghatta Road, Bengaluru 560076, Karnataka; [Tel: Off. (080) 25711304, 25711164; Res. (080) 26555313, Cell: 9980827868; Fax: (080) 25711420; Email: nksgowda@rediffmail.com]



2011: **GOYAL, Arun** (b 2 Jun, 1965), Sp: Microbiology, Molecular Biology, Biochemistry; Professor and Former Head, Department of Biosciences and Bioengineering, Indian Institute of Technology Guwahati, Guwahati 781039, Assam; F-64, Indian Institute of Technology Guwahati, Guwahati 781039, Assam; [Tel: Off. (0361) 2582208; Res. (0361) 2584208, Cell: 9435044273; Email: arungoyal@iitg.ac.in]



2018: **GRANER, Andreas** (b 5 Oct, 1957), Sp: Crop Genomics, Genetic Diversity and Genebank; Executive Director, Leibniz Institute of Plant Genetics and Crop Plant, Research (IPK), Corrensstr. 3, 06466 Seeland OT Gatersleben, Germany; Kastanienweg 18, 06485 Quedlinburg, Germany; [Tel: Off. +49-39482-5219; Email: graner@ipk-gatersleben.de]



2009: **GRESSHOFF, Peter Michael** (b 26 Nov, 1948), Sp: Biotechnology, genetics and molecular genetics of legume (mainly soybean) nodulation; Biotechnology, genetics, genomics and plant biology of sustainable biofuel production using the legume tree *Pongamia pinnata*; Emeritus Director and Emeritus Professor, Centre for Integrative Legume Research, The University of Queensland, St. Lucia, Brisbane, QLD 4072, Australia; [Email: p.gresshoff@uq.edu.au]



2003: **GROVER, Anil** (b 15 Aug, 1958), Sp: Physiology, biochemistry, molecular biology, biotechnology and genomics of plant abiotic stress responses; Professor, Department of Plant Molecular Biology, University of Delhi, South Campus, Benito Juarez Road, Dhaula Kuan, New Delhi 110021; C-1/96, Janak Puri, New Delhi 110058; [Tel: Off. (011) 24115097, 24117693; Res. (011) 49854674; Cell: 9871618167; Fax: (011) 24115270; Email: anil.anilgrover@gmail.com; agrover@south.du.ac.in]



2017: **GROVER, Sunita** (b 28 Jul, 1958), Sp: Probiotics and Gut Microbiota, Microbial Diversity, Recombinant Proteins, PCR and Real Time PCR based detection of Food Borne pathogens; Former Head, Dairy Microbiology, NDRI, "Veera Villa", 789, Sector -8, Part I, Urban Estate, Karnal 132001, Haryana; [Tel: Off. (0184) 4030383; Cell: 9996033052; Email: sungro@gmail.com; dmfaculty.ndri@gmail.com]



2004: **GULATI, Ashok** (b 11 May, 1954), Sp: Analysis and policy advice on agricultural markets; trade liberalization, WTO and trade negotiations in agriculture; Chair Professor, Agriculture, Indian Council for Research on International Economic Relations, Core 6A, 4th Floor, India Habitat Center, Lodhi Road, New Delhi 110003; I-14 Indraprastha Apartments, 114, I.P. Extension, Patparganj, New Delhi 110092; [Tel: Off. (011) 43112400 Extn. 436; Fax: (011) 24620180, 24618941; Email: agulati@icrier.res.in; agulati115@gmail.com]



1997: **GUNTAKA, Ramareddy Venkata** (b 1 Apr, 1942), Sp: Virology, molecular biology and biotechnology; Professor, Department of Molecular Sciences, University of Tennessee, 858 Madison Avenue, Memphis, TN 38163, USA; 3233 Whisperwind Cove, Memphis, TN 38125, USA; [Tel: Off. (+1-901) 4488230; Res. 7482865; Fax: (+1-901) 4487360; Email: rguntaka@utmem.edu]



1992: **GUPTA, Anil Kumar** (b 24 Apr, 1952), Sp: Sustainable agriculture, indigenous ecological knowledge-biodiversity, conservation, IPR, knowledge network, research management, creativity & innovation; CSIR Bhatnagar Fellow, GIAN India, Satellite Complex, Near Mansi crossroads, Satellite, Ahmedabad 380015, Gujarat; 315, IIM Campus, Vastrapur, Ahmedabad 380015, Gujarat; [Tel: Res. (079) 6325315, 26304979; Cell: 9825014437; Email: anilg@iimahd.ernet.in; anilgoffice@gmail.com]



2008: **GUPTA, Hari Shanker** (b 1 Jul, 1953), Sp: Crop breeding and biotechnology; Former Director General, BISA, Kalypso Court, Tower-3, Unit-1601, Jaypee Greens Wish Town, Sector 128, Noida 201304, U.P.; [Tel: Res. (0120) 6780551; Cell: 9654494989; Email: h.s.gupta@cgjar.org; hsgupta.53@gmail.com]; *Member Executive Council 1 Jan, 2010 to 31 Dec, 2012*



2007: **GUPTA, Modadugu Vijay** (b 17 Aug, 1939), Sp: Aquaculture management; Aquaculture genetics; Research Management; Former ADG, World Fish Center, C 502 Aditya Elite, B.S. Maktha, Begumpet, Hyderabad 500016, Telangana; [Tel: Res. (040) 23400229; Cell: 9866508555; Fax: (040) 23400229; Email: guptamo2000@yahoo.co.in; guptamo@hotmail.com]



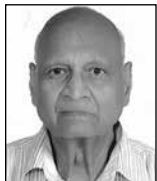
2002: **GUPTA, Prem Prakash** (b 16 Jul, 1941), Sp: Pathology of cardio-vascular, respiratory, genital, mycoplasmal and mycotic diseases in animals; Fellow, NAAS, Flat No. G-3, Pilgrim Cottage, Nainivihar, Mallital, Nainital 263001, Uttarakhand; [Tel: Cell: 9873248812; Email: drpgupta41@gmail.com]; *Dr. P. Bhattacharya Memorial Award 2007-2008*



1991: **GUPTA, Pushpendra Kumar** (b 14 Dec, 1936), Sp: Cytogenetics, plant breeding, plant molecular biology & crop biotechnology; Hon. Emeritus Professor, Department of Genetics and Plant Breeding, Ch. Charan Singh University, Meerut 250004, U.P.; Honorary Emeritus Professor, F-119, Shastri Nagar, Meerut 250004, U.P.; [Tel: Off. (0121) 2768195; Res. (0121) 2762505, Cell: 9411619105; Email: pkgupta36@gmail.com]



1992: **GUPTA, Raj Krishan** (b 1 Nov, 1946), Sp: Soil fertility, land reclamation, irrigation water quality, conservation agriculture; Former South Asia Co-ordinator, CIMMYT, B4/205 First Floor, Safdarjung Enclave, New Delhi 110029; [Tel: Res. (011) 26181175, Cell: 9711009365; Email: rajbisa2013@gmail.com; rajgupta@cgjar.org]; *Member Executive Council 1 Jan, 2011 to 31 Dec, 2013*



1998: **GUPTA, Rajendra** (b 25 Dec, 1934), Sp: Medicinal and Aromatic crops; B-I/46, Pashim Vihar, New Delhi 110063; [Tel: Res. (011) 25282909; Cell: 9818860556]



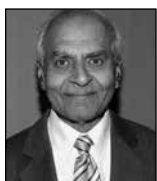
2002: **GUPTA, Ram Khilari** (b 7 Dec, 1944), Sp: Natural resource management and soil physics; Former Dean & Director of Research, JNAU, 38/1104 Lotus Boulevard Espacia, Sector 100, Noida 201304, U.P.; [Tel: Res. (011) 45642355, Cell: 9871504695; Email: rk Gupta1244@gmail.com]



2021: **GUPTA, Sanjeev** (b 16 Nov, 1964), Sp: Genetics & Plant Breeding; Project Coordinator, ICAR-All India Coordinated Research Project on, (MULLaRP) ICAR-Indian Institute of Pulses Research, Kanpur 208024, U.P.; G-1004 Avas Vikas -1, Kalyanpur, Kanpur 208017, U.P.; [Tel: Off. (0512) 2580985; Cell: 9336119397; Fax: (0512) 2580992; Email: saniipr@rediffmail.com; sanjiipr@gmail.com]



1999: **GUPTA, Suresh Kumar** (b 30 Sep, 1949), Sp: Land reclamation, irrigation and drainage engineering, water management, modelling water and salt transport, disaster management and environment; Ex-Distinguished Professor (INAE), 198, Sector 8 (Part 1), Karnal 132001, Haryana; [Tel: Cell: 9416081613; Email: drskg1949@yahoo.com; s.gupta@icar.gov.in]; *Recognition Award 2001-2002*



2005: **GUPTA, Umesh Chandra** (b 25 Oct, 1937), Sp: Soil fertility and plant nutrition with special emphasis on micronutrients and selenium nutrition of crops, livestock and human nutrition; Emeritus Research Scientist, Agriculture & Agri-Food Canada, Science and Technology Branch, Charlottetown Research and Development Centre, 440 University Avenue, Charlottetown, PE C1A 4N6, Canada; 15 MacMillan Crescent, Charlottetown, PE C1A 8G3, Canada; [Tel: Off. 902-370-1379; Res. 902-892-2246; Fax: 902-370-1444; Email: zguptau@yahoo.com; umesh.gupta@agr.gc.ca]



2008: **GUPTA, Vidya Shrikant** (b 22 Jun, 1955), Sp: Plant Biochemistry, Molecular Biology and Biotechnology; Springfields Co-op Soc # B403, Off Gananjay Society Road, Kothrud, Pune 411038, Maharashtra; [Tel: Res. (020) 25385170, Cell: 9881300982; Fax: (020) 25902648; Email: vidyagene@gmail.com]



2021: **GUPTA, Vijai Kumar** (b 19 Nov, 1981), Sp: Bioactive natural products, microbial biotechnology, bioprocess technologies and glycobiotechnology of plant-microbe interactions.; Senior Fellow and Group Leader, Center for Safe and Improved Foods & Biorefining and Advanced Materials Research Centre, Scotland's Rural College, SRUC Barony Campus, Parkgate, Dumfries DG1 3NE, Scotland, UK; 55 Barrie Avenue, Dumfries DG1 2HB, Scotland, United Kingdom; [Tel: Off. +441387242920; Res. +441387430332; Cell: +447826515346; Email: vijai.gupta@sruc.ac.uk; vijaifzd@gmail.com]



2009: **GUPTA, Vinod Kumar** (b 17 Mar, 1951), Sp: Design of Experiments, Sampling Theory, Applied Statistics; Formerly ICAR National Professor, Indian Agricultural Statistics Research Institute, (IASRI), Library Avenue, Pusa, New Delhi 110012; Formerly ICAR National Professor, 108, Jaipuria Building, Kolhapur Road, Kamla Nagar, Delhi 110007; [Tel: Cell: 9899105601; Email: vk Gupta\_1751@yahoo.co.in]; *Editor (Casual Vacancy) 23 Jul, 2015 to 31 Dec, 2016*



2017: **HANCHINAL, Rayappa Ramappa** (b 1 Jun, 1952), Sp: Agriculture (Plant Breeding and Genetics, Seed Production Technology, Intellectual Property Rights and Plant Genetic Resource Management); Consultant, Bioversity International, NASC Complex, New Delhi 110012; 6389, B-9 Vasant Kunj, New Delhi 110070; [Tel: Off. (011) 25849000; (011) 26130010, Cell: 8130578889; Email: rrhanchinal@rediffmail.com; r.hanchinal@cgiar.org]



1992: **HANUMANTHA RAO, Chennamaneni** (b 15 May, 1929), Sp: Agricultural economics, development planning and public finance; Hon. Professor, Centre for Economic and Social Studies, Nizamia Observatory Campus, Begumpet, Hyderabad 500016, Telangana; 240-B, Road No. 18, Jubilee Hills, Hyderabad 500003, Telangana; [Tel: Off. (040) 23402789, 23416780; Res. (040) 23608656; Cell: 9701860861; Email: chennamaneni@cess.ac.in]



2009: **HEGDE, Dattatraya Mahabaleshwar** (b 15 Apr, 1949), Sp: Soil Fertility Management, Water Management, Cropping Systems and Oilseeds; Ex-Director (ICAR-IIOR), C-108, SMR Vinay Galaxy, ITPL Road, Hoody Junction, Mahadevapura, Bengaluru 560048, Karnataka; [Tel: Cell: 9535788244, 8867217956; Email: dmhegde@rediffmail.com; dmhegde@gmail.com]



2020: **HEMAPRABHA, Govinda Kurup** (b 5 Jul, 1962), Sp: Crop Science, Plant Breeding; Principal Scientist & Head I/c, Division of Crop Improvement, ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu; 119, KTVR Greenfield, Thavasi Nagar, Velandipalayam PO, Coimbatore 641025, Tamil Nadu; [Tel: Off. (0422) 476261; Cell: 9994994715; Fax: (0422) 2472923; Email: GHemaprabha@icar.gov.in; ghemaprabha1@gmail.com]



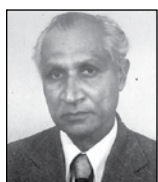
2004: **HITTALMANI, Shailaja** (b 15 Apr, 1956), Sp: Rice breeding and genetics for abiotic and biotic stress; No. 16, I Cross, D.V. Block, Dinnur Main Road, R.T. Nagar, Bengaluru 560065, Karnataka; [Tel: Res. (080) 23337660; Cell: 9845017436, 9448270110; Email: shailajah\_maslab@rediffmail.com; shailajahittalmani@gmail.com]; *Member Executive Council 1 Jan, 2009 to 31 Dec, 2011; Dr. K. Ramiah Memorial Award 2015-2016*



2021: **HOSSAIN, Firoz** (b 11 Oct, 1975), Sp: Maize Genetics and Breeding; Principal Scientist and Programme Leader (Maize), Division of Genetics, ICAR-Indian Agricultural Research Institute, Pusa Campus, New Delhi 110012; J-206, KDP Grand Savanna, Rajnagar Extension, Ghaziabad 201017, U.P.; [Tel: Off. (011) 25841481; Res. (0120) 2875366; Cell: 9811727896; Fax: (011) 25846420; Email: fh\_gpb@yahoo.com]



2006: **HUQU, Zhai** (b 28 Aug, 1950), Sp: Crop genetics, agricultural research management; Former President, Chinese Academy of Agricultural Science, No. 12 Southern Street of ZhongGuancun, Beijing 100081, P.R. China; [Tel: Off. 86-10-82109396, 82109726; Email: Zhaihq@mail.caas.net.cn]



1995: **HUSAIN, Akhtar** (b 1 Jul, 1928), Sp: Plant pathology, cultivation of medicinal and aromatic plants; Former VC, Jamia Hamdard, 50, Adil Nagar, Kalyanpur, Lucknow 226022, U.P.; [Tel: Res. (0522) 2752479]





2009: **IGNACIMUTHU, Savarimuthu** (b 9 Sep, 1948), Sp: Biopesticide, Plant Biotechnology, Ethnopharmacology; Director, Xavier Research Foundation, St Xavier's College, Palayamkottai 627002, Tamil Nadu; 12, Jesuit Residence, St. Xavier's College, Palaymkottai 627002, Tamil Nadu; [Tel: Off. (0462) 2561987; Cell: 9840337667; Fax: (0462) 2561765; Email: imuthus@hotmail.com]



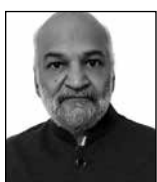
2019: **ISMAIL, Abdelbagi M.** (b 1 May, 1958), Sp: Environmental Plant Physiology, Stress Physiology, Molecular Biology and breeding; Principal Scientist, (IRRI) Representative for Africa, C/O International Livestock Research Institute, P.O. Box 30709, Nairobi 00100, Kenya; [Tel: Off. +254 20 4223634; Cell: +254 748812506; Fax: +254-20 422 3001; Email: a.ismail@irri.org]



2009: **JAG MOHAN** (b 5 Jul, 1957), Sp: Animal Physiology, Avian Molecular Biology; Principal Scientist & Head, Division of Physiology and Reproduction, ICAR-Central Avian Research Institute, Izatnagar, Bareilly 243122, U.P.; Qr. No.02 (Tpe IV), CARI Residential Complex, IVRI Campus, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0581) 2303223, 2310023; Res. (0581) 2301191, Cell: 9319065484; Fax: (0581) 2301321; Email: mohanjagjag@rediffmail.com]; *Recognition Award 2011-2012*



2018: **JAGGI, Seema** (b 11 Sep, 1965), Sp: Agricultural Statistics, Design of Experiments, Statistical Computing; Principal Scientist, Division of Design Experiments, ICAR-Indian Agricultural Statistics Research Inst., Library Avenue, Pusa, New Delhi 110012; EC-37, 1st Floor, Inder Puri, New Delhi 110012; [Tel: Off. (011) 25847284; Res. (011) 45627899; Cell: 9873169418; Fax: (011) 25841564; Email: seema.jaggi@icar.gov.in; jaggi\_seema@rediffmail.com]



2021: **JAIN, Dilip** (b 26 Sep, 1961), Sp: Post Harvest Technology, Grain Storage, Food Processing, Greenhouse Technology, Solar Thermal Engineering and Evaporative Cooling; Head, Division of Agricultural Engineering and Renewal Energy, ICAR-Central Arid Zone Research Institute, CAZRI Road, Light Industrial Area, Jodhpur 342003, Rajasthan; Qtr No. V/9 CAZRI staff Colony, CAZRI Road, Jodhpur 342003, Rajasthan; [Tel: Off. (0294) 2786386; Cell: 9468853615; Email: dilip.jain1@icar.gov.in, jaindilip25@gmail.com]



2016: **JAIN, Mukesh** (b 27 Aug, 1978), Sp: Plant Genomics, Biotechnology, Genome Informatics, Next Generation Genomics and Epigenomics; Professor, School of Computational & Integrative Sciences, Jawaharlal Nehru University, New Delhi 110067; Flat No 2085, Sector C-2, Vasant Kunj, New Delhi 110070; [Tel: Off. (011) 26704686; Res. (011) 26132575, Cell: 9871711699; Email: mjainanid@gmail.com; mjain@jnu.ac.in]; *NAAS Associate, 2011*



2006: **JAIN, Rakesh Kr.** (b 21 May, 1956), Sp: Plant Virology, diagnostics, molecular characterization and transgenics; Emeritus Scientist, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; Flat No. 87, GH-12, Paschim Vihar, New Delhi 110087; [Tel: Cell: 9810887248; Fax: (011) 25846420; Email: rakeshjain56@yahoo.co.in]; *Treasurer 1 Jan, 2019; Member Executive Council 1 Jan, 2018 to 31 Dec, 2018; Recognition Award 2005-2006*



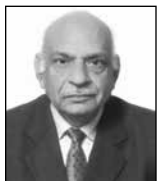
1993: **JAIRAJPURI, Mohammad Shamim** (b 8 Apr, 1942), Sp: Plant protection, nematology, biological control, parasitology; INSA Emeritus Scientist & Adjunct Professor, Division of Nematology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 274-Aslam Manzil, Block-B, Flat No. 104, 1st Floor, Jamia Nagar, Okhla, New Delhi 110025; [Tel: Cell: 9540981665; Email: msjairajpuri@gmail.com]



1999: **JAISWAL, Chandra Shanker** (b 15 Jun, 1943), Sp: Soil and water conservation engineering, water management, water resource engineering; Former Dean, GBPUAT, 208, Uphar Special, Sector-1, ELDECO, Udyan-II, Rai Bareli Road, Lucknow 226025, U.P.; [Tel: Cell: 9415515254; Email: csjaiswal2000@yahoo.co.in]



1997: **JALALI, Bushan L.** (b 14 Jun, 1943), Sp: Plant Pathology, Microbiology, Integrated Pest Management and Research Management; Ex Director of Research, HAU, # 601, Neelkanth Apartments, Sector 21-C, Part III, Faridabad 121001, Haryana; [Tel: Res. (0129) 2980329, Cell: 9910609931; Email: bljalali@gmail.com]; *Member Executive Council 1 Jan, 2007 to 31 Dec 2009*



1997: **JALOTA, Surinder Kumar** (b 14 Sep, 1950), Sp: Soil physics, natural resource management and climate change; Adjunct Professor, Department of Soil Science, Punjab Agricultural University, Ludhiana 141004, Punjab; B XIX, 801/3A, Loomba Street, Patel Nagar, Dandi Swami Chowk, Civil Lines, Ludhiana 141001, Punjab; [Tel: Off. (0161) 2401960 Ext 317; Res. (0161) 2402649; Fax: (0161) 2400945; Email: skjalota03@yahoo.com]; *Recognition Award 1997-1998*



2002: **JANA, Bana Bihari** (b 10 Feb, 1942), Sp: Aquaculture, aquatic microbiology, water quality management, ecological engineering, ecological sanitation, cryopreservation of fish embryos, global warming and climate change; Vice-Chairman, International Centre for Ecological Engineering, University of Kalyani, Kalyani 741235, W.B.; Secretary, Kalyani Shine India, B-10/289, Kalyani, Kalyani 741235, W.B.; [Tel: Off. (033) 25809212; Res. (033) 25826323; Cell: 9433533716; Fax: (033) 25828282; Email: bbjana@gmail.com; bbj\_icee@yahoo.co.in; janabb@rediffmail.com]



2016: **JAT, Mangi Lal** (b 4 May, 1971), Sp: Conservation agriculture, precision farming and climate smart agriculture; Principal Scientist/Cropping Systems Agronomist & CIMMYT-CCAFS South Asia Coordinator, International Maize and Wheat Improvement Center (CIMMYT), CG Block, NASC Complex, DPS Marg, New Delhi 110012; EA 58, First Floor, Inderpuri, New Delhi 110012; [Tel: Off. (011) 65441938, 65441940; Res. (011) 45041799, Cell: 9999108787; Fax: (011) 25842938; Email: m.jat@cgiar.org; jat\_ml@yahoo.com]; *NAAS Associate, 2008*



2011: **JAYAS, Digvir Singh** (b 10 Jan, 1958), Sp: Physical properties of agricultural products; modified atmosphere storage of grains, oilseeds, potatoes and meats; Vice-President (Research & International) and Distinguished Professor, 202, Administration Building, 66 Chancellors Circle, Univ of Manitoba, Winnipeg, MB Canada R3T 2N2, Canada; 49 Westwater Drive, Winnipeg, Manitoba, Canada R3X 2G2, Canada; [Tel: Off. (001) 204 474 9404; Res. (001) 204 254 0637; Cell: (001) 204 291 4505; Fax: (001) 204 261 1318; Email: digvir.jayas@umanitoba.ca]



2015: **JENA, Joykrushna** (b 28 Oct, 1965), Sp: Freshwater aquaculture, Population genetics; Deputy Director General (Fisheries Science), Division of Fisheries Science, Indian Council of Agricultural Research, KAB-II, Pusa, New Delhi 110012; B-7, NASC Complex, DPS Marg, New Delhi 110012; [Tel: Off. (011) 25846738, 25842284, Res. (011) 25842508; Cell: 9453019735; Fax: (011) 25841955; Email: jkjena2@rediffmail.com; jkjena2@gmail.com]; *Secretary 1 Jan, 2017 to 31 Dec 2019; Member Executive Council 1 Jan, 2016 to 31 Dec 2016; NAAS Associate, 2005*



2017: **JENA, Kshirod K.** (b 3 Feb, 1953), Sp: Plant Breeding, Genetics and Biotechnology; Professor Emeritus, School of Biotechnology, KIIT University (Deemed University), Bhubaneswar 751024, Odisha; [Tel: Cell: 6370715377, 7381223961; Email: kshirod.jena@kiitbiotech.ac.in; k.jena@irri.org]



2011: **JHA, Bhavanath** (b 1 Mar, 1958), Sp: Plant Molecular Biology and Biotechnology, Environmental and Marine Biotechnology, Gene Mining and Translational Research, Climate Resilient Agriculture; Fellow, NAAS, Flate No. 401, RGS Green Apartments, Opposite Gate No. 32A, Rajapur, Patna 800001, Bihar; [Tel: Cell: 9427232120, 7016234913; Fax: (0278) 2570885; Email: jha.bhavanath@gmail.com]



2020: **JHA, Madan Kumar** (b 25 Dec, 1965), Sp: Water Management; Basin-wide Simulation and Optimization Modeling; Rainwater Harvesting and Artificial Recharge; Conjunctive Use Planning; Seawater Intrusion; Application of AI/ML Techniques in Groundwater Hydrology; Climate/Socio-economic Change Impacts on GW and SW Systems; Application of RS, GIS and MCDA Techniques for Integrated Planning and Management of Water Resources; Professor (HAG), Agricultural and Food Engineering Department, IIT Kharagpur, Kharagpur 721302, W.B.; Qtr. A-182, IIT Kharagpur Campus, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283116; Res. (03222) 283117; Cell: 9434722570; Email: madan@agfe.iitkgp.ac.in; kumar.madanjha@gmail.com]



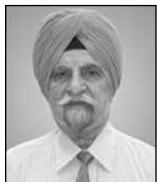
2001: **JHA, Pramod Narayan** (b 3 Jan, 1942), Sp: Agricultural extension, extension education, transfer of technology, communication, training and human resource development; agricultural education; Former Vice-Chancellor, B-38, Indirapuri Colony, P.O. B.V. College, Patna 800014, Bihar; [Tel: Cell: 9431459559; Fax: (0612) 2589070; Email: pnj42@rediffmail.com]



2012: **JHA, Shyam Narayan** (b 2 Apr, 1964), Sp: Agricultural process Engineering, storage of fruits & vegetables, Pioneering research on makhana processing & nondestructive evaluation of food quality in India; Assistant Director General (Process Engineering), Indian Council of Agricultural Research, Room No. 407, KAB-II, Pusa, New Delhi 110012; F-204, Central Govt. Residential Complex, Deen Dayal Upadhyay Marg, New Delhi 110002; [Tel: Off: (011) 25846492; Cell: 9417601715; Email: snjha\_cipheta@yahoo.co.in; snjhajae@gmail.com]; *Member Executive Council 1 Jan, 2017 to 31 Dec 2019; Recognition Award 2011-2012*



2021: **JOGAIAH, Sudisha** (b 29 Sep, 1974), Sp: Plant Pathology, Plant-Microbe Interactions, Plant Signaling for Resistance; Assistant Professor and Co-ordinator, Plant Healthcare and Diagnostic Center, PG Department of Biotechnology and Microbiology, Karnatak University, Pavate Nagar, Dharwad 580003, Karnataka; Door No. 550, 11th Cross, Anikethana Road, Kuvempunagar, Mysore 570023, Karnataka; [Tel: Off. (0836) 2779533; Cell: 9448206685; Fax: (0836) 2779533; Email: jsudish@kud.ac.in; jsudish@gmail.com]



1997: **JOHL, Sardara Singh** (b 24 Feb, 1928), Sp: Agricultural development economics and policy; Former Chairman, CACP, 56, Bindraban Colony, Palampur, Dist. Kangra, Himachal Pradesh (Summer); 2920, Gurdev Nagar, Ludhiana 141001, Punjab (Winter); [Tel: Cell: 9815186766; Email: mail@ssjohl.com; sardarsinghjohl@gmail.com]



2002: **JOHRI, Bhavdish Narain** (b 16 Apr, 1945), Sp: Microbial diversity, molecular microbial ecology; Chairperson NASI Regional Chapter; LV-32, Indus Gardens, E-8, Gulmohar Extension, Bawadia Kalan, Bhopal 462039, M.P.; [Tel: Res. (0755) 2427239; Cell: 9425080243; Fax: (0755) 2485656; Email: bhavdishnjohri@rediffmail.com]; *Editor 1 Jan, 2005 to 31 Dec, 2007*



2001: **JOSEPH, Richard** (b 13 Dec, 1937), Sp: Enzymology, molecular genetics, industrial microbiology; 393, Gokulam 3rd Stage, Mysuru 570002, Karnataka; [Tel: Res. (0821) 2516718; Cell: 7829954827; Email: rikyme@gmail.com]



2016: **JOSHI, Arun Kumar** (b 2 Aug, 1958), Sp: Wheat genetics and breeding; CIMMYT Asia Representative & Managing Director, Borluag Institute for South Asia (BISA), CIMMYT, G-2, B-Block, NASC Complex, DPS Marg, New Delhi 110012; 31 Mahamanapuri, P.O. BHU, Varanasi 221005, U.P.; [Tel: Cell: 9415221526; Email: a.k.joshi@cgiar.org; joshi\_vns@yahoo.co.in]



2019: **JOSHI, Pawan Kumar** (b 18 Jun, 1975), Sp: Environmental Sciences, Forestry - Advanced geospatial (RS, GIS, GPS/GNSS) analysis and modeling; Landscape and vegetation analysis (incl. Land use/Land cover change); Climate change vis-à-vis ecological studies (incl. Natural Resource Management); Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Mehrauli Road, New Delhi 110067; Warden Flat 4, Sutlej Hostel, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704323; Res. (011) 26704323; Cell: 9818025993; Fax: (011) 26741502; Email: pkjoshi27@hotmail.com; pkjoshi@mail.jnu.ac.in]



2007: **JOSHI, Pramod Kumar** (b 2 Mar, 1953), Sp: Technology policy, market and institutional economics; Flat No: 14112, ATS Pristine, Pushta Road, Sector 150, Noida, GB Nagar Distt 201310, U.P.; [Tel: Cell: 9818506753; Email: pkj.in@outlook.com; pkj.ncap@gmail.com]; *Secretary 1 Jan, 2020; Foreign Secretary 1 Jan, 2016 to 31 Dec, 2018; Dr. M.S. Randhawa Memorial Award 2009-2010*



2017: **JUNEJA, Vijay K.** (b 1 Jul, 1956), Sp: Food Safety and Predictive Microbiology; Lead Scientist (Microbiology), ERRC-USDA-ARS, 600 E. Mermaid Lane, Wyndmoor, PA 190038, USA; [Tel: Off. 215-233-6500; Cell: 215-370-8566; Fax: 215-233-6697; Email: vijay.juneja@usda.gov]



2014: **KALIA, Pritam** (b 14 Jan, 1955), Sp: Vegetable Breeding, In Vitro culture, transgenesis; J1 024 Indiabulls Centrum Park, Sector 103, VPO Daultabad, Gurugram 122006, Haryana; [Tel: Cell: 9810185336; Email: pritam.kalia@gmail.com; pkalia@iari.res.in]



2016: **KALIA, Vipin Chandra** (b 16 Dec, 1956), Sp: Microbial Biotechnology and Genomics, Biodiversity, Bioenergy (Hydrogen and Methane), Biopolymer (PHAs), Comparative Genomics, Phylogeny, Quorum sensing, Quorum quenching; Professor, Department of Chemical Engineering, Konkuk University, 1 Hwayang-Dong, Gwangjin-Gu, Seoul 05029, Republic of Korea; Pocket F/ 105A, Mayur Vihar Phase II, Delhi 110091; [Tel: Cell: +82 1095068365, 9811428365; Email: vckaliaku@gmail.com]



1997: **KALLOO, Gautam** (b 16 Nov, 1944), Sp: Horticulture-Vegetable Breeding; Genetics & Plant Breeding, Biotechnology; Former Vice Chancellor, N8-236/R-11, Ganesh Dham Colony, Newada, Sunderpur, Varanasi 221005, U.P.; [Tel: Res. (0542) 317630; Cell: 7388999197; Email: gkalloo@gmail.com]; *Member Executive Council 1 Jan, 2010 to 31 Dec, 2012*



2010: **KALRA, Alok** (b 16 Apr, 1959), Sp: Plant Pathology, Microbiology; Scientist G and Head, Crop Protection Division, Central Institute of Medicinal & Aromatic Plants, P.O. CIMAP, Lucknow 226015, U.P.; E-6, CIMAP Colony, Vikas Nagar, Sector 7, Lucknow 226022, U.P.; [Tel: Off. (0522) 3218639; Res. (0522) 2329711, Cell: 9415020340; Fax: (0522) 2342666; Email: alokkalra@hotmail.com; a.kalra@cimap.res.in]



2018: **KAMALA JAYANTHI, Pagadala Damodaram** (b 16 Jul, 1968), Sp: Insect-plant interactions, Semiochemicals, IPM; ICAR National Fellow & Principal Scientist, Division of Entomology & Nematology, Indian Institute of Horticultural Research, Hessaraghatta Lake PO, Bangalore 560089, Karnataka; #17, Basappa Layout, II Main, Sanjay Nagar, Bangalore 560094, Karnataka; [Tel: Off. (080) 23086100; Cell: 9972366714; Fax: (080) 28466291; Email: jaiinsect@gmail.com; kamalajayanthi.pd@icar.gov.in]



2007: **KAMRA, Devki Nandan** (b 8 Nov, 1954), Sp: Rumen microbiology and biotechnology for eco-friendly livestock production; ICAR National Professorial Chair, Animal Nutrition Division, Indian Veterinary Research Institute, Izatnagar 243122, U.P.; A-785, Rajendra Nagar, Izatnagar 243122, U.P.; [Tel: Off. (0581) 2302536; Res. (0581) 2585313; Cell: 9411008904; Fax: (0581) 2301318, 2302536; Email: dnkamra@rediffmail.com]; *Recognition Award 2007-2008; Dr. P. Bhattacharya Memorial Award 2015-2016*



2003: **KAMRA, Sushil Kumar** (b 30 Dec, 1954), Sp: Subsurface drainage, groundwater recharge, hydro-salinity modeling; Emeritus Scientist, Division of Irrigation & Drainage Engineering, ICAR-Central Soil Salinity Research Institute, Karnal 132001, Haryana; 1587, Sector 9, Urban Estate, Karnal 132001, Haryana; [Tel: Off. (0184) 2291119 Ext. 177; Res. (0184) 2231363; Cell: 9416109968; Fax: (0184) 2290480; Email: sk.kamra@icar.gov.in; sushilkamra@yahoo.com]



2020: **KANT, Lakshmi** (b 3 Jun, 1969), Sp: Wheat and Barley Breeding (Winter x spring wheat hybridization), Molecular Breeding; Head & Principal Scientist, Division of Crop Improvement, ICAR-Vivekananda Parvatiya Krishi Anusandhan, Sansthan, Almora 263601, Uttarakhand; House No. 3, Type IV, ICAR-VPKAS, Residential Colony, Mall Road, Almora 263601, Uttarakhand; [Tel: Off. (05962) 231679, 230208; Res. (05962) 297147, 297147; Cell: 9412044391, 9389669695; Fax: (05962) 231539; Email: lakshmi.kant@icar.gov.in; lkant\_vpkas@yahoo.com]



2001: **KANWAR, Rameshwar Singh** (b 11 Feb, 1949), Sp: Soil and water engineering/bio-engineering; Vice Chancellor, Lovely Professional University, Jalandhar-Delhi G.T. Road (NH-1), Phagwara 144411, Punjab; [Tel: Off. (01824) 404404; Fax: 515-294-6633; Email: rskanwar@iastate.edu; rs.kanwar@lpu.co.in]



1993: **KAPOOR, Vijay Chandra** (b 26 Mar, 1942), Sp: Animal taxonomy, especially Diptera, earwigs, mites; Former Head (Zoology), PAU, Flat No. 904, Premier Tower B, Wembley Estate, Rosewood City, Sector 50, Sohna Road, Gurugram 122018, Haryana; [Tel: Res. (0124) 4113043, Cell: 9811867945, 9910285084; Email: vckapoor@gmail.com; vc\_kapoor@yahoo.com]



2012: **KAR, Gouranga** (b 1 Sep, 1968), Sp: Climate change research, mitigation, adaptation; Watershed management; Remote sensing, Geographic Information System (GIS); Agro-climatic analysis; Crop-weather interaction; Crop modeling; Director, ICAR-Central Research Institute for Jute and Fibres, Barrackpore, Kolkata 700121, W.B.; [Tel: Off. (033) 25356124; Res. (0674) 2421748, Cell: 9438362587; Fax: (0674) 2301651; Email: kar\_wtcer@yahoo.com; director.crijaf@icar.gov.in; crijaf-wb@nic.in]; NAAS Associate, 2009-11; Recognition Award 2011-2012



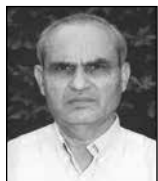
2006: **KARUNASAGAR, Iddya** (b 27 Jan, 1952), Sp: Fish and shellfish diseases, fish safety and aquatic microbiology and marine biotechnology; Senior Fish Safety and Quality Specialist, Fisheries and Aquaculture Department, Food & Agriculture Organisation of UN, Subba Meena, Jayanagar I Main, Mangalore 575005, Karnataka; [Tel: Off. (0824) 2439750, 6490336; Cell: 9481202750; Email: Iddya.Karunasagar@gmail.com; karuna8sagar@rediffmail.com]



2011: **KARUNASAGAR, Indrani** (b 25 Jun, 1952), Sp: fish and shellfish health management, functional genomics of shrimp; Director (R&D), Nitte University, Director, UNESCO MIRCEN for Medical & Marine Biotechnology & Nitte University Center for Science Education and Research, Head, Faculty of Biomedical Sciences, University Enclave, Medical Sciences Complex, Deralakatte, Mangalore 575018; Karnataka; 'Shuba-Meena', Jayanagar 1st Main, Kulshekar P.O., Mangalore 575005, Karnataka; [Tel: Off. (0824) 2204300/301/302; Res. (0824) 2439750; Cell: 9448479750; Fax: (0824) 2204308; Email: indrani.karunasagar@nitte.edu.in; karuna8sagar@yahoo.com]



2006: **KATARIA, Jag Mohan** (b 16 Oct, 1955), Sp: Veterinary microbiology, avian health and biotechnology (emerging poultry diseases; development of molecular diagnostics and immunobiologicals); Research on various aspects of diversified poultry production; Director, ICAR-Central Avian Research Institute, CARI Director's Bungalow, IVRI Campus, Izatnagar 243122, U.P.; [Tel: Off. (0581) 231261; Res. (0581) 2301493, Cell: 9457756195; Fax: (0581) 2301321; Email: jmkataria@rediffmail.com; cari\_director@rediffmail.com]



1992: **KATYAL, J.C.** (b 4 Mar, 1944), Sp: Soil chemistry and fertilizers, micronutrients, dryland agriculture, land degradation and desertification; Former VC, HAU, A 104, Park View City 2, Sector 49, Sohna Road, Gurugram 122018, Haryana; [Tel: Res. (0124) 4148082; Cell: 9284755567, 8447806760; Email: jc\_katyal@rediffmail.com]; *Vice President (Casual Vacancy) 01 Jan, 2020; Editor 1 Jan, 2002 to 31 Dec, 2004; Member Executive Council 1 Jan, 2000 to 31 Dec, 2001; Dr. N.S. Randhawa Memorial Award 2001-2002*



2007: **KAYASTHA, Arvind Mohan** (b 1 Aug, 1960), Sp: Enzymology & enzyme technology, protein structure-function studies, plant biochemistry; Professor, School of Biotechnology, Institute of Science, Banaras Hindu University, Varanasi 221005, U.P.; 42-53 Akhnoor Hut, Nandnagar Colony, ITI Road, P.O. BHU, Varanasi 221005, U.P.; [Tel: Off. (0542) 6701594; Fax: (0542) 2368693; Email: kayasthabhu@gmail.com]



1995: **KESAVAN, Parthasarathy Chenna** (b 24 Aug, 1938), Sp: Radiation Biology, Genetics, Science and Ecotechnology, Sustainability Science; DAE Homi Bhabha Chair and Distinguished Fellow, MSSRF, 3rd Cross Street, CPT Campus, Taramani Institutional Area, Chennai 600113, Tamil Nadu; N-19 Maxworth Nagar, Kovilambakkam, Sunnambu Kulathur Village, Chennai 600117, Tamil Nadu; [Tel: Off. (044) 22541229; Res. (044) 22682254, Cell: 9444024013; Fax: (044) 22541319; Email: pckesavan@mssrf.res.in]



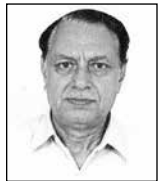
2010: **KHADI, Basavaraj M** (b 1 Jun, 1954), Sp: Genetics and Plant Breeding; Introgression Breeding and Hybrid Development in Cotton; Former Director of Education, UASD, PUROB, Xth Cross, Saptapur, Dharwad 580001, Karnataka; [Tel: Res. (0836) 2776263, Cell: 9019944999; Email: bmkhadi@rediffmail.com; bmkhadi.cotton@gmail.com]



2009: **KHAN, Mohammed Latif** (b 1 Jan, 1961), Sp: Forest Ecology, Biodiversity Conservation, Eco-restoration and Natural Resource Management; Professor, Department of Botany, Dr. Hari Singh Gour Central University, Sagar 470003, M.P.; [Tel: Off. (07582) 265561; Cell: 9425613661; Email: khanml@yahoo.com; khanml61@gmail.com]



2012: **KHAN, Mujeebur Rahman** (b 1 Jan, 1963), Sp: Plant Nematology, Plant Pathology, Environmental Botany; Professor, Department of Plant Protection, Faculty of Agricultural Sciences, Aligarh Muslim University, Aligarh 202002, U.P.; 9-B, Rifa Complex, Medical Road, Civil Lines, Aligarh 202002, U.P.; [Tel: Off. (0571) 2601524; Res. 9456278953; Cell: 9412527112; Email: mrkhan777in@yahoo.co.in; mrkhan.amu@gmail.com]



2004: **KHANNA, Subhash Kumar** (b 21 Feb, 1942), Sp: Quality and safety assessment of food-additives-adulterants and contaminants; Fellow, NAAS, 40/8, Gokhale Vihar Marg, Lucknow 226001, U.P.; [Tel: Cell: 9450096975; Email: khannaitrc@yahoo.co.in]



1992: **KHANNA-CHOPRA, Renu** (b 24 Sep, 1949), Sp: Plant physiology & biochemistry; INSA Senior Scientist, Water Technology Centre, Indian Agricultural Research Institute, New Delhi 110012; A1/153, Paschim Vihar, New Delhi 110063; [Tel: Cell: 9899017170; Fax: (011) 25843112, 25846420; Email: [renu.chopra3@gmail.com](mailto:renu.chopra3@gmail.com); [renu\\_wtc@rediffmail.com](mailto:renu_wtc@rediffmail.com)]; *Member Executive Council 1 Jan, 2013 to 31 Dec, 2015; Member Executive Council (Casual Vacancy) 16 Sep, 2007 to 31 Dec, 2008*



2002: **KHANUJA, Suman Preet Singh** (b 13 Aug, 1958), Sp: Molecular and General Genetics, Biotechnology, Plant Genetics and Breeding, Plant Metabolomics; Technology Sectors: Medicinal & Aromatic Plants, Natural Products, Botanicals, Functional Foods & Nutraceuticals, Secondary Agriculture, Agribusiness; Former Director, CIMAP/CSIR, C 41-42, Double Storey, Ramesh Nagar, New Delhi 110015; [Tel: Cell: 9711773867 (Delhi), 8005044134 (Lucknow); Email: [spskhanuja@gmail.com](mailto:spskhanuja@gmail.com); [khanujazy@yahoo.com](mailto:khanujazy@yahoo.com)]



2019: **KHARE, Sunil Kumar** (b 4 Aug, 1960), Sp: Enzymology protein and proteomics; Extremophiles and extremozymes; Biobased chemicals and fuels; Food bioprocesses; Nanotoxicology and bioremediation; Dean (R&D) and Institute Chair Professor of Biochemistry, MS-705 (A), Enzyme and Microbial Biochemistry Lab, Dept. of Chemistry, Indian Institute of Technology Delhi, Hauz Khas, New Delhi 110016; 52, Vikramshila Apartment, IIT-Delhi, Hauz Khas, New Delhi 110016; [Tel: Off. (011) 26596568; Res. (011) 26597733; Cell: 9350408194; Email: [skkhare@chemistry.iitd.ac.in](mailto:skkhare@chemistry.iitd.ac.in); [skhare@rocketmail.com](mailto:skhare@rocketmail.com)]



1992: **KHEHRA, Amarjeet Singh** (b 15 Jun, 1934), Sp: Crop breeding and genetics; Former VC, PAU, 903 Phase 3B2, Sector 60, Mohali 160059, Punjab; [Tel: Res. (0172) 4651903; Cell: 9888260002; Email: [khehra.amarjit@yahoo.com](mailto:khehra.amarjit@yahoo.com)]



1994: **KHEPAR, Shankar Dass** (b 8 Nov, 1940), Sp: Irrigation and drainage engineering; Former ICAR National Professor, 10 FF, HIG Flats, BRS Nagar, Ludhiana 141012, Punjab; 1273 Lyons Street, Great Falls, VA 22066, USA; [Tel: 703-669-2511 (USA); Email: [drkhepar@yahoo.com](mailto:drkhepar@yahoo.com)]; *Member Executive Council 1 Jan, 1999 to 31 Dec, 2001*



1992: **KHOSLA, Prem Kumar** (b 18 Feb, 1940), Sp: Forest Genetics, Agroforestry, Biotechnology; Vice-Chancellor, Shoolini University of Biotechnology and Management Sciences, Post Box No. 9, Head Post Office, The Mall, Solan 173212, H.P.; Saroj Villa, Officers Colony, Kotla Nala, Rajgarh Road, Solan 173212, H.P.; [Tel: Off. (01792) 35000, 226674; Res. (01792) 221340; Cell: 9816064182; Email: [vc@shooliniuniversity.com](mailto:vc@shooliniuniversity.com); [khoslapk\\_2001@rediffmail.com](mailto:khoslapk_2001@rediffmail.com)]



2005: **KHURANA, Jitendra Paul** (b 30 Oct, 1954), Sp: Photo-perception and signal transduction mechanisms; structural and functional genomics in plants; Professor & Coordinator (UGC-SAP), Department of Plant Molecular Biology, University of Delhi South Campus, New Delhi 110021; Type VB/4, Staff Quarters, University of Delhi South Campus, New Delhi 110021; [Tel: Off. (011) 24115126; Res. (011) 24119090; Fax: (011) 24115270, 24111208; Email: [khuranaj@genomeindia.org](mailto:khuranaj@genomeindia.org)]





2014: **KHURANA, Paramjit** (b 15 Aug, 1956), Sp: Plant Biotechnology, Molecular Biology and Genomics; Professor, Department of Plant Molecular Biology, University of Delhi South Campus, Benito Juarez Road, New Delhi 110021; House No. 7, Type VB, Staff Residence, University of Delhi South Campus, Dhaura Kuan, New Delhi 110021; [Tel: Off. (011) 24115096; Res. (011) 24119090; Cell: 9711006512; Fax: (011) 24113096; Email: param@genomeindia.org]



2003: **KHURANA, Satyendra Mohan Paul** (b 31 Dec, 1944), Sp: Plant pathology, plant virology/biotechnology; Professor of Biotechnology, Amity Institute of Biotechnology, Head, Univ. Science Instrumentation Centre, Amity University Haryana, Gurgaon (Manesar) 122413, Haryana; E-1101, Park View City-2, Sector-49, Sohna Road, Gurugram 120001, Haryana; [Tel: Cell: 9650844566; Email: smpaulkhurana@gmail.com; smpkhurana@ggn.amity.edu]



1991: **KHUSH, Gurdev Singh** (b 22 Aug, 1935), Sp: Genetics, plant breeding and biotechnology; Adjunct Professor, University of California, 39399 Blackhawk Place, Davis, CA 95616, USA; [Tel: Res. (+1-530) 750-2440; Fax: (+1-530) 750-2440; Email: gurdev@khush.org]; *Foreign Secretary 1 Jan, 2001 to 31 Dec, 2003; Dr. K. Ramiah Memorial Award 1995-1996; Dr. B.P. Pal Memorial Award 2007-2008*



1997: **KIRTI, Pulugurtha Bharadwaja** (b 15 Sep, 1953), Sp: Plant biotechnology; Professor, Department of Plant Sciences, University of Hyderabad, Prof. C.R. Rao Road, Hyderabad 500046, Telangana; 5-562, Deepthisri Nagar, Miyapur, Hyderabad 500049, Telangana; [Tel: Off. (040) 23134545; Res. (040) 20044664; Fax: (040) 23010120; Email: pbksl@uohyd.ernet.in]; *Dr. K.C. Mehta Memorial Award 2013-2014*



2010: **KISHOR, P.B. Kavi** (b 29 Mar, 1951), Sp: Plant Physiology, Plant Biotechnology; CSIR Emeritus Scientist, Department of Genetics, Osmania University, Hyderabad 500007, Telangana; 103, Prashanti Nivas (2-2-23/22/24), D.D. Colony, Bagh Amberpet, Hyderabad 500007, Telangana; [Tel: Off. (040) 27682335; Res. (040) 27424582; Cell: 9553564185; Fax: (040) 27095178; Email: pbkavi@yahoo.com]



2005: **KOHLI, Ravinder Kumar** (b 2 Dec, 1953), Sp: Invasive Ecology of Alien Plant, Weed Ecology, Eco-physiology, Plantation Forestry and Allelopathic Interactions; Vice-Chancellor, Amity University, Sector 82, Mohali 140306, Punjab; Home: # 1516, Sector 11-D, Chandigarh 160011; [Tel: Cell: 98722015161; Email: rkkohli@pb.amity.edu; rkkohli45@yahoo.com; rkkohli45@gmail.com]



2008: **KOTHARI, S.L.** (b 25 Jul, 1954), Sp: Plant Tissue Culture and Biotechnology, Biodiversity; Pro Vice-Chancellor & Director, Biotechnology, Amity University Rajasthan, Jaipur 303002, Rajasthan; 12-Kalyan Colony, Malviya Nagar, D-Block, Jaipur 302017, Rajasthan; [Tel: Off. (01426) 212147, Res. (0141) 2554338, Cell: 9829179692; Fax: (0141) 2703439; Email: slkothari28@gmail.com]



1995: **KOUL, Opender** (b 14 Apr, 1949), Sp: Insect toxicology/physiology, insect-plant interactions, insect chemical ecology, plant protection, biopesticides; Insect Biopesticide Research Centre, 30 Parkash Nagar, Jalandhar 144003, Punjab; 16, Kasturba Nagar, Jalandhar Cantt 144005, Punjab; [Tel: Off. (0181) 2270582; Res. (0181) 2262755, Cell: 9815666657; Fax: (0181) 2274336; Email: okoul@koulresearch.org; okoul@yahoo.com]; *Member Executive Council 1 Jan, 2007 to 31 Dec 2009; Recognition Award 2003-04*



2009: **KRANTHI, Keshav Raj** (b 26 Feb, 1963), Sp: Insect resistance to insecticides; Molecular entomology and biotechnology; Head, Technical Information Section, International Cotton Advisory Committee, 1629 - K Street, NW Suite 702, Washington DC 20006, USA; 6419, Patience Court, Alexandria, VA 22315, USA; [Tel: Off. +1-202-292-1687 (Director), +1-202-463-6660 ext 122; Cell: +1-202-577-6050; Fax: +1-202-463-6950; Email: krkranthi@gmail.com]; *Recognition Award 2015-2016*



1999: **KRISHNA, Lal** (b 10 Jun, 1948), Sp: Animal health, Veterinary pathology; Former Animal Husbandry Commissioner, C-302, Exotica Elegance, Ahinsa Khand - II, Indrapuram, Ghaziabad 201014, U.P.; [Tel: Res. (0120) 4570258, Cell: 9350586550; Email: lal.krishna1948@gmail.com]



2021: **KRISHNAN, Pandian** (b 26 Jul, 1973), Sp: Fisheries Resource Management, Aquatic Animal Health and Environment Management; Fish Biotechnology; Coastal Zone Management, Agricultural Research Management; Principal Scientist (Agril. Research Mgmt.), Division of Research Systems Management, ICAR-National Academy for Agricultural Research Management, Rajendra Nagar, Hyderabad 500030, Telangana; Flat No. 301, 3-301, Sirimalle Classiq Apartment, Nalanda Nagar, Upparpally, Hyderguda, Hyderabad 500048, Telangana; [Tel: Off. (040) 24581293; Cell: 9848050062; Fax: (040) 24015912; Email: krishnanars@yahoo.com; krishnanars@naarm.org.in]



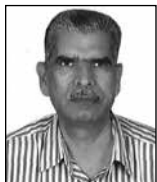
2021: **KRISHNAN, Prameela** (b 24 May, 1967), Sp: Image processing and crop simulation modelling; Head, Division of Agricultural Physics, ICAR-Indian Agricultural Research Institute, New Delhi 110012; H-269, Naraina, New Delhi 110028; [Tel: Cell. 9873532369; Email: prameelakrishnan@yahoo.com]



2016: **KRISHNANI, Kishore Kumar** (b 18 Nov, 1966), Sp: Aquatic environment and health management; Abiotic and biotic stress management; Principal Scientist & Head (A), Division of Aquaculture, ICAR-Central Institute of Fisheries Education, Panch Marg, Off Yari Road, Versova, Andheri (W), Mumbai 400061, Maharashtra; Type-V Quarters, Flat No 101, CIFE Campus, Versova, Mumbai 400061, Maharashtra; [Tel: Off. (022) 26361446-8 Ext 489; Res. Ext 640; Cell: 8600070775, 8788679672; Fax: (022) 2636157; Email: krishnani@cife.edu.in; krishnanik@hotmail.com; kishor.krishnani@icar.gov.in]; *Recognition Award 2017-2018*



2003: **KRISHNASWAMY, Kamala** (b 4 Apr, 1940), Sp: Nutrition and medical sciences, preclinical and clinical toxicology; Former Director, NIN, H.No.: 1-2-98/2, Sriniketan, Kakateyanagar Colony, Habsiguda, Hyderabad 500007, Telangana; [Tel: Res. (040) 27153248; Email: kamalakrishnaswamy@gmail.com]



2014: **KUHAD, Ramesh Chander** (b 7 Aug, 1955), Sp: Lignocellulose Microbiology and Biotechnology, Animal Feed, Biofuels, Enzymatic bleaching of paper pulp; Professor in Microbiology, Department of Microbiology, University of Delhi South Campus, Benito Juarez Road, New Delhi 110021; Provost's House, Aravali & Saramati PG Men's Hostel, University of Delhi South Campus, New Delhi 110021; [Tel: Off. (011) 24111248 Ext. 368, 174; Res. (011) 24112062, Cell: 9871509870; Fax: (011) 24115270; Email: kuhad85@gmail.com]



2015: **KUKAL, Surinder Singh** (b 20 Feb, 1963), Sp: Soil physics, water management, soil erosion and conservation; Member, Punjab Water Regulatory & Development Authority, Govt. of Punjab, Chandigarh, Punjab; 6/8, PAU, Ludhiana 141004, Punjab; [Tel: Off. (0161) 2403006; Cell: 9872777626; 8283900626; Fax: (0161) 2400945; Email: sskukal@rediffmail.com; surindersingh@pau.edu; sskukal1@gmail.com]



2019: **KULSHRESHTHA, Akhilesh Chandra** (b 23 Mar, 1946), Sp: Agricultural Statistics, Design of Experiments, Official Statistics, National Accounts Statistics; Former Additional Director General, CSO, Ministry of Statistics and Programme Implementation; Former Addl. DG, Central Statistical Organisation, Flat No. 802, Plot No. 15, New Rashtriya, Sector 18-A, Dwarka, New Delhi 110078; [Tel: Cell: 9560155946; Email: ackulshreshtha@yahoo.com]



1996: **KULSHRESHTHA, Gita** (b 8 Nov, 1944), Sp: Pesticide residue chemistry, pesticide-soil/plant interactions, pesticide metabolism/transformations, bioremediation, agrochemical risk assessment and safety aspects; Former Head (Agril. Chem.), IARI, 802, New Rashtriya CGHS, Plot No. 15, Sector 18A, Dwarka, New Delhi 110078; [Tel: Res. (011) 45578595, Cell: 9810994627; Email: gitakul@rediffmail.com; gitakul03@yahoo.co.in]; *Member Executive Council 1 Jan, 2012 to 31 Dec, 2014; Dr. K.C. Mehta Memorial Award 2011-2012*



2001: **KUMAR, Amresh** (b 15 Feb, 1945), Sp: Pain relief, animal anaesthesia, veterinary surgery, tissue repair, animal health; Former Dean, GBPUAT, 35, Green Park, Bisalpur Road, Bareilly 243006, U.P.; [Tel: Cell: 9411048497, 8077206794; Email: amresh85@gmail.com]



2013: **KUMAR, Anjani** (b 14 Nov, 1969), Sp: Agricultural Policy, Food Safety, Institutional innovations, Food Security, Poverty and Nutrition and Rural Financing; Senior Research Fellow, International Food Policy Research Institute, CG Block, NASC Complex, Dev Prakash Shastri Marg, Pusa, New Delhi 110012; C-1009, Crescent Apartment, Plot No. 2, Sector 18A, Dwarka, New Delhi 110078; [Tel: Off. (011) 66166565; Cell: 9911106918; Fax: (011) 66781699; Email: anjani.kumar@cgiar.org]; *NAAS Associate 2008; Young Scientist Award 2001-02*



2012: **KUMAR, Arvind** (b 4 Jul, 1952), Sp: Natural Resource Management; Crop Production; (Oilseeds); Dryland farming; Policy Planning, Quality Assurance and Reforms in higher agricultural education; Vice-Chancellor, Rani Lakshmi Bai Central Agricultural University, Gwalior Road, Jhansi 284003, U.P.; Camp Office: Room No. 213, KAB-II, New Delhi 110012; [Tel: Off. (0510) 2730777 (Jhansi), (011) 25846034 (Delhi); Cell: 9711008862; Email: vcrlbcau@gmail.com]; *Member Executive Council 1 Jan, 2019; Member Executive Council (Casual Vacancy) 1 Jan, 2017 to 31 Dec, 2018*



2015: **KUMAR, Arvind** (b 21 Sep, 1966), Sp: Genetics and Plant Breeding; Senior Plant Breeder, IRRI South Asia Hub, Building 303, ICRISAT, Patancheru 502324, Telangana; House No. 13, Jayabheri Pine Valley, Telecom Nagar, Gachibowli, Hyderabad, Telangana; [Tel: Off. (040) 30713091, 30713094; Res. (040) 23002021, Cell: 8008883838; Fax: (040) 30713074; Email: a.kumar@irri.org]



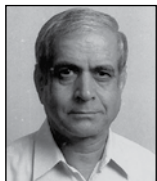
2013: **KUMAR, Ashok** (b 20 Mar, 1958), Sp: Education management, agronomy of field crops, natural resources management, crop physiology, transfer of technology; Principal (Agriculture), Chandigarh Group of Colleges, Jhanjeri, Mohali 140307, Punjab; Flat No. 1104, Block-C, Mapsko Paradise, Sector 83, Gurugram 122004, Haryana; [Tel: Cell: 9416674542; Email: akumarphysiology@gmail.com]



2012: **KUMAR, Ashwani** (b 18 Oct, 1952), Sp: Soil and water conservation engineering, application of plastics in agriculture, micro-irrigation systems, agriculture water management in irrigation commands; Ex-Director, ICAR-DWM, 1320, Sector 3, Vasundhara HIG Duplex, Ghaziabad 201012, U.P.; [Tel: Res. (0120) 4168242; Cell: 9968646448, 7011615599; Email: ashwani\_wtcer@yahoo.com]; *Member Executive Council 1 Jan, 2018 to 31 Dec, 2020*



2008: **KUMAR, B. Mohan** (b 14 Oct, 1953), Sp: Agroforestry, forest ecology, silviculture; ICAR Emeritus Scientist, College of Forestry, Kerala Agricultural University, KAU PO, Thrissur 680656, Kerala; No. 48, Pushpavihar, Nadathara, Thrissur 680751, Kerala; [Tel: Cell: 9995815730; Email: bmkumar.kau@gmail.com; bm.kumar@kau.in]



2003: **KUMAR, Jagdish** (b 1 Mar, 1946), Sp: Plant genetics, breeding, molecular biology, soybean nutraceuticals, science management; Vice President, Research & Development, Ruchi Hi-Rich Seeds Pvt. Ltd., 101, The Horizon, 1st Floor, 11/5 South Tukoganj, Nath Mandir Road, Indore 452001, M.P.; [Tel: Off. (0731) 4767982; Cell: 7225015188; Email: jagdishkumar46@gmail.com; Jagdish\_kumar@hirichseeds.com]



2015: **KUMAR, Jitendra** (b 24 Jun, 1963), Sp: Agro-chemicals, nutraceuticals, botanical products and nanotechnology; Director, Institute of Pesticide Formulation Technology, Sector-20, Udyog Vihar, Gurugram 122016, Haryana; H.No. 146, Great India Apartments, Plot No.15, Sector-6, Dwarka, New Delhi 110075; [Tel: Off. (0124) 2347788, (011) 25089998; Cell: 8860055511, 9868091868; Fax: (0124) 2348489; Email: jitendrakumar7@yahoo.com]



1993: **KUMAR, Kambhampati Anand** (b 7 Nov, 1945), Sp: Plant breeding, pearl millet improvement; Fellow, NAAS, Maruti Heights, Road No. 1, Banjara Hills, Hyderabad 500034, Telangana; [Tel: Res. (040) 23302818; Email: k.kumar@cgnnet.com]



1995: **KUMAR, M. Udaya** (b 15 Sep, 1946), Sp: Crop physiology, photosynthesis and crop productivity; stress responses of plants; physiology of water use efficiency; Professor, Department of Crop Physiology, University of Agricultural Sciences, GKVK, Bengaluru 560056, Karnataka; 246, 1st 'N' Block, Rajajinagar, Bangalore 560010, Karnataka; [Tel: Off. (080) 23636713, 23330153-376; Res. (080) 23324960, 23524357; Cell: 9448376357; Fax: (080) 23330277; Email: udayakumar\_m@yahoo.com]; *Member Executive Council 1 Jan, 2003 to 31 Dec, 2005*



2020: **KUMAR, Naresh** (b 15 May, 1965), Sp: Dairy Microbiology; Principal Scientist & Nodal Officer, NRC, Microbial Biosensors, Food Safety & Q.A. Lab, Dairy Microbiology Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; [Tel: Off. (0184) 2259187; Cell: 8901023594, 8684005646; Fax: (0184) 2250041; Email: nkg6825@gmail.com; nrshgoyal@yahoo.com; naresh.kumar2@icar.gov.in]



1998: **KUMAR, Polumetla Ananda** (b 14 Nov, 1955), Sp: Plant molecular biology, Bt-based insect resistance; Emeritus Scientist, Indian Institute of Rice Research, Rajendra Nagar, Hyderabad 500030, Telangana; Villa 24, Nakshatra, Siddanthi, Shamshabad, Hyderabad 501218, Telangana; [Tel: Off. (040) 24591343; Res. (040) 29700624, Cell: 9818902455; Email: polumetla@hotmail.com]; *Recognition Award 2005-2006*



2010: **KUMAR, Sanjay** (b 14 Feb, 1963), Sp: Plant adaptation, metabolic engineering, bioprospecting genes/enzymes, high altitude biology, climate change biology; Director, CSIR-Institute of Himalayan Bioresource Tech., Palampur 176061, H.P.; House # E-8, IHBT Scientist Colony, Near Chadhiyar Road, Holta, Palampur 176061, H.P.; [Tel: Off. (01894) 230411; Res. (01894) 231008; Cell: 9816621463; Fax: (01894) 230433; Email: director@ihbt.res.in; sanjaykumar@ihbt.res.in; sanjayplp1@gmail.com]



2020: **KUMAR, Shalander** (b 8 Jun, 1969), Sp: Transitions to climate resilient and sustainable agri-food systems with focus on dry areas, Development of climate smart and nutrition oriented agricultural value chains, institutional and market led innovations for sustainable intensification, Farming systems sustainability and resilience, Approaches and policies for climate change adaptation, prioritization and ex-ante & ex-post impact assessments; Principal Scientist-Agricultural Economist, Innovation Systems for the Drylands, International Crop Research Institute for Semi-Arid Tropics (ICRSAT), Patancheru, Hyderabad 502324, Telangana; 303, Sapphire, My Home Jewel, Madinaguda, Hyderabad 500049, Telangana; [Tel: Off. (040) 30713045; Res. (040) 49531718; Cell: 9989807521; Email: k.shalander@cgiar.org; shalanderkumar@gmail.com]



1992: **KUMAR, Sushil** (b 14 Dec, 1940), Sp: Plant and microbial genetical genomics; food and industrial crop breeding and biotechnology; biodiversity and biosafety; and human resource development; INSA Honorary Emeritus Scientist, National Institute for Plant Genome Research (NIPGR), Post Box-10531, Aruna Asif Ali Marg, New Delhi 110067; INSA Honorary Emeritus Scientist, SKA Institute for Research, Education and Development (SKAIREd), 4/11, Sarv Priya Vihar, New Delhi 110016; [Tel: Res. (011) 26865494, Cell: 9958432895, 9810723891; Email: sushil2000\_01@yahoo.co.in; sushilskired@gmail.com]



2004: **KUMAR, Vijay** (b 7 Nov, 1954), Sp: Biotechnology, Hepatitis B Virus, Animal genetics & breeding; Professor, Department of Molecular and Cellular Medicine, Room-4112, Phase 2, Inst of Liver and Biliary Science (ILBS), D-1, Vasant Kunj, Acharya Shree Tulsi Marg, New Delhi 110070; House No.3266, Sector 23, Gurugram 122017, Haryana; [Tel: Off. (011) 46300000 Ext. 24112; Res. (0124) 4202266; Fax: (011) 26742316; Email: vijaykumar98@gmail.com]



2013: **KUNDU, Samaresk** (*b 3 Jan, 1957*), Sp: Soil Chemistry/Fertility, Soil Microbiology, Application of Nano Science and Nano technology in Soil Science and Plant Nutrition Research; Former Head & Principal, Division of Environmental Soil Science, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; C-187, New Minal Residency, J.K. Road, Bhopal 462023, M.P.; [Tel: Cell: 9424476497, 8871934547; Email: samareshk\_2006@yahoo.com]



1996: **KWATRA, Mohan Singh** (*b 6 Apr, 1938*), Sp: Veterinary pathology, veterinary epidemiology, veterinary public health and disease investigation; Former Professor, PAU, 60-B, Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2460151, Cell: 9872233636; Email: mskwatra1@rediffmail.com]



2000: **LADHA, Jagdish Kumar** (*b 5 Jan, 1952*), Sp: Agronomy, soil fertility, soil microbiology, plant nutrition; Adjunct Professor, 205, Hunt Hall, Department of Plant Sciences, University of California, 1, Shields Avenue, Davis, CA, 95616; [Tel: Off. (+63-2) 580-5600; Email: jkladha@ucdavis.edu]



2014: **LAHIRI MAJUMDER, Arunendra Nath** (*b 1 Mar, 1946*), Sp: Plant Physiology & Biochemistry; Abiotic stress responses in plants; Plant Biotechnology.; INSA Senior Scientist, Division of Plant Biology, Bose Institute, P-1/12, CIT Scheme VII M, Kolkata 700054, W.B.; 5B2, FJORD Tower, Hiland Park, 1925, Chak Garia, Kolkata 700094, W.B.; [Tel: Off. (033) 25693232; Res. (033) 24367219, Cell: 9433027050; Fax: (033) 23553886; Email: lahiri@jcbose.ac.in; alahirimajumder@yahoo.com]



2009: **LAKRA, Wazir Singh** (*b 1 Jul, 1955*), Sp: Fisheries, Aquaculture Genetics, Biotechnology and Biodiversity; Former Director, CIFE, 45 Saini Enclave, IP Estate Extension, Vikas Marg, New Delhi 110092; Panch Marg, Off Yari Road, Versova, Andheri (W), Mumbai 400061; [Tel: Cell: 9920906001; Email: lakraws@hotmail.com]; *Member Executive Council 1 Jan, 2020; Dr. P. Bhattacharya Memorial Award 2011-2012*



2000: **LAL, Murari** (*b 5 Mar, 1949*), Sp: Modeling of global and regional climate variability and change, sectoral vulnerability assessment (water, marine and coastal biodiversity and agriculture), natural resource management - technological options & interventions - environmental & economic feasibility, policy development in Asia - Pacific regional context, social dimensions and sustainable development; Fellow, NAAS, 1006, Osimo Tower, Mahagun Mansion-II, 1/4, Vaibhav Khand, Indirapuram, Ghaziabad 201014, U.P.; [Tel: Res. (0120) 4559730; Cell: 9811904828; Email: lal321@hotmail.com]



1998: **LAL, Rattan** (*b 5 Sep, 1944*), Sp: Adaption/Mitigation of climate change, soil carbon sequestration, climate-smart agriculture, sustainable management of soils, global food security, soil quality, soil health, soil-water management, erosion control, soil structure; Director, Carbon Management and Sequestration Centre, FAES/OARDC, 2021 Coffey Road, 210 Kottman Hall, The Ohio State University, Columbus, OH 43210-1-85, USA; [Tel: Off. 614-292-9069; Res. 614-442-6963; Fax: 614-292-7432; Email: lal.1@osu.edu]



2007: **LAL, Rup** (b 27 Sep, 1953), Sp: Molecular Biology, Microbiology, Genomics and Metagenomics; Professor, Molecular Biology Laboratory, Department of Zoology, University of Delhi, Delhi 110007; 38/3, Probyn Road, University of Delhi, Delhi 110007; [Tel: Off. (011) 27666254; Cell: 9810785766; Fax: (011) 27666254; Email: ruplal@gmail.com]



2000: **LALITHAKUMARI, Damodaran** (b 11 May, 1943), Sp: Molecular plant pathology, microbiology, biotechnology, biofertilizers and bio-pesticides; 106, Kensington Drive, MS 39402, USA; [Tel: Res. 601-488-6363; Email: dlalithakumari@yahoo.com]



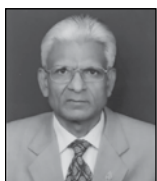
2017: **LATA** (b 11 Jun, 1959), Sp: Agrowaste management, Biofuels, Bioremediation, Enzymes, Plant Growth Promoting Rhizobacteria; Principal Scientist, Division of Microbiology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; Bungalow B5, Pusa Campus, Indian Agricultural Research Institute, New Delhi 110012; [Tel: Off. (011) 25847649; Cell: 9868016139; Email: latambio@yahoo.com]



1998: **LELE, Uma** (b 28 Aug, 1941), Sp: Global development, global public policies and partnerships, agriculture and rural development, environment management, human health, aid effectiveness; Independent Scholar, 700 New Hampshire Avenue, Apt 304, Washington, D.C. 20037, USA; [Tel: Res. 202-337-1916, Cell: 571-274-1916; Email: umalele1@gmail.com]; *Dr. B.P. Pal Memorial Award 2015-2016*



1994: **LIANZHENG, Wang** (b 15 Oct, 1930), Sp: Crop breeding and genetics, soyabean breeding; Former President, Chinese Academy of Agricultural Sciences, 12 Zhongguanchun Nan Street, Beijing 100081, China; 14-12-2, Cuiweixili, Haidian District 100036, Beijing, China; [Tel: 0086-10-82103007; Fax: 0086-10-68975138; Email: wanglianzheng@caas.cn]



2000: **LODHA, Madan Lal** (b 4 Aug, 1944), Sp: Antiviral proteins from non-host plants; quality protein maize; biological nitrogen fixation; Flat # 2064, Joy Apartments, Plot No. 2, Sector 2, Phase-I, Dwarka, New Delhi 110075; A12, Legacy Dimora, Jakkur Plantation Road, Bangalore 560064; [Tel: Res. (011) 25071592, (080) 49563496, Cell: 9873347705, 8368753707; Email: mll\_bio@yahoo.co.in]; *Treasurer 1 Jan, 2004 to 31 Dec, 2006; Dr. K. Ramiah Memorial Award 2011-2012*



2019: **MAAN, Sushila** (b 23 Feb, 1969), Sp: Animal Biotechnology, Molecular Virology, Molecular Epidemiology, Microbial genomic and proteomics, Virus genetics, Molecular Biology, Vaccinology; Professor and Head, Department of Animal Biotechnology, College of Veterinary Sciences, Lala Lajpat Rai, University of Veterinary and Animal Sciences (LUVAS), Hisar 125004, Haryana; House No. 105, Police Line Area (Near Sector 15 A), Hisar 125001, Haryana; [Tel: Off. (01662) 256130; Cell: 9466088610; Fax: (01662) 284312; Email: sushilamaan105@gmail.com; sushilamaan105@luvas.edu.in]





1996: **MADAN, Moti Lal** (b 1 Jan, 1939), Sp: Biotechnology; Animal Physiology, Reproductive Endocrinology; Former VC, DUVASU, 'Anugrah', Madan Lodge, House No. 842/6, Urban Estate, Karnal 132001, Haryana; [Tel: Res. (0184) 2284783; Cell: 9896017878, 9896317878; Email: mltmadan@hotmail.com]; Secretary 1 Jan, 2006 to 31 Dec, 2008; Member Executive Council 1 Jan, 2002 to 31 Dec, 2004; Dr. B.P. Pal Memorial Award 2005-2006



2019: **MADHAVI REDDY, Kambham** (b 14 Aug, 1962), Sp: Vegetable Science, Crop Improvement, Hot and Sweet Pepper Breeding; Principal Scientist, Division of Vegetable Crops, ICAR-Indian Institute of Horticultural Research, Hesaraghatta Lake Post, Bengaluru 560089, Karnataka; #92, SFS 208, II Main, Opposite to Mother Dairy (Near Dairy Cross), Yelahanka New Town, Bengaluru 560064, Karnataka; [Tel: Off. (080) 23086100, Ext. 282; Res. (080) 28461167; Cell: 9448506132; 7259294309; Fax: (080) 28466291; Email: madhavireddy.k@icar.gov.in; kmreddy14@gmail.com]



1999: **MAHADEVAPPA, Madappa** (b 4 Aug, 1937), Sp: Genetics, plant breeding, seed science & technology, parthenium weed control; Director, JSS Rural Development Foundation, Ramanuja Road, Mysore 570004, Karnataka; Director, JSS Rural Development Foundation, 'Samarasa' 1576, 1st Cross, Chandra Layout, Bangalore 560040, Karnataka; 1-C, Pine Wood Park, Ambedkar Street, Chamurajapuram, Mysore 50005, Karnataka; [Tel: Off. (0821) 2520092; Res. (080) 23216040, Cell: 9448360991; Email: mahadevrice@yahoo.com]; Member Executive Council 1 Jan, 2014 to 31 Dec, 2016



2017: **MAHAJAN, Gulshan** (b 20 Jun, 1973), Sp: Rice Agronomy, Weed Science, Water Management; Professor, Punjab Agricultural University, Ludhiana 141004, Punjab; 8/25, PAU Campus, Punjab Agricultural University, Ludhiana 141004, Punjab; [Tel: Cell: +61-432467954; Email: mahajangulshan@rediffmail.com; g.mahajan@uq.edu.au]; NAAS Associate, 2013



2021: **MALAVIYA, Devendra Ram** (b 1 Jul, 1958), Sp: Plant Breeding, Seed Technology, Biotechnology; Former Head, ICAR-IISR, Flat No K-306, Rapti Apartment, Gomtinagar Extension, Lucknow 226010, U.P.; [Tel: Res. (0522) 2390044 Cell: 9450041288; Email: drmalaviya47@rediffmail.com; malaviya2007@yahoo.co.in]



1993: **MALIK, Chander Parkash** (b 26 Jul, 1935), Sp: Plant biotechnology; Crop genetics; Molecular plant physiology; Nanotechnology; E-46, Sector 41, Noida 201301, U.P.; [Tel: Res. (0120) 4324265; Cell: 9999041434; Email: cpm\_malik@yahoo.com; cpmalik26@gmail.com]



1997: **MALIK, Vedpal Singh** (b 1 Jan, 1942), Sp: Recombinant DNA, Made nicotine free plants by antisense RNA. Isolation and Characterization of Rubisco and CAB genes; characterization of G box; Genetic engineering of yeast and Streptomyces; United States Department of Agriculture, 4700 River Road, Riverdale MD 20737-1236, USA; 6716 Haycock Road, Falls Church VA 22043, USA; [Tel: Res. 301 3326405; Email: vedpal.s.malik@aphis.usda.gov; vedpalm@gmail.com]





2007: **MANDAL, Asitbaran** (b 6 Oct, 1957), Sp: Livestock and Poultry Nutrition, Feeding standards, Alternate feed resources, Clinical Nutrition, In ovo feeding and vaccination, Nutritional biotechnology; Principal Scientist and Head, Avian Nutrition & Feed Technology Division, ICAR-Central Avian Research Institute, Izatnagar 243122, U.P.; 15A Utsav, Mahanagar (Phase 1), Pilibhit Bypass, Izatnagar 243005, U.P.; [Tel: Off. (0581) 2300204 Ext. 3053; Cell: 9897539349; Fax: (0581) 2301321; Email: abmcari@rediffmail.com; drab.mandal@gmail.com]; *Recognition Award 2009-2010*



2004: **MANDAL, Biswapati** (b 4 Aug, 1957), Sp: Environmental soil science, soil quality and soil organic carbon management and soil testing and fertilizer recommendation; Professor, Directorate of Research, Bidhan Chandra Krishi Viswavidyalaya, Kalyani 741235, W.B.; Professor, BCKV, Flat No. 102, Niharika Housing, B-10/230, Kalyani P.O., Kalyani, Dist.: Nadia 741235, W.B.; [Tel: Cell: 9433533598, 9836361615; Email: mandalbiswapati@rediffmail.com]; *Member Executive Council 1 Jan, 2012 to 31 Dec, 2014; Dr. N.S. Randhawa Award 2017-2018*



1999: **MANMOHAN SINGH** (b 26 Sep, 1932), Sp: Economics, development; Former Prime Minister of India, 3, Motilal Nehru Place, New Delhi 110001; [Tel: Off. (011) 23015470, 23018668; Fax: (011) 23795152; Email: manmohan@sansad.nic.in]



2015: **MANNA, Madhab Chandra** (b 1 Nov, 1960), Sp: Microbiological transformation of nutrients, carbon sequestration, waste recycling and soil health; Head, Division of Soil Biology, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; [Tel: Off. (0755) 2730970; Res. (0755) 2689267; Cell: 9424444568; Fax: (0755) 2733310; Email: madhabcm@yahoo.com; madhabcm@gmail.com]



2008: **MANOHARACHARY, Chakravarthula** (b 1 Jan, 1945), Sp: Mycology, Plant Pathology, Fungal Biotechnology and Microbiology; NASI Senior Scientist and Platinum Jubilee Fellow, Department of Botany, Osmania University, Hyderabad 500007, Telangana; 2-2-1144/23/1 (MCH 250), New Nallakunta, Hyderabad 500044, Telangana; [Tel: Off. (040) 27682244; Res. (040) 27562723; Cell: 9391164243; Fax: (040) 27090020; Email: cmchary@rediffmail.com]



2021: **MATHEW, Suseela** (b 7 Apr, 1962), Sp: Fish Biochemistry, Marine Bioactive Molecules, Analytical Chemistry, Biomaterial Science; Principal Scientist & Head, Biochemistry & Nutrition Division, ICAR-Central Institute of Fisheries Technology, Willington Island, Matsyapuri P.O., Cochin 682029, Kerala; 29/848 -B, Mazhuvancheryparambath, Major Road, Vyttila 682019, Kerala; [Tel: Off. (0484) 2412300; Cell: 9446218958; Fax: (0484) 2668212; Email: suseela1962@gmail.com]



2002: **MATHUR, Bhupendra Nath** (b 17 Oct, 1943), Sp: Dairy processing - new product & process development: formulated nutritional products; Former Director, NAARM, Q-35 Radhasoami Satsang, Dera Baba Jaimal Singh, Beas, Amritsar Dist. 143204, Punjab; [Tel: Cell: 9878902602; Fax: (01853) 287435; Email: bnmathur2003@yahoo.com; bnmathur48@gmail.com]; *Member Executive Council 1 Jan, 2005 to 31 Dec, 2007*



2008: **MAYEE, Charudatta Digambarrao** (b 15 Jul, 1946), Sp: Plant Pathology -Epidemiology and Management of Crop Diseases, Human Resource Development, Cotton Improvement, Biotechnology; Former Chairman, ASRB, 602, Raviram Residency, 13/1 Chitale Marg, Dhantoli, Nagpur 440012, Maharashtra; [Tel: Cell: 9970618066; Email: mayeecharu@gmail.com; charumayee@yahoo.co.in]; *Vice President 1 Jan, 2016 to 31 Dec, 2018; Member Executive Council 1 Jan, 2015 to 31 Dec, 2015*



2012: **MEHETRE, Subhash Sonyabapu** (b 12 Jun, 1952), Sp: Cytogenetics, Plant Breeding, Mutation Breeding, Bio technology, Plant Molecular Biology, Conservation of Plant Genetic Resources; Former Director of Research, Directorate of Research, Mahatma Phule Krishi Vidyapeeth, Rahuri 413722, Maharashtra; Former Director of Research, MPKV, A-2, Mithila Staff Quarters, Central Campus, MPKV, Rahuri 413722, Maharashtra; [Tel: Res. (02426) 243317, 243261; Res. (02426) 243365; Cell: 9860529571; Fax: (02426) 243223; Email: subhash\_mehetre@rediffmail.com; subhashmehetre@rediffmail.com]



1995: **MEHRA, Usha R.** (b 19 Jun, 1944), Sp: Animal nutrition and metabolism, feed & fodder technology; Ex. Head, Animal Nutrition Division, Indian Veterinary Research Institute, Izatnagar, Bareilly 243122, U.P.; 121, Janakpuri, Avas Vikas Colony, Izatnagar 243122, U.P.; [Tel: Cell: 9412822204, 9412290125; Email: mehra62@gmail.com]



1995: **MEHTA, Shanti Lal** (b 25 Oct, 1943), Sp: Plant biotechnology and biochemistry; Former VC, MPUAT, 71 Gokul Nagar, Near Bohra Ganeshji Temple, Udaipur 313001, Rajasthan; [Tel: Res. (0294) 2470123, Cell: 9460919188; Email: slmehta1947@gmail.com]



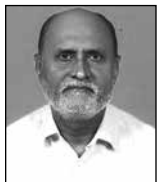
2017: **MELCHINGER, Albrecht E.** (b 4 Mar, 1949), Sp: Quantitative genetics, hybrid breeding, heterosis, QTL and association mapping; Professor Emeritus, Institute of Plant Breeding, University of Hohenheim, 70593 Stuttgart, Germany; [Tel: +49-711-459-2334; Email: melchinger@uni-hohenheim.de]



2001: **MINHAS, Paramjit Singh** (b 5 Apr, 1954), Sp: Soil Physics; Irrigation Water Quality, Salinity and Abiotic Stress Management; Former Director, NIASM, House No. 906, Sector 9, Urban Estate, Karnal 132001, Haryana; [Tel: Cell: 9896981924; 9896940234; Email: minhas\_54@yahoo.co.in]



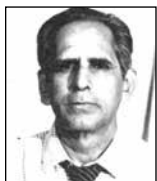
2008: **MISHRA, Banawari** (b 14 Apr, 1947), Sp: Genetics, plant breeding, seed, expertise in rice and wheat research and abiotic stress, climate change and policy; Former VC, SKUAST-Jammu, Flat No. B-63, IDC CGHS Apartments, Plot 8-C, Sector - 11, Dwarka, New Delhi 110075; [Tel: Cell: 9582500093, 9868599100; Email: b9mishra@gmail.com]



2021: **MISHRA, Vinay Kumar** (b 3 Apr, 1963), Sp: Soil and Water Management; Principal Scientist & Head, ICAR-Central Soil Salinity Research Institute, Reional Research Station, Old Jail Road, Post Dilkusha, Lucknow 226002, U.P.; [Tel: Cell: 9451990546; Email: vkmishra\_63@yahoo.com]



2015: **MISRA, Aditya Kumar** (b 6 Jan, 1957), Sp: Animal Reproduction, Embryo Biotechnology, Frozen Semen Technology; Chairman, Agricultural Scientists Recruitment Board, Room No. 201, Krishi Anusandhan Bhawan-I, New Delhi 110012; Type VII, Tower 9, First Floor, Kidwai Nagar (East), New Delhi 110023; [Tel: Off. (011) 25843295; Res. 7122053658; Cell: 8888873830; Email: prof\_misra@hotmail.com; chairman@asrb.org.in]; *Dr. P Bhattacharya Memorial Award 2013-2014*



1992: **MISRA, Chakrapani** (b 4 Mar, 1933), Sp: Soil physics; Former Dean, OUAT, 67, Surya Nagar, Bhubaneswar 751003, Odisha; [Tel: Res. (0674) 2397606]



2021: **MITRA, Abhijit** (b 12 Nov, 1965), Sp: Animal Genetics & Breeding, Molecular genetics and genomics; Director, ICAR-Central Institute for Research on Cattle, Grass Farm Road, Meerut Cantt 250001, U.P.; [Tel: Off. (021) 2657136; Res. (021) 2667050, Cell: 9412445671; Fax: (021) 2657134; Email: drabhijitmitra@gmail.com]



1995: **MODI, Vinod Venilal** (b 10 May, 1929), Sp: Microbial biochemistry and biotechnology; Former Professor, 'Alaap', 12 A Pratapgunj, Baroda 390002, Gujarat; [Tel: Res. (0265) 2794601; Fax: (0265) 2794342]



2000: **MOHAN, Madan** (b 17 Aug, 1953), Sp: Plant biotechnology, genome analysis and breeding; Professor, Department of Plant Molecular Biology, University of Delhi South Campus, New Delhi 110021; Professor, B-10/7055, Vasant Kunj, New Delhi 110070; [Tel: Cell: 9811054232; Email: mohanm98@hotmail.com]



2020: **MOHANTY, Bimal Prasanna** (b 20 Jun, 1962), Sp: Biochemistry & Biotechnology; ADG (Inland Fisheries), Indian Council of Agriculture Research, 308, Krishi Anusandhan Bhawan-II, New Delhi 110012; Qrs. No. C-102, NASC Residential Complex, Dev Prakash Shastri Marg, New Delhi 110012; [Tel: Off. (011) 25849825; Cell: 9230618153; Email: bimalmohanty12@gmail.com; bimal.mohanty@icar.gov.in]



2021: **MOHANTY, Manoranjan** (b 18 Mar, 1972), Sp: Soil Science-Soil Physics, Agricultural System Modelling and Climate change impact studies; Principal Scientist, ICAR-Indian Institute of Soil Science, Nabi Bagh Berasia Road, Bhopal 462038, M.P.; Block B, Sagar Landmark, Ayodhya Bypass Road, Bhopal 462038, M.P.; [Tel: Off. (0755) 2730970, 2733341 Ext 109; Cell: 8878250282; Fax: (0755) 2733310; Email: manoranjan.mohanty@icar.gov.in; mmohanty1972b@gmail.com; mmohanty\_bpl@yahoo.co.in]



2006: **MOHAPATRA, Trilochan** (b 20 Apr, 1962), Sp: Molecular genetics and genomics; Secretary, DARE & Director General, Indian Council of Agricultural Research, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi 110001; [Tel: Off. (011) 23382629, 23386711, Cell: 7840000542; Fax: (011) 23384773; Email: dg.icar@nic.in; tmnrcpb@gmail.com]; *President 1 Jan, 2020; Vice President 1 Jan, 2019 to 31 Dec, 2019; Member Executive Council 1 Jan, 2016 to 31 Dec, 2018; Recognition Award 2013-2014*



2003: **MORE, Tukaram Annapa** (b 6 May, 1952), Sp: Horticulture - olericulture, (vegetable breeding-heterosis breeding, resistance breeding, agro-techniques, protected cultivation, tissue culture), fruit breeding; Former VC, MPKV, Renuka Nivas, Survey No. 90/5A, Manjri Budruk, Taluka Haveli, District Pune 412307, Maharashtra; [Tel: Cell: 8975750343, 9284710623, 9561954200; Email: moretukaram.5.2@gmail.com; tamoreta@rediffmail.com; drmoremds@gmail.com]; *Member Executive Council 1 Jan, 2013 to 31 Dec, 2015*



2019: **MOURYA, Devendra Tarachand** (b 3 Jun, 1956), Sp: Microbiology, Entomology, Biochemistry, Biotechnology and Bio-containment; Former, Director, NIV, Crest Avenue, Wing B, Flat No. 201, Survey No. 52, Baner Sus Road, Pune 411045, Maharashtra; [Tel: Off. (020) 26006158; Cell: 9822307812; Email: dtmourya@gmail.com; dtmourya@hotmail.com]



2005: **MRUTHYUNJAYA** (b 28 Jan, 1947), Sp: Agricultural technology assessment and policy, agricultural research management and strategic planning; Former National Director, NAIP, G-502, NCC Urban Meadows-II, Yelahanka-Doddaballapur Road, Bengaluru 560064, Karnataka; [Tel: Res. (080) 22171538; Cell: 7899802241; Email: mruthyunjaya1947@gmail.com]; *Member Executive Council 1 Jan, 2013 to 31 Dec, 2015; Dr. M.S. Randhawa Memorial Award 2015-2016*



2017: **MUKHERJEE, Irani** (b 4 Jan, 1958), Sp: Agricultural Chemicals; Professor & Principal Scientist, Division of Agricultural Chemicals, ICAR-Indian Agricultural Research Institute, New Delhi 110012; A-5 Pushpanjali Enclave, Pitampura, New Delhi 110034; [Tel: Cell: 9899029981; Email: mukrj\_irani@yahoo.com]



2014: **MUKHERJEE, Prasun Kumar** (b 18 Oct, 1963), Sp: Biological control, Trichoderma, fungal genetics, secondary metabolism; Scientific Officer H, Nuclear Agriculture & Biotechnology Division, Bhabha Atomic Research Centre, Trombay, Mumbai 400085, Maharashtra; Kamet 13 B, Anushaktinagar, Mumbai 400094, Maharashtra; [Tel: Off. (022) 25590367, Cell: 9757414312; Fax: (022) 25505151; Email: prasunmukherjee1@gmail.com]



2021: **MUKHERJEE, Pulok Kumar** (b 12 Dec, 1968), Sp: Medicinal and Aromatic Plant research, Traditional medicine inspired Drug Development, Bio-prospecting of natural products, quality and safety evaluation, Metabolomic studies of Medicinal plants; Director, Inst. of Bioresources and Sustainable Development, A National Institute under DBT, Ministry of Science and Technology, Govt. of India, Takyelpat, Imphal 795001; Suite No. 4I, Nature's Nest, 140 Prince Gulam Hussain Shah Road, Jadavpur, Kolkata 700032, W.B.; [Tel: Off. (0385) 2246122, (0385) 2051277; Res. (033) 2429 8313; Cell: 9433013170; Fax: (0385) 2446120; Email: pulokm@gmail.com; director.ibsd@nic.in]



1995: **MUKHOPADHYAY, Amar Nath** (b 12 Mar, 1940), Sp: Plant pathology, biocontrol of plant diseases; Former VC, AAU, 'Sangini', 151 Akanksha, Udyan II, Raibareilly Road, Lucknow 226025, U.P.; [Tel: Cell: 9793200333; Email: amar.mukhopadhyay@gmail.com]; Member Executive Council 1 Jan, 2010 to 31 Dec, 2012; Member Executive Council 1 Jan, 2000 to 31 Dec, 2002; Dr. K.C. Mehta Memorial Award 2015-2016



2020: **MUNSHI, Anilabha Das** (b 31 Jul, 1961), Sp: Vegetable Crop Improvement & Seed Production; Principal Scientist, Division of Vegetable Science, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 517, Krishi Cooperative Group Housing Society, Krishi Apartment, D-Block, Vikaspuri, New Delhi 110018, India; [Tel: Off. (011) 25846628; Cell: 9810546964; Fax: (011) 25847148; Email: anilabhm@yahoo.co.in; anilabhm@gmail.com]



2020: **MUTHAPPA, Senthil-Kumar** (b 15 Oct, 1976), Sp: Plant-pathogen interaction, non-host disease resistance, combined interaction of biotic & abiotic stresses in plants; Staff Scientist, National Institute of Plant Genome Research, Aruna Asaf Ali Marg, P.O. Box No. 10531, New Delhi 110067; H-IV-s-204, NIPGR, Aruna Asaf Ali Marg, New Delhi 110067; [Tel: Off. (011) 26735229; Res. (011) 26735226; Cell: 8527289125; Fax: (011) 26741658; Email: skmuthappa@nipgr.ac.in]



1995: **NAIDU, Kora Mohan** (b 22 Aug, 1937), Sp: Plant physiology; Former Joint Director, NAARM, 95A/24, Lalbahadur Colony, Peelamedu, Coimbatore 641004, Tamil Nadu; [Tel: Res. (0422) 2560661; Cell: 9842256066; Fax: (0422) 2577929; Email: drmhannaidu@gmail.com]



2021: **NAIDU, Ravendra** (b 26 May, 1954), Sp: Soil and Environmental Science; CEO and Managing Director, CRC CARE and Global Innovation Chair & Faculty of Sciences, The University of Newcastle (UON), University Drive, Callaghan NSW 2308 Australia; [Tel: Off. +61 2 49138705; Email: ravi.naidu@crccare.com]



2021: **NAIK, Manjanath Krishnappa** (b 1 Jul, 1961), Sp: Plant Pathology, Biological Control, PGPR, Mycotoxins, Biodiversity of fungi, Disease resistance and IPM for sustainable crop production; Vice Chancellor, Uni. of Agricultural and Horticultural Sciences, Navile, Savalanga Road, Shivamogga 577204, Karnataka; Konalli, Kumta, Taluk Uttara kannada; [Tel: Off. (08182) 267000; Res. (08182) 267001; Cell: 9480838999; Fax: (08182) 298008; Email: manjunaik2000@yahoo.com; vcuahss2014@gmail.com; vc@uahs.edu.in]



2004: **NAIK, Prakash Shamrao** (b 23 Aug, 1952), Sp: Genetics and plant biotechnology; Former Director, IIVR, Flat No. 505, Building A-6, Kumar Pinnacle, Tadiwala Road (Off Dhole-Patil Road), Pune 411001, Maharashtra; [Tel: Cell: 9418023852, 7620931614; Email: naikps1952@gmail.com]; *Sh. L.C. Sikka Endowment Award 2009-2010*



2015: **NAIR, Krishnapillai Madhavan** (b 5 May, 1954), Sp: Translational research, public health nutrition and biochemistry; Former Deputy Director, NIN, LIG-B-422, Dr. A.S. Rao Nagar, ECIL P.O., Hyderabad 500062, Telangana; [Tel: Res. (040) 27120369, Cell: 9849665422; Email: nairthayil@gmail.com]



2001: **NAIR, P.K. Ramachandran** (b 12 Mar, 1942), Sp: Agroforestry, sustainable land-use systems; Distinguished Professor, School of Forest Resources and Conservation, IFAS, University of Florida, P.O. Box 110410, Gainesville, FL 32611-0410, USA; 4721 S.W. 97th Terrace, Gainesville, Florida 32608-7109, USA; [Tel: Off. (+1-352) 8460880; Res. 3757828; Cell: +1-352-222-1935; Fax: (+1-352) 8461277; Email: pknair@ufl.edu]



2006: **NAIR, Suresh** (b 28 Feb, 1961), Sp: Plant biotechnology, genome analysis, molecular markers, molecular breeding and marker-assisted selection, insect-plant interaction, rice gall midge genomics; Group Leader, International Centre for Genetic Engineering and Biotechnology (ICGEB), Aruna Asaf Ali Marg, New Delhi 110067; D-21, Press Enclave, Saket, New Delhi 110017; [Tel: Off. (011) 26741242, 26741007; Res. (011) 26855412; Fax: 011-26742316; Email: suresh@icgeb.res.in]



2003: **NANDA, Amarjit Singh** (b 2 Nov, 1953), Sp: Animal reproduction; 252-B, Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Cell: 7087429236; Fax: (0161) 2553340; Email: asinghnanda@gmail.com]



1997: **NANDA, Govinder Singh** (b 1 Jul, 1945), Sp: Plant breeding & genetics; Former Director of Research, PAU, 1142, Sector 71, Mohali 160071, Punjab; [Tel: Cell: 9814002898; Email: govinder.nanda@gmail.com]



2018: **NANDI, Samit Kumar** (b 2 Jan, 1967), Sp: Veterinary Surgery & Radiology, Biomaterials in bone, cartilage and wound healing Drug delivery; Professor, Department of Veterinary Surgery & Radiology, West Bengal University of Animal & Fishery Sci., 37, Kshudiram Bose Sarani, Kolkata 700037, W.B.; Radhakunja Apartment, 4C, 53/45, R.N. Guha Road, Golpark, Kolkata 700028, W.B.; [Tel: Off. (033) 25569234; Res. (033) 25793769; Cell: 9433111065; Fax: (033) 25571986; Email: samitnandi1967@gmail.com]



2012: **NAQVI, Syed Mohammed Khursheed** (b 10 Jul, 1958), Sp: Small Ruminants, Reproductive Biotechnology, Stress Physiology; Former Director, ICAR-Central Sheep and Wool Research Institute, Avikanagar via Jaipur 304501, Rajasthan; VI/2, CSWRI Campus, Avikanagar 304501, Rajasthan; [Tel: Off. (01437) 220162; Cell: 9414440194; Fax: (01437) 220163; Email: naqvismk@yahoo.co.in]



2004: **NARAHARI, Devareddy** (b 2 Sep, 1946), Sp: Poultry & Human nutrition, value added egg & meat production, food safety, modern poultry house & cage designing; 31/15, 3rd Floor, East First Main Road, Shenoy Nagar, Chennai 600030, Tamil Nadu; [Tel: Off-cum-Res. (044) 48622946; Cell: 9444810639; Email: narahari.devareddy@gmail.com]



1990: **NARAIN, Prem** (b 3 Jan, 1934), Sp: Statistics, statistical genetics, statistical genomics; 29278 Glen Oaks Blvd. W., Farmington Hills, MI 48334-2932, USA; [Email: premn877@gmail.com]; *Founder Member Executive Council 5 Jun, 1990 to 30 Dec, 1991; Treasurer 1 Jan, 1992 to 31 Dec, 1997; Dr. M.S. Randhawa Memorial Award 1997-1998*



1997: **NATARAJAN, Pavanasam** (b 26 Sep, 1943), Sp: Fisheries and Aquaculture, Fish Pathology, Biodiversity Conservation and Management, Land Degradation and Watershed Management, Environmental Impact Assessment; Professor and Director, Department of Biology, Ambo University, P.O Box 19, West Shoa, Ethiopia; 20/40, Sivasakthi, Edaitheru, Kuzhithurai, District: Kanyakumari, Tamil Nadu; [Tel: Cell: +251-912440799 (Ethiopia); Res. (04651) 262862 (India); Fax: +251-912440799; Email: drpnatarajan123@gmail.com]



2000: **NATH, Prem** (b 12 Nov, 1937), Sp: Horticulture, Vegetable Crops Breeding, Genetic Resources, Seed Production, Agriculture Development, Food and Nutrition Security; Chairman, Dr. P.N. Agricultural Science Foundation (PNASF), No. 9, 'Prem Sheel', 1st Cross, 1st Block, Rajmahal Vilas Extension, 2nd Stage, Bengaluru 560094, Karnataka; [Tel: Off. (080) 23415188; Fax: (080) 23511555 (Telefax); Email: pnasfoundation@gmail.com]



2004: **NAUTIYAL, Chandra Shekhar** (b 25 May, 1956), Sp: Plant-microbial associations, microbial biodiversity, biotechnology; Director, CSIR-National Botanical Research Institute, Rana Pratap Marg, P.B. No. 436, Lucknow 226001, U.P.; C-50, Nirala Nagar, Lucknow 226020, U.P.; [Tel: Off. (0522) 2205848; Cell: 9415511111; Fax: (0522) 2205839; Email: director@nbri.res.in; csnnbri@yahoo.com]



2021: **NAVEENA, B. Maheswarappa** (b 21 Jun, 1974), Sp: Livestock Products Technology; Principal Scientist, ICAR-National Research Centre on Meat, Chengicherla, Boduppal Post, Hyderabad 500092, Telangana; House No. 1-5-76, Regency Square, Flat 203, Street No. 8/26, VV Nagar, Hyderabad 500092, Telangana; [Tel: Off. (040) 29801674; Res. (040) 42215196 Cell: 9951745870; Fax: (040) 29804259; Email: naveena.bm@icar.gov.in; maheswarappa.naveenlpt@gmail.com]; *NAAS Associate 2014*



2015: **NAYAK, Amaresh Kumar** (b 18 Apr, 1969), Sp: Nutrient management, Carbon sequestration, Problem soil management, Water quality assessment and modeling, Climate change: adaptation and mitigation; Principal Scientist & Head, Crop Production Division, ICAR-National Rice Research Institute, Cuttack 753006, Odisha; 2C/164, Sector 9, CDA, Cuttack 753014, Odisha; [Tel: Off. (0671) 2367768 Ext 2212; Cell: 9777591282; Fax: (0671) 2367663; Email: aknayak20@yahoo.com]



1997: **NAYYAR, Vijay Kumar** (b 29 Nov, 1945), Sp: Soil fertility and chemistry, micronutrients, secondary nutrients, pollutant elements; Former Head (Soils), PAU, 220-C, Bhai Randhir Singh Nagar, PAU, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2464557; Cell: 9465187274; Email: vknayyar@rediffmail.com]



1998: **NERKAR, Yogendra Shankar** (b 15 Jun, 1944), Sp: Plant biotechnology, crop genetics & breeding; Former VC, MPAU, Shriram Apartment, 15, Mrutyunjay Society, Kothrud, Pune 411038, Maharashtra; [Tel: Cell: 7709568819; Email: ysnerkar@gmail.com]



2020: **NGUYEN, Henry T.** (b 7 Jan, 1954), Sp: Plant Genetics and Genomics; Curators' Distinguished Professor, Division of Plant Sciences, 25 Agriculture Lab, University of Missouri, Columbia, Missouri 65211, USA; 1801 Glenbrook Court, Columbia, Missouri 65203, USA; [Tel: Cell: +1 573-356-6218; Fax: +1 (573) 882-1469; Email: nguyenhenry@missouri.edu; henrynguyen.global@yahoo.com]



2003: **NIGAM, Janki Mohan** (b 5 Oct, 1938), Sp: Veterinary Surgery, Anesthesia, Radiology and Animal Reproduction; Former Dean, CSK HPKV, 1st Floor, Anchal Apartments, Near J.N. Arogya Dham, Narbada Road, Jabalpur 482001, M.P.; [Tel: Res. (0761) 2668383; Cell: 9893148383; Email: jankimohannigam@rediffmail.com]



2012: **NIRANJANA, Siddapura Ramachandrappa** (b 20 Jul, 1959), Sp: Plant protection; molecular plant pathology; biotechnology; seed science and technology; biological control; Former Vice-Chancellor, Gulbarga University, Professor and Chairman, Dept. of Studies in Biotechnology, University of Mysore, Manasagangotri, Mysore 570006, Karnataka; #122, 21st Cross, Vijaya Nagara III Stage, Mysore 570030, Karnataka; [Tel: Off. (0821) 2419881; Res. (0821) 2411118; Cell: 8197077637; Fax: (0821) 2419881; Email: niranjanasr@rediffmail.com]; Recognition Award 2013-2014



2010: **PAKNIKAR, Kishore Madhukar** (b 28 Feb, 1959), Sp: Application of nanoscience in medicine, biology, agriculture and environment; microbe-metal interactions; Professor Agharkar Chair, Agharkar Research Institute, G.G. Agarkar Road, Pune 411004, Maharashtra; 11 Chandragupta Housing Society, 81/5 B Kothrud, Paud Road, Pune 411038, Maharashtra; [Tel: Cell: 9823087687; Fax: (020) 25651542; Email: kpaknikar@gmail.com; kmpaknikar@aripune.org; kpaknikar@iitb.ac.in]





2008: **PAL, Asim Kumar** (b 1 Jun, 1953), Sp: Stress physiology and climate change, nutraceuticals, natural resources management and aquatic radioecology; Former Joint Director, ICAR-CIFE; Former Joint Director, CIFE, 402, Prabhatt Castle, Near Bandhan Bank, Opp. Sanchi Dental Hospital, Lane No 10-3-32/13, East Marredpally, Secunderabad 500026, Telangana; [Tel: Res. (022) 26709265, Cell: 9969282919; Email: akpal53@gmail.com; drasimkpal53@gmail.com]



2020: **PAL, Dharam** (b 24 Mar, 1966), Sp: Plant Breeding, Wheat & Barley Improvemnet; Principal Scientist (Plant Breeding) & In-Charge, ICAR-Indian Agricultural Research Institute Regional Station (Cereals & Horticultural Crops), Tutikandi Facility, Shimla 171004, H.P.; IARI Quarters, Set #1, Type-IV, Tutikandi, Shimla 171004, H.P.; [Tel: Off. (0177) 2652449; Cell: 9817163305; Fax: (0177) 2655305; Email: dpwalia@rediffmail.com]



2010: **PAL, Dilip Kumar** (b 19 Apr, 1948), Sp: Soil Science - Soil Mineralogy; Former Pricpal Scientist, ICAR-NBSS&LUP, Kamal Narayan Apts, Q3 Laxmi Nagar, Nagpur 440022, Maharashtra; [Tel: Cell: 9822369154; Email: paldilip2001@yahoo.com]



2017: **PAL, Ram Krishna** (b 1 Jan, 1956), Sp: Pomegranate as dietary supplement for management of chronic human ailments including cancer, postharvest technology and value addition of horticulture and field crops, Controlled / Modified Atmosphere storage; Ex Director, ICAR-NRCP, C-908, Shipra Neo, Dr. Sushila Naiyar Marg, Indirapuram, Ghaziabad 201014, U.P.; [Tel: Cell: 8888754868; Email: rkrishnapal@gmail.com]



2009: **PAL, Suresh** (b 15 Mar, 1960), Sp: Agricultural development policy, institutional change, science and technology policy, technology and trade for development; Director, ICAR-National Institute of Agricultural Economics and Policy Research, DPS Marg, Pusa, New Delhi 110012; B-5 Bungalow, Indian Agricultural Research Institute, New Delhi 110012; [Tel: Off. (011) 25843036; Cell: 9818357791; Fax: (011) 25842684; Email: splecon@gmail.com; director.niap@icar.gov.in]; *Treasurer 1 Jan, 2010 to 22 Aug, 2010*



2015: **PALANISAMI, Kuppannan** (b 3 Oct, 1949), Sp: Water economics & policy, impact evaluation, investment modelling, technology transfer and climate change; Former Director, CARDS, TNAU, 8 A3 Ramasamy Layout, Venkitapuram, Velandipalayam P.O, Coimbatore 641025, Tamil Nadu; [Tel: Res. (0422) 2448878; Cell: 9443348782; Email: k.palanisami@cgjar.org; palanisami.iwmi@gmail.com]



2011: **PALNI, Lok Man Singh** (b 22 May, 1953), Sp: Plant Growth Substances, Plant Tissue Culture, Microbial Interactions, Biodiversity & Biotechnology, Rural Development and Science & Society related programmes in the Indian Himalayan Region; Professor & Vice Chancellor, Graphic Era (Deemed to be University), Clement Town, Dehradun 248002, Uttarakhand; Former Director, GBPIHD, Flat 1-A/B, Riturain, Woldorf Compound, Near Vijaya Bank, Nainital 263001, Uttarakhand; [Tel: Cell: 8475996514, 9456748720; Email: lmspalni@rediffmail.com]



2014: **PANDA, Sudhindra Nath** (b 5 Aug, 1956), Sp: Systems Approach for Integrated Land and Water Resources Planning and Management, Geoinformatics and Soft Computing Tools for Watershed / Flood Management; Director, National Institute of Technical Teachers Training and Research (NITTTR), Taramani, Chennai 600113, Tamil Nadu; T-9, NITTTR Staff Quarters, Gandhi Mandapam Road, Chennai 600025, Tamil Nadu; [Tel: Off. (044) 22545405; Res. (044) 24411946; Cell: 9434009156; Fax: (044) 22541126; Email: sudhindra.n.panda@gmail.com]



2017: **PANDEY, Chandra Bhushan** (b 1 Jan, 1960), Sp: Agroforestry, soil-tree-crop relations, Soil ecology carbon sequestration, metagenomics of soils; Principal Scientist & Head, Division of Natural Resources, ICAR-Central Arid Zone Research Institute, Jodhpur 342003, Rajasthan; Qtr. No. Type 5/8, CAZRI Staff Colony, Jodhpur 342003, Rajasthan; [Tel: Cell: 9460206137; Email: cbpandey5@rediffmail.com]



2018: **PANDEY, Girdhar Kumar** (b 15 Feb, 1972), Sp: Plant Molecular Biology; Professor, Department of Plant Molecular Biology, University of Delhi South Campus, Benito Juarez Road, Dhaula Kuan, New Delhi 110021; D-503 Happy Home Apartment, Plot No: 12A, Sector-7, Dwarka, New Delhi 110075; [Tel: Res. (011) 42445436; Cell: 9811721436; Fax: (011) 24111208; Email: gkpandey@south.du.ac.in]



2002: **PANDEY, Mata Prasad** (b 8 Sep, 1946), Sp: Crop improvement (rice and grain legumes), plant genetics, breeding, hybrid seed production and biotechnology; Director General, Institute of Agriculture Technology, Utthan, Jhalwa (Near IIIT), Prayagraj 211012, U.P.; Former VC, IGKV Raipur and BAU Ranchi, 2/38, Vinamra Khand, Gomti Nagar, Lucknow 266010, U.P.; [Tel: Off. (0532) 2552226; Res. (0522) 4025396; Cell: 9956901946; Email: matappandey@gmail.com]



2015: **PANDEY, Rakesh** (b 12 Oct, 1960), Sp: Nematology, Agricultural Microbiology, Plant Pathology, Mycorrhizal Symbiosis; Professor AcSIR, Sr. Principal Scientist & Head, Dept of Microbial Technology & Nematology, CSIR-Central Institute of Medicinal and Aromatic Plants, P.O. CIMAP, Lucknow 226015, U.P.; 6/954, Vikas Nagar, Lucknow 226022, U.P.; [Tel: Off. (0522) 2718530, 2718520; Res. (0522) 3555373, Cell: 9793993218, 9453023391; Fax: (0522) 2716141; Email: rakeshpandey66@gmail.com; rakeshpandey66@hotmail.com; r.pandey@cimap.res.in]



2018: **PANDEY, Sudhakar** (b 4 Jan, 1969), Sp: Horticulture (Vegetable Science): Cucurbit Breeding, genetics and genomics; Principal Scientist, ICAR-Indian Institute of Vegetable Research, PB No. 01, PO - Jakhini (Shahnshahpur), Varanasi 221305, U.P.; Flat No. 1047, Block-A, KBN Lion Enclave, Newada, Sunderpur, Varanasi 221005, U.P.; [Tel: Off. (0542) 2635247; Cell: 9415371451; Email: sudhakariivr@gmail.com; sudhakar.pandey@icar.gov.in]



2005: **PANDEY, Suman Kumar** (b 26 Jun, 1948), Sp: Genetics & plant breeding, biotechnology; Ex Director, CPRI, 78, Marutipuram, Faizabad Road, Lucknow 226016, U.P.; [Tel: Res. (0522) 4063642; Cell: 9695162741; Email: write2skpandey@gmail.com]; *Sh. L.C. Sikka Endowment Award 2005-2006*



1993: **PANDIAN, Thavamani Jegajothivel** (b 15 Jun, 1939), Sp: Sexuality, Sex Determination and Sex Differentiation in Fish; Former ICAR National Professor, 9, Old Natham Road, Madurai 625014, Tamil Nadu; [Tel: Res. (0452) 2640139, Cell: 9842164130; Email: [tjpandian16@gmail.com](mailto:tjpandian16@gmail.com)]; *Member Executive Council 1 Jan, 1998 to 31 Dec, 2000*



2016: **PAPPU, Hanu R.** (b 15 Jul, 1961), Sp: Plant Virology, Agricultural Biotechnology; Samuel H. Smith Distinguished Professor, Department of Plant Pathology, Graduate Program in Molecular Plant Sciences, 345 Johnson Hall, Washington State University, Pullman, WA 99164, USA; [Tel: Off. +1 509 335 3752; Email: [hrp@wsu.edu](mailto:hrp@wsu.edu)]



2016: **PAREEK, Ashwani** (b 27 Sep, 1969), Sp: Functional genomics, forward and reverse genetics, abiotic stress and crop biotechnology; Professor, Stress Physiology & Molecular Biology Laboratory, School of Life Sciences, Jawaharlal Nehru University, New Delhi 110067; Flat B-533, Paschimabad New Complex, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704504; Res. (011) 26741558, Cell: 9818487723; Fax: (011) 26742558; Email: [ashwanip@mail.jnu.ac.in](mailto:ashwanip@mail.jnu.ac.in); [ashwanipareek@gmail.com](mailto:ashwanipareek@gmail.com)]; *NAAS Associate, 2010*



2007: **PARIDA, Ajay Kumar** (b 12 Dec, 1963), Sp: Plant biotechnology, transgenics and molecular breeding; Director, Institute of Life Sciences, (An autonomous Institution under DBT, GOI), Nalco Square, Bhubaneswar 751023, Odisha; [Tel: Off. (0674) 2301900, 2300324; Cell: 9444024019; Fax: (0674) 2300728; Email: [director@ils.res.in](mailto:director@ils.res.in); [drajayparida@gmail.com](mailto:drajayparida@gmail.com)]; *Recognition Award 2011-2012*



2019: **PARIDA, Swarup Kumar** (b 26 May, 1979), Sp: Agricultural Biotechnology, Plant Genomics, Molecular Genetics, Molecular Breeding; Staff Scientist IV, National Institute of Plant Genome Research (NIPGR), Lab No. 109, Aruna Asaf Ali Marg, P.O. Box No. 10531, New Delhi 110067; H-III/103, NIPGR, Aruna Asaf Ali Marg, New Delhi 110067; [Tel: Off. (011) 26735228; Res. (011) 26735194, Cell: 9968207166; Fax: (011) 26741658; Email: [swarup@nipgr.ac.in](mailto:swarup@nipgr.ac.in); [swarupdbt@gmail.com](mailto:swarupdbt@gmail.com)]; *NAAS Associate, 2016*



2021: **PARIHAR, C.M.** (b 10 Oct, 1976), Sp: Conservation agriculture & Precision nutrient management in diversified cropping systems; Senior Scientist, Division of Agronomy, ICAR-Indian Agricultural Research Institute, Pusa Campus, New Delhi 110012; D-30, Near Mother Dairy, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25841488; Cell: 9013172214; Fax: (011) 25842283; Email: [pariharcm@gmail.com](mailto:pariharcm@gmail.com)]



1992: **PARMAR, Balraj Singh** (b 30 Sep, 1944), Sp: Agro-chemicals, pesticide formulation, botanical pesticides; Former Jt. Director, IARI, 337, Mandakini Enclave, Alaknanda, New Delhi 110019; [Tel: Res. (011) 40666511; Cell: 9868373507; Email: [parmar.balraj9@gmail.com](mailto:parmar.balraj9@gmail.com); [balrajparmar33@yahoo.com](mailto:balrajparmar33@yahoo.com)]; *Treasurer 1 Jan, 2000 to 31 Dec, 2003; Recognition Award 1997-1998; Dr. K.C. Mehta Memorial Award 2001-2002*



1990: **PARODA, Rajendra Singh** (b 28 Aug, 1942), Sp: Genetics & plant breeding, cytogenetics, biometrical genetics, genetic resources; Chairman, Trust for Advancement of Agricultural Sciences, Avenue II, IARI Campus, New Delhi 110012; C-597, Sushant Lok - 1, Gurugram 122002, Haryana; Vill. P.O. Sardhana, District: Ajmer, Rajasthan; [Tel: Off. (011) 25843243 telefax; Res. (0124) 4089343; Cell: 9810191486; Email: raj.paroda@gmail.com; taasiari@gmail.com]; *Founder Member Executive Council* 5 Jun, 1990 to 30 Dec, 1991; *Member Executive Council* 1 Jan, 2001 to 31 Dec, 2004 and 1 Jan, 1992 to 31 Dec, 1996; *Vice-President* 1 Jan, 1996 to 31 Dec, 1996; *President* 1 Jan, 1997 to 31 Dec, 2000; *Dr. B.P. Pal Memorial Award* 2001-2002



1994: **PASRICHA, Nanak Singh** (b 20 Aug, 1941), Sp: Soil Science - Soil Fertility, Soil Chemistry, Plant Nutrition and Crop Productivity, Natural Resource Management; Advisor, Natural Resource Conservation Technology, 219-C, Bhai Randhir Singh Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 5022178, Cell: 9023109001; Fax: (0161) 2539147; Email: nspasricha25@gmail.com]



2020: **PATEL, Neelam** (b 1 Feb, 1972), Sp: Policy formulation, block chain technology, price prediction model, monitoring of schemes, Decision Support Systems and automation, micro irrigation, waste water treatment technology; Hi tech horticulture technologies; Senior Adviser (Agriculture), NITI Aayog, Sansad Marg, Sansad Marg Area, New Delhi 110001; [Tel: Off. (011) 25848703; Res. (011) 25842478; Cell: 9868060359; Email: np\_wtc@yahoo.com; neelam.patel@gov.in]



2007: **PATHAK, Bhim Sen** (b 13 Nov, 1933), Sp: Renewable energy and agricultural mechanization; Former Director, SPRERI, KC-5, Kavi Nagar, Ghaziabad 201002, U.P.; [Tel: Res. (0120) 2705303, Cell: 9873797530; Email: bspathakprof@gmail.com]; *Member Executive Council* 1 Jan, 2011 to 31 Dec, 2013



2007: **PATHAK, Himanshu** (b 2 Feb, 1965), Sp: Climate change, Soil science; Director, ICAR-National Inst. of Abiotic Stress Management, (NIASM), Baramati, Pune 413115, Maharashtra; Director's Residence, National Inst. of Abiotic Stress Management, Baramati, Pune 413115, Maharashtra; [Tel: Off. (02112) 254055; Cell: 9899247590, 9437325663; Email: hpathak.iari@gmail.com; director.niasm@icar.gov.in]; *Treasurer*, 1 Jan, 2013 to 31 Dec, 2015; *Treasurer (casual vacancy)*, 1 Jan, 2011 to 31 Dec, 2012; *Recognition Award* 2009-2010



2013: **PATHAK, K.M.L.** (b 7 Dec, 1953), Sp: Animal Sciences, Veterinary Parasitology, Molecular Biology, Animal Biotechnology, Animal Health & Management of Animal Resources; Former VC, DUVASU, Mathura, Flat No. 2204, Tower B-2, Cleo County, Sector 121, Noida, Dist. Gautam Budhnagar 201301, U.P.; [Tel: Cell: 9412286214; Email: pathakkmml@yahoo.co.in]



1999: **PATHAK, Prem Shankar** (b 8 Jan, 1944), Sp: Agroforestry, grassland ecology & management, fodder production, multipurpose tree species research, silvipastoral system, restoration ecology, biodiversity conservation; Former Director, K-1/1450, Aashiyana Colony, Kanpur Road Scheme, Lucknow 226012, U.P.; [Tel: Res. (0522) 2422395; Cell: 9415112911; Email: pathak.prem@gmail.com]; *Editor* 1 Jan, 2009 to 31 Dec, 2011; *Member Executive Council* 1 Jan, 2006 to 31 Dec, 2008



2007: **PATHAK, Ram Kirpal** (b 3 Aug, 1943), Sp: Fruit Science, Organic cultivation; Former Director, CISH, 14-A, C-Block, Oberoi Executive, Goregoan East, Mumbai 400063, Maharashtra; Maharashtra; 3/40, Bahar, Sahara State, Jankipuram, Lucknow 226021, U.P.; [Tel: Cell: 8828686737, 9454974422; Email: pathakramkripal@gmail.com]



2011: **PATIL, Girdhari Ramdas** (b 9 Jan, 1953), Sp: Dairy Technology, Dairy Food Preservation, Dairy Food Formulation, Food Rheology; Former Joint Director, NDRI, 2154 A, Sector 6, Karnal 132001, Haryana; [Tel: Res. (0184) 2282154, Cell: 9466149003; Fax: (0184) 2254751; Email: grpdndri@gmail.com]



2013: **PATIL, Jagannath Vishnu** (b 1 Jun, 1956), Sp: Breeding for disease resistance in pulses and cereals, Crop improvement research in pulses and sorghum, Genetic resource management in sorghum and Value-addition and promotion of sorghum as health-food; Sai Shree, Dhyanes Park, Road No: 3, Near Krishna Chowk, Pimple Gurav, Pune 411061, Maharashtra; [Tel: Cell: 9848378035; Email: drpatiljv@gmail.com]



2011: **PATIL, Ramabhau Tumadu** (b 14 Feb, 1954), Sp: Agricultural Engineering and Technology, Agricultural Structures & Process Engineering, Computer Applications in Agriculture, Innovative Technologies for Post Harvest Management and Value Addition; Chairman & Executive Director, Benevole Welfare Society for Post Harvest Technology, 13/14, Shalimar Enclave, E-3, Arera Colony, Bhopal 462016, M.P.; Shalimar Enclave, E-3, Arera Colony, Bhopal 462016, M.P.; [Tel: Cell: 8964030701, 7898744894; Email: ramabhau@gmail.com; ramabhau@yahoo.com; benevole14@gmail.com]



2010: **PATRA, Ashok Kumar** (b 7 Sep, 1960), Sp: Nitrogen cycling, soil biodiversity, carbon sequestration, nanoparticles; Director, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; Director's Bungalow, ICAR-IISS Campus, Nabibagh, Berasia Road, Bhopal 462038, M.P.; [Tel: Off. (0755) 2730946; Cell: 9811733465; Fax: (0755) 2733310; Email: director.iiss@icar.gov.in; ashok.patra@icar.gov.in; patraak@gmail.com]



2008: **PATRA, Dharani Dhar** (b 24 Oct, 1955), Sp: Soil Science & Agricultural Chemistry, Isotope technique, Agrotechnology of medicinal and aromatic plants, waste land utilization; Vice Chancellor, Bidhan Chandra Krishi Viswavidhyalaya, P.O. Krishi Viswavidyalaya, Mohanpur, Nadia 741252, W.B.; Kiran Kunj, 8/889 Vikas Nagar, Lucknow 226022, U.P.; [Tel: Off. (033) 25879772, (03473) 222666; Res. (0522) 4077088, Cell: 9830071278, 9450096944; Fax: (03473) 222275; Email: ddpatra@rediffmail.com]; *Member Executive Council 6 Aug, 2019 to 31 Dec, 2020*



2019: **PATTANAYAK, Debasis** (b 6 Aug, 1967), Sp: Plant Molecular Biology & Biotechnology, Biochemistry & Plant Biology; Professor, Molecular Biology & Biotechnology, ICAR-National Institute for Plant Biotechnology, Room No. 122, Lal Bahadur Shastri Buidling, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25843554 Ext. 256; Cell: 9910014695; Email: debasispattanayak@yahoo.co.in; debasis.pattanayak@icar.gov.in]; *NAAS Associate, 2006*



2018: **PAUL, Ranjit Kumar** (b 25 Apr, 1982), Sp: Statistical Modelling, Nonlinear time series, Machine learnings, Wavelets, Climate change; Senior Scientist (Agricultural Statistics), ICAR-Indian Agricultural Statistics Research Inst., Library Avenue, New Delhi 110012; #78, Krishi Niketan, A-6, Paschim Vihar, New Delhi 110063; [Tel: Off. (011) 25847121 Ext. 4117; Cell: 8287778896; Fax: (011) 25841564; Email: ranjitstat@gmail.com; ranjit.paul@icar.gov.in]; *Young Scientist Award 2015-2016*



1994: **PAWAR, Sharad Eknath** (b 12 Mar, 1942), Sp: Genetics & plant breeding, grain legume, oil seed improvement; Fellow, NAAS, CH 2/44 Kendriya Vihar, Sector 11, Kharghar, Navi Mumbai 410210, Maharashtra; [Tel: Res. (022) 30984575, Cell: 9820518767; Email: sepawar2004@yahoo.com]



1993: **PENTAL, Deepak** (b 12 Feb, 1951), Sp: Breeding of mustard and cotton through conventional and molecular methods; Professor, Centre for Genetic Manipulation of Crop Plants, Department of Genetics, University of Delhi South Campus, New Delhi 110021; Type V, B-7, University of Delhi South Campus, New Delhi 110021; [Tel: Off. (011) 24112609, 24115203; Cell: 9810843421; Fax: (011) 24116392; Email: dpental@gmail.com]



1996: **PETER, Kuruppacharil V.** (b 17 May, 1948), Sp: Vegetable breeding, spices improvement, genetics & plant breeding, biometrics; Former Vice Chancellor, KAU, Kuruppacharil House, TC-12 (17)/1309 (447), P.O. Mannuthy, Thrissur 680651, Kerala; [Tel: Res. (0487) 2963017; Cell: 9446513017, 7994894235; Email: kvptr@yahoo.com; peter.kv@gmail.com]; *Member Executive Council 1 Jan, 1999 to 31 Dec, 2001; Recognition Award 1999-2000; Dr. K. Ramiah Memorial Award 2007-2008*



2020: **PINGALI, Prabhu Lakshminarayana** (b 12 Feb, 1955), Sp: Agricultural Development, Economic Development, Food and Nutrition Policy, Rural Poverty Reduction, Sustainable Agriculture and Food Systems; Professor of Applied Economics & Director, Tata-Cornell Institute (TCI), College of Agriculture & Life Sciences, Charles H. Dyson School of Applied Economics & Management, SC Johnson College of Business, Room 375J Warren Hall, Cornell University, Ithaca, NY 14853 USA; [Tel: Off. (607) 255-4416; Email: plp39@cornell.edu]



2013: **PODILE, Appa Rao** (b 3 Mar, 1960), Sp: Biological Control, Chitinases, Chitooligosaccharide Elicitors, Induced Resistance, Non-Host Resistance and Plant Growth Promoting Rhizobacteria (PGPR); Vice Chancellor, University of Hyderabad, Prof. C.R. Rao Road, Gachibowli, Hyderabad 500046, Telangana; Vice Chancellor's Lodge, University of Hyderabad, Prof. C.R. Rao Road, Gachibowli, Hyderabad 500046, Telangana; [Tel: Off. (040) 23132000, 23010121, (040) 23134503 (Lab); Cell: 9100655777, 9490749922; Fax: (040) 23010121; Email: podilerao@gmail.com; podilerao@uohyd.ac.in]; *Member Executive Council 1 Jan, 2021; Dr. K.C. Mehta Award 2017-2018*



2013: **PONNIAH, A.G.** (b 7 Apr, 1952), Sp: Aquaculture, conservation, alien species, genetics, environment management; Former Director, CIBA, 933, Ground Floor, Snowdrops, 10th Street, 'H' Block, Anna Nagar West, Chennai 600040, Tamil Nadu; [Tel: Res. (044) 26161232, Cell: 9445019555; Email: agponniah@gmail.com]



2005: **PRABHU, K.V.** (b 20 May, 1958), Sp: Plant breeding, genetics, molecular marker assisted selection; Chairperson, Protection of Plant Varieties and Farmers' Rights Authority, Govt. of India, Ministry of Agriculture & Farmers Welfare, NASC Complex, DPS Marg, New Delhi 110012; B-7, IARI Campus, New Delhi 110012; [Tel: Off. (011) 25848127; Res. (011) 25847216; Cell: 9899023566; Fax: (011) 25840478; Email: chairperson-ppvfra@nic.in; kvinodprabhu@rediffmail.com]; *Treasurer (Casual Vacancy) 1 Jan, 2008 to 31 Dec 2009; Secretary 1 Jan, 2015 to 21 Dec 2017*



2006: **PRADHAN, Akshay Kumar** (b 11 Aug, 1956), Sp: Plant genetics & molecular breeding; Professor, Department of Genetics, University of Delhi South Campus, Benito Juarez Road, Dhaula Kuan, New Delhi 110021; 1052 Joy Apartment, Sector -2, Plot No. 2, Dwarka, New Delhi 110075; [Tel: Off. (011) 24112322, 24115203; Cell: 9871748739; Fax: (011) 24112761; Email: pradhancgmcp@gmail.com]



1995: **PRADHAN, Khageswar** (b 9 Apr, 1936), Sp: Animal Nutrition; Rumen Ecosystem; Animal Biochemistry and Physiology; Former VC, RAU, C-24/HIG, Housing Board Colony, Baramunda, Bhubaneswar 751003, Odisha; [Tel: Res. (0674) 2951752, Cell: 9437302370; Email: ks\_pradhan@yahoo.com]; *Secretary 1 Jan, 2000 to 31 Dec, 2002; Member Executive Council 1 Jan, 1996 to 31 Dec, 1999; Dr. P. Bhattacharya Memorial Award 2001-2002*



2018: **PRADHAN, Sharat Kumar** (b 6 Jan, 1967), Sp: Plant Breeding; Principal Scientist, Crop Improvement Division, ICAR-National Rice Research Institute, Cuttack 753006, Odisha; At-Kanheipur, P.O. CRRRI, Cuttack 753006, Orisha; [Tel: Cell: 9937750353; Fax: (0671) 2367663; Email: pradhancrri@gmail.com; sarat\_pk@yahoo.co.in]



2012: **PRAJNESHU** (b 30 Jul, 1951), Sp: Agricultural Statistics; Principal Investigator, S.E.R.B. Research Project, ICAR-Indian Agricultural Statistics Research Institute, Library Avenue, Pusa, New Delhi 110012; A-150 Deepali, Pitampura, Delhi 110034; [Tel: Off. (011) 25847284; Res. (011) 43701097; Cell: 8447600924; Fax: (011) 25841564; Email: prajneshu@gmail.com]



2005: **PRAKASH, B.S.** (b 12 Jul, 1956), Sp: Reproductive Physiology, Endocrinology, Animal Reproduction; Technical Consultant Senior - AH&F, National Rainfed Area Authority (NRAA), Ministry of Agriculture & Farmers Welfare, Gol, 2nd Floor, NASC Complex, DPS Marg, Pusa, New Delhi 110012; EG 13, 4th Floor Inderpuri, New Delhi 110012; [Tel: Off. (011) 25842959; Email: bsp1001@rediffmail.com; bsprakash1001@gmail.com]; *Recognition Award 2005-2006*



2011: **PRAKASH, Harischandra Shripathy** (b 5 Feb, 1956), Sp: Stress response of plants, Seed health diagnostics, Molecular diversity and bioprospecting of medicinal plants and their endophytes, Molecular/Biochemical profiling and barcoding of native varieties; UGC-BSR-Faculty Fellow, Department of Studies in Biotechnology, University of Mysore, Manasagangotri, Mysuru 570006, Karnataka; 215, 21 Main, Vijayanagar III Stage, 'B' Block, Mysuru 570030, Karnataka; [Tel: Off. (0821) 2414450, 2419877; Res. (0821) 2517577, Cell: 9845488400; Fax: (0821) 2414450; Email: hsp@apbbot.uni-mysore.ac.in; hasriprakash@gmail.com]



2016: **PRAKASH, Jamuna** (b 11 Feb, 1955), Sp: Food Science, Nutrition and Extension; No. 58, 5 'A' Main, Vontikoppal, Mysuru 570002, Karnataka; [Tel: Res. (0821) 2510054; Cell: 9845247386; Email: jampr55@hotmail.com]



1998: **PRAKASH, Vishweshwaraiah** (b 23 Nov, 1951), Sp: Food Chemistry, Enzymes and Proteins, Food and Nutrition, Biochemistry, Food Biotechnology and Nutraceuticals and Food Policies and Prevention of Food Losses and Waste and Food Regulations and Food, Nutrition, Health and Wellness as an Integrated area overarching Policy matters in Food Systems in Sustainable Growth; Former Director, CFTRI, No. 58, '5A' Main Road, Vontikoppal, Mysuru 570002, Karnataka; [Tel: Cell: 9845048854; Email: prakashvish@gmail.com]; *Member Executive Council 1 Jan, 2018 to 31 Dec, 2020*



2014: **PRASAD, Cadaba Srinivas** (b 20 May, 1952), Sp: Dairy cattle nutrition, Micronutrients, Bypass nutrients, Bioconversion of crop residues, Climate and livestock; Former VC, MAFSU, 144/1, 8th Main, 14th Cross, Malleswaram, Bengaluru 560003, Karnataka; [Tel: Res. (080) 23343845, Cell: 9986498977; Email: cadaba\_prasad@yahoo.co.in]; *Member Executive Council 1 Jan, 2015 to 31 Dec, 2017*



2008: **PRASAD, Gaya** (b 5 Nov, 1953), Sp: Animal Biotechnology, Molecular Virology & Molecular Diagnostics; Vice-Chancellor, Sardar Vallabhbhai Patel University of Agriculture and Technology, NH 58, Roorkee Road, Modipuram, Meerut 250110, U.P.; C-301, NASC Complex, Dev Prakash Sastry Marg, New Delhi 110012; [Tel: Off. (0121) 2888522; Cell: 9582898968; Fax: (0121) 2888505; Email: vc.svpuat@gmail.com; gprasad1986@gmail.com]; *Dr. P. Bhattacharya Memorial Award 2009-2010*



2013: **PRASAD, Manoj** (b 16 Dec, 1970), Sp: Plant molecular genetics and genomics, molecular breeding, functional genomics of plant abiotic and biotic stress responses; Staff Scientist VII (Professor) & J.C. Bose National Fellow, National Institute of Plant Genome Research, Aruna Asaf Ali Marg, JNU Campus, New Delhi 110067; House No. H-VB-DI-003, NIPGR, Aruna Asaf Ali Marg, New Delhi 110067; [Tel: Off. (011) 26735160; Res. (011) 26735147, Cell: 8800184445, 9868316379; Fax: (011) 26741658; Email: manoj\_prasad@nipgr.ac.in; prasadmanoj1970@gmail.com]; *Young Scientist Award 2003-04; NAAS Associate, 2006-10*



2016: **PRASAD, Minakshi** (b 18 Jun, 1961), Sp: Animal biotechnology, molecular virology, diagnostics and vaccines; Professor & Head, Department of Animal Biotechnology, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary & Animal Sciences, Hisar 125004, Haryana; 10/37, Old Campus, CCS HAU, Hisar 125004, Haryana; [Tel: Off. (01662) 256130; Res. (01662) 289589, Cell: 9992923330; Fax: (01662) 284312; Email: minakshi.abt@gmail.com]



1991: **PRASAD, Rajendra** (b 1 Jan, 1936), Sp: Soil fertility & fertilizer use; cropping systems; 6695 Meghan Rose Way, East Amherst, NY 14051, USA; C-309, Vardhman Appartments, Mayur Vihar Extension, Phase I, New Delhi 110091 [Res. (011) 22712256, Cell: 9810258485]; [Tel: Cell: 716-868-1640; Email: rajuma36@gmail.com]; *Editor 1 Jan, 2008 to 31 Dec, 2010*





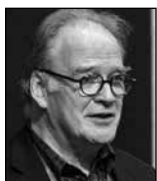
2009: **PRASANNA, Boddupalli Maruthi** (b 31 Aug, 1965), Sp: Maize genetics, breeding and seed systems in Africa, Asia and Latin America; Director, CGIAR Research Program MAIZE & Global Maize Program CIMMYT (International Maize and Wheat Improvement Centre), ICRAF House, United Nations Avenue, Gigiri, PO Box 1041, Village Market, 00621, Nairobi, Kenya; Permanent Residence: C-115, First Floor, Inderpuri, New Delhi 110012; [Tel: +254-722626095; Cell: 9540293287 (Delhi); Email: b.m.prasanna@cgiar.org; bmprasanna@gmail.com]; *NAAS Associate, 2005*



2020: **PRASATH, Duraisamy** (b 30 May, 1973), Sp: Breeding of horticulture crops and applied genomics; Principal Scientist (Horticulture), Division of Crop Improvement and Biotechnology, ICAR-Indian Institute of Spices Research, Kozhikode 670012, Kerala; 38/325A, Dwaraka, KK Road, Netaji Nagar, East Hill, Kozhikode 673005, Kerala; [Tel: Off. (0495) 2731410 Ext. 208; Res. (0495) 2384995; Cell: 9495639838; Fax: (0495) 2731410; Email: dprasath@gmail.com; prasath.d@icar.gov.in]



2015: **PRAVEEN, Shelly** (b 26 May, 1966), Sp: Nutritional Biochemistry, Molecular Biology, Plant Virology; Head, Division of Biochemistry, ICAR-Indian Agricultural Research Institute, New Delhi 110012; B-36, Samrat Ashok Apartments, Sector-9, Rohini, New Delhi 110085; [Tel: Off. (011) 25842038; Res. (011) 47082905, Cell: 9868033132; Fax: (011) 25846420; Email: shellypraveen@hotmail.com; shellypraveen@iari.res.in]; *NAAS Associate, 2005*



2021: **PRITCHARD, Hugh W.** (b 10 May, 1957), Sp: Comparative seed biology, seed quality, plant cryobiotechnology, international science policy; Principal Scientific Leader, Royal Botanic Gardens, Kew, Wakehurst Place, Ardingly, West Sussex RH17 6TN, U.K.; 73 Highdown Road, Lewes, East Sussex BN7 1QE, UK; [Tel: Off. (+44) 1444 894140; Res. (+44) 1273 479154; Cell: (+44) 4794 9696485; Fax: (+44) 1444 894110; Email: h.pritchard@kew.org; h.w.pritchard@btinternet.com]



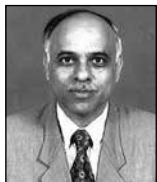
2020: **PUNIYA, Anil Kumar** (b 15 Aug, 1966), Sp: Dairy & Rumen Microbiology; Principal Scientist (Dairy Microbiology), Anaerobic Microbiology Lab, Dairy Microbiology Div, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; H.No. 1154, Alpha City, International, Sector 29, Karnal 132001, Haryana; [Tel: Off. (0184) 2259176; Cell: 8395913535, 8360189196; Email: akpuniya@gmail.com; anil.puniya@icar.gov.in]



2019: **PURAKAYASTHA, Tapan Jyoti** (b 2 Mar, 1964), Sp: Soil quality assessment, Soil carbon sequestration, Use of biochar in agriculture, Phytoremediation of heavy metal contaminated soils; Principal Scientist, Division of Soil Science and Agril. Chemistry, Indian Agricultural Research Institute, New Delhi 110012; N 235, DLF Capital Greens, 15 Shivaji Marg, Moti Nagar, New Delhi 110015; [Tel: Off. (011) 25841494; Res. (011) 40193809; Cell: 9868091129; Fax: (011) 25846420; Email: tpurakayastha@gmail.com; tapanjp@iari.res.in; tapan.purakayastha@icar.gov.in]



2000: **PURI, S.N.** (b 24 Jan, 1945), Sp: Entomology, Integrated Pest Management; Former VC, CAU, Flat No. 402/502, Plot 84/85, Kusum Residence, Vidya Sagar Colony, Near Salisbury Park, Pune 411037, Maharashtra; [Tel: Cell: 9999637566; Email: snpuri04@yahoo.co.in]; *Member Executive Council 1 Jan, 2013 to 31 Dec, 2015; Member Executive Council 1 Jan, 2001 to 31 Dec, 2003*



2006: **PURI, Sunil** (b 17 Mar, 1953), Sp: Agroforestry, tree improvement, c-sequestration, physiology; Dean, Academic Affairs cum Registrar, Shoolini University of Biotechnology and Management Sciences, The Mall, Near Head P.O., Solan 173212, H.P.; Mother's Abode, Sunny Side, Near District Courts, Solan 173212, H.P.; [Tel: Off. (01792) 308000, Cell: 9816011680; Fax: (01792) 2226364; Email: spuri56@yahoo.com]



1992: **PUROHIT, Aditya Narain** (b 30 Jul, 1940), Sp: Environmental plant physiology; mountain environment and development planning; physiology of medicinal and aromatic plants; Former Vice Chancellor, Garhwal University, "Almi Anchal", 181/1 Dobhalwala, Dehradun 248006, Uttarakhand; [Tel: Res. (0135) 2713219; Cell: 9412058572; Email: adityapurohit19@gmail.com]



2003: **PUSHPANGADAN, P.** (b 23 Jan, 1944), Sp: Conservation biology, cytogenetics & plant breeding, molecular taxonomy, ethnobiology & ethnopharmacology; Director General, Amity Institute for Herbal and Biotech Products Development, 3 Ravi Nagar, Ambalamukkam, Peroorkada P.O., Trivandrum 695005, Kerala; Sreesailam, TC x/910, VRA-179, Mannamoola, Peroorkada PO, Trivandrum 695005, Kerala; [Tel: Off. (0471) 2432138; Cell: 9895066816; 9447678772; Fax: (0471) 2432148; Email: palpuprakulam@yahoo.co.in]



2012: **RAGHAVAN, G.S. Vijaya** (b 10 Nov, 1944), Sp: Post-harvest technologies, storage, drying, food processing, electro-technologies, microwave-assisted extraction, bio-energy, biochar, microbial fuel cells; James McGill Professor, MMcGill University, Department of Bioresource Engineering, Faculty of Agricultural and Environmental Sciences, Macdonald Steward Building, Room M51-027, 2111 Lakeshore Road, Ste. Anne-de-Bellevue, Quebec, H9X 3V9, Canada; 398, Boulevard de l'Île, Pin court, Quebec, J7V 9Y3, Canada; [Tel: Off. (514) 398-8731; Res. (514) 453-6151; Fax: (514) 398-7990; Email: vijaya.raghavan@mcgill.ca]



2014: **RAGHAVARAO, K.S.M.S** (b 2 Aug, 1960), Sp: Food Engineering, Biotechnology (Downstream Processing, Bioreactor design), Chemical Engineering; Director, CSIR-Central Food Technological Research Institute, Mysore 570020, Karnataka; E1-3, CFTRI Quarters, CFTRI Campus, Mysore 570020, Karnataka; Permanent Address: C/o Dr. E. Vedavyas, IAS, Ph.D, No.56, Road No.8, Jubilee Hills, Hyderabad - 500033; [Tel: Off. (0821) 2512520, Res. (0821) 2340988; Cell: 9483540988; Fax: (0821) 2517233; Email: raghavarao@cftri.res.in; ksmsraghavarao60@gmail.com]



1998: **RAGHAVENDRA, Agepati S.** (b 17 Nov, 1950), Sp: Plant biochemistry, plant physiology and plant molecular biology; Professor, School of Life Sciences, University of Hyderabad, Hyderabad 500046, Telangana; Flat No. M-1701, Aparna Sarovar, Nallagandla, Central University Post, Hyderabad 500046, Telangana; [Tel: Off. (040) 29881003; Res. (040) 48514460; Cell: 9849107190; Fax: (040) 23010120, 23010145; Email: asrsl@uohyd.ernet.in; asrsls@gmail.com]; Recognition Award 2003-2004; Dr. K. Ramiah Memorial Award 2005-2006



1992: **RAGHU, Kanthadai** (b 23 Sep, 1936), Sp: Fate, persistence and metabolism of pesticides in soils and plants; E-7, Dattaguru Housing Society, Deonar Village Road, Deonar, Mumbai 400088, Maharashtra; [Tel: Res. (022) 25565512, Cell: 9820322244; Email: drraghu10@gmail.com]



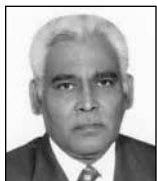
2016: **RAGHUWANSHI, Narendra Singh** (*b 3 Jul, 1962*), Sp: Irrigation water management, watershed modelling and management, soft computing in water management, IT applications in water; Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur 721302, W.B.; A-186, IIT Campus, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283146; Res. (03222) 283147, Cell: 9434010850; Fax: (03222) 255303; Email: nsr@agfe.iitkgp.ernet.in]



2021: **RAHEMAN, Hifjur** (*b 4 May, 1962*), Sp: Combination and renewable energy operated machinery, sensors for precision farming, traction improvement of tractors and power tillers; Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur 721302, W.B.; [Tel: Off. (03222)-283160; Res. (03222)-283161 Cell: 9434704801; Email: hifjur@agfe.iitkgp.ac.in; rahemanh@gmail.com]



2020: **RAI, Anil** (*b 14 Mar, 1964*), Sp: Agricultural Statistics, Computer Science and Bioinformatics; Head & Principal Scientist, Centre for Agricultural Bioinformatics, ICAR-Indian Agril. Statistics Research Institute, Library Avenue, Pusa, New Delhi 110012; F-1801, Apex Athena, Sector 75, Noida, Gautam Budh Nagar 201301, U.P.; [Tel: Off. (011) 25841721; Cell: 9868500341; Email: anil.rai@icar.gov.in; anilrai64@gmail.com]



2010: **RAI, Ashwani Kumar** (*b 29 Dec, 1948*), Sp: Physiology and Biochemistry of cyanobacteria and Azolla-Anabaena system, nitrogen nutrition, carbon fixation, salt stress and adaptive responses; Distinguished Professor, Department of Botany, Banaras Hindu University, Varanasi 221005, U.P.; N1-65/ B18, Shiva Prasad Gupta Colony, Samne Ghat Road, Nagwa, Varanasi 221005, U.P.; [Tel: Res. (0542) 2366514, Cell: 9450867006; Email: akrai.bhu@gmail.com; akrai@bhu.ac.in]



2012: **RAI, Lal Chand** (*b 15 Jul, 1950*), Sp: Proteomics and Functional Genomics of diazotrophic cyanobacteria under abiotic stress; In Silico and Molecular characterization of novel/hypothetical proteins; Molecular Microbiology; Professor, Molecular Biology Section, Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu University, Varanasi 221005, U.P.; B 30/40, Mani Niketan C/o Orhocity, Madhav Market, Lanka, Varanasi 221005, U.P.; [Tel: Res. (0542) 2367520; Cell: 9415225821; Fax: (0542) 2368174; Email: lcrbhu15@gmail.com; lcrai@bhu.ac.in]



2000: **RAI, Mangala** (*b 30 Jun, 1947*), Sp: Genetics, plant breeding, seeds, management, policy and perspective planning; Kalindi Kunj, N-8/180 A-B, Ganesh Dham Colony, Newada, P.O. Sunderpur, Varanasi 221005, U.P.; H-6, Pusa Apartments, Sector-15, Rohini, New Delhi 110085; [Tel: Cell: 9868630033, 9473199162; Email: mnglrai@gmail.com]; *Member Executive Council 1 Jan, 2011 to 31 Dec, 2013; President 1 Jan, 2008 to 31 Dec, 2010; Vice-President 1 Jan, 2006 to 31 Dec, 2007; Dr. A.B. Joshi Memorial Lecture Award 2013*



2008: **RAI, Mathura** (*b 5 Jan, 1948*), Sp: Vegetable and fruit breeding and genetics; Former Director, IIVR, 1/36, Rasmi Khand, Sharada Nagar, Lucknow, U.P.; [Tel: Cell: 9450786967; Email: mathura.rai@gmail.com]



2021: **RAI, Nagendra** (b 1 Mar, 1964), Sp: Genetic improvement of tomato and legume vegetables (Indian bean, French bean and cowpea) through traditional and molecular breeding approaches; Principal Scientist, Division of Crop Improvement, Indian Institute of Vegetable Research, P.B. No. 01, P.O. Jakhini (Shahanshahpur), Varanasi 221305, U.P.; B-33/14CB/204, Trupatikunj Apartment, Koshleshnagar, Sunderpur, BHU, Varanasi 221005, U.P.; [Tel: Off. (0542) 2635236/37/47; Res. 8887957452; Fax: (05443) 229007; Email: nrail964@gmail.com]



2010: **RAI, Ram Bahal** (b 5 Jan, 1954), Sp: Livestock and poultry disease control, stephanofilariasis, gastroenteritis, infertility control, Integrated farming system, organic production system; Principal Scientist, Division of Pathology, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly 243122, U.P.; 4, Jagdish Vihar, Rajendra Nagar, Bareilly 243122, U.P.; [Tel: Res. (0581) 2300490 Cell: 9411699408; Email: drrbrai@yahoo.co.in]; *Sh. L.C. Sikka Endowment Award 2011-2012*



2005: **RAINA, Satish Kumar** (b 25 Jun, 1947), Sp: Genetics, breeding, plant biotechnology; Chief Adviser, Nath BioGene (India) Ltd., Nath House, Nath Road, Aurangabad 431005, Maharashtra; [Tel: Off. (0240) 2376765; Res. (0240) 2343993; Fax: (0240) 2376188; Email: satishraina@yahoo.com]



2012: **RAJAM, Manchikatla Venkat** (b 2 Feb, 1955), Sp: Plant Biotechnology, RNA Silencing, Polyamine Physiology and Molecular Biology; UGC BSR Faculty Fellow, Department of Genetics, University of Delhi South Campus, Benito Juarez Road, Dhaura Kuan, New Delhi 110021; Flat No. 2E, Shivalika Apartments, Sector 9, Plot No. 16, Dwarka, New Delhi 110077; [Tel: Off. (011) 24112503, Ext. 7172; Res. (011) 25075497, Cell: 9818108515; Fax: (011) 24112761; Email: rajam.mv@gmail.com; venkat.rajam@south.du.ac.in]



1999: **RAJARAM, Sanjaya** (b 10 Feb, 1943), Sp: Plant breeding, plant pathology; Resource Seed Mexicana (RSM), Calle Aldama, 100, San Miguel Chapultepec, C.P. 52240, Edo. De Mexico, Mexico; Calle Paris 186, Colonia Jardines de Bellavista, Tlalnepantla, Estado de Mexico, C.P. 54054, Mexico; [Tel: Off. 52-722-2630732; Res. 52-55-53657547; Email: s.rajaram@cgiar.org]



2003: **RAJASEKHARAN, Ram** (b 25 Dec, 1960), Sp: Plant Biochemistry and Food Biotechnology; Director, Central Food Technological Research Institute, Council of Scientific & Industrial Research, Mysore 570020, Karnataka; CFTRI House, CFTRI Campus, Mysore 570020, Karnataka; [Tel: Off. (0821) 2517760; Fax: (0821) 2516308; Email: director@cftri.com; director@cftri.res.in; ram@cftri.com]



2011: **RAJENDER PARSAD** (b 10 Nov, 1966), Sp: Agricultural Statistics, Design of Experiments, Sampling Techniques; Director, ICAR-Indian Agricultural Statistics Research Inst., Library Avenue, Pusa, New Delhi 110012; J-34, Chankya Place, Part I, New Delhi 110059; [Tel: Off. (011) 25841479; Res. (011) 25638564, Cell: 9811647837; Fax: (011) 25841564; Email: rajender.parsad@icar.gov.in; rajender1066@yahoo.co.in]; *Member Executive Council 1 Jan, 2020; Member Executive Council (Casual Vacancy) 14 Sept, 2018 to 31 Dec 2019; Young Scientist Award 1999-2000; NAAS Associate, 2007-10; Recognition Award 2015-2016*



2010: **RAJESWARA RAO, Bhaskaruni Raja** (b 12 Aug, 1953), Sp: Agronomy, Medicinal and Aromatic plants; Former Chief Scientist, CSIR-CIMAP, 1-1-593/2/2 Gandhinagar, Hyderabad 500080, Telangana; [Tel: Off. (040) 27200272; Res. (040) 27621400, Cell: 9441455397; Fax: (040) 27202602; Email: brrao1@rediffmail.com; brrao1@gmail.com]



2013: **RAJPUT, Thakur Bahadur Singh** (b 1 Jan, 1952), Sp: Canal Water Management, On-farm Water Management, Micro Irrigation; Adjunct Professor (Ag. Engg.), Indian Agricultural Research Institute, New Delhi 110012; D-26, IARI Campus, New Delhi 110012; [Tel: Off. (011) 25848703; Res. (011) 21521073, Cell: 9810673101; Fax: (011) 25848703; Email: tbsraj@yahoo.com]



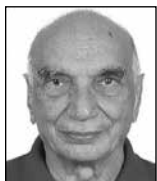
2015: **RAJPUT, Yudhishtir Singh** (b 26 Feb, 1953), Sp: Protein chemistry, aptamer, milk adulteration; Ex-Head (ABD), NDRI, # 912, Sector 6, Karnal 132001, Haryana; [Tel: Res. (0184) 2281912; Cell: 9466653595; Email: ys\_rajput@rediffmail.com]



2019: **RAM, Bakshi** (b 1 Jul, 1959), Sp: Plant Breeding, Sugarcane Breeding, Germplasm Evaluation and Utilisation, Abiotic Stresses; Director, ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu; House No. 401, Sector 9, Urban Estate, Gurugram 122001, Haryana; [Tel: Off. (0422) 2472923; Cell: 9894044711, 9416484030; Fax: (0422) 2472923; Email: bryadav2003@yahoo.com; director.sbi@icar.gov.in]



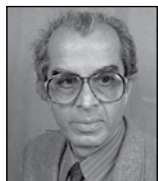
2002: **RAM SAKAL** (b 31 Jul, 1942), Sp: Soil fertility/Soil Chemistry and Plant Nutrition with special reference to micro-and secondary nutrients; Former Director, Sugarcane Research Institute, Patel Niwas, Village - Rasulaha, P.O. Raghupur (Sewapuri), Distt. Varanasi 221403, U.P.; [Tel: Cell: 9918771058]



1991: **RAMA** (b 16 Mar, 1929), Sp: Isotope hydrology, isotope applications in environmental sciences; Former Professor, CSIR-TIFR, Y-4, Sector 9, CBD Belapur, Navi Mumbai 400614, Maharashtra; [Tel: Res. (022) 27570081, 27561850; Email: rama139@yahoo.co.in; rama.506@yahoo.com]



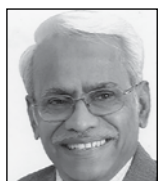
1994: **RAMAKRISHNAN, Narasimhan** (b 15 Nov, 1938), Sp: Entomology, insect pathology, insect virology; Former Head (Entomology), IARI, 99, Anandvan, A-6, Paschim Vihar, New Delhi 110063; [Tel: Res. (011) 25261533; Email: nramakrishnan1938@hotmail.com]



1991: **RAMAKRISHNAN, Palayanoor Sivaswamy** (b 24 Dec, 1936), Sp: Global change, agro-ecology, natural resource management, ecology and sustainable development; Emeritus Professor & INSA Sr. Scientist, School of Environmental Science, Jawaharlal Nehru University, New Delhi 110067; I-21, South City, Phase I, Gurugram 124001, Haryana; [Tel: Off. (011) 26704326; Res. (0124) 4085970, Cell: 9312257870; Fax: (011) 26741262; Email: psr@mail.jnu.ac.in]; *Member Executive Council 19 Aug, 1995 to 31 Dec, 1995*



1999: **RAMAMURTHI, Rallapalli** (b 27 Jul, 1936), Sp: Fin fish and shell fish physiology, environmental science, biodiversity monitoring and conservation, stress induced diabetic nephropathy, mechanisms and management of psoriasis; INSA Honorary Scientist, Former, Vice Chancellor, SV University, A-9, Vaikuntapuram, Tirupati 517502, A.P.; [Tel: Res. (0877) 2241907, Cell: 9849488390; Fax: (0877) 2242079; Email: rrallapallius@yahoo.com; gauthama.rallapalli@gmail.com]



2006: **RAMASAMY, Chinnachamy** (b 26 Jun, 1947), Sp: Technology and agricultural development, agricultural markets, prices and international trade, natural resources economics, agricultural research investment and impact evaluation and agri-business management; Former VC, TNAU, 9/12, 5th Cross Ramalingam Nagar, K.K. Pudur, Coimbatore 641038, Tamil Nadu; [Tel: Res. (0422) 2442065; Cell: 9940964747; Email: cramasamy47@gmail.com]; *Member Executive Council 1 Jan, 2007 to 31 Dec 2009*



2019: **RAMASWAMY, Hosahalli** (b 13 Nov, 1950), Sp: Food Science, Food Processing, Process Engineering, Process Development and Evaluation; Professor, Department of Food Science, McGill University, Macdonald Campus, 21111 Lakeshore Road, Ste-Anne-de-Bellevue, Quebec, Canada, H9X3V9; [Tel: Off. 01-514-398-7019; Cell: 01-514-608-9587; Email: hosahalli.ramaswamy@mcgill.ca]



2015: **RAMTEKE, Pramod Wasudeo** (b 30 May, 1957), Sp: Environmental microbiology & biotechnology, biofuels, plant-microbes interactions, enzymology, nanotechnology; Flat No. 206, 'I' Wing, Techops Garden, Gohnisim, Umred Road, Nagpur 440034, Maharashtra; [Tel: Off. (0532) 2684296; Cell: 9415124985; Email: pwranteke@gmail.com; pwranteke@yahoo.com; pwranteke.178@rediffmail.com]



1996: **RANA, Bhanwar Singh** (b 5 Jul, 1941), Sp: Plant breeding, Quantitative genetics, Research management; Farmer Participatory Research, Energy crops development and production; Formerly Director, IIMR, Flat No. 109, Indraprasth Apartments, Sector 12, Pocket 3, Dwarka, New Delhi 110078; [Tel: Cell: 9718450201; 8920548742; Email: ranabs2@gmail.com]



2014: **RANA, Jai Chand** (b 23 Jan, 1963), Sp: Plant Genetic Resources Management; On-farm Conservation; Climate Change; Country Representative & National Coordinator, UN Environment GEF Project, The Alliance of Bioversity International and CIAT, India Office, G-1, B-Block, NASC Complex, DPS Marg, New Delhi 110012; EA 125, Inderpuri, New Delhi 110012; [Tel: Off. (011) 25849000-04; Cell: 9540534697, 9418104185; Fax: (011) 25849002; Email: j.rana@cgiar.org; ranajc2003@yahoo.com; ranajcnbpgr@gmail.com]; *Recognition Award 2015-2016*



2020: **RANDHAWA, Gurinderjit** (b 16 Aug, 1960), Sp: GM Diagnostics, DNA Fingerprinting, Molecular Genetics; Principal Scientist & Head, Division of Genomic Resources, ICAR-National Bureau of Plant Genetic Resources, New Delhi 110012; Ivory 168, Emerald Hills, Sector 65, Gurgaon 122002, Haryana; [Tel: Off. (011) 25802790; Res. (0124) 4674851; Cell: 9811974396; Email: gurinder.randhawa@icar.gov.in; gurinder.randhawa@rediffmail.com]



1998: **RANDHAWA, Sarnarinder Singh** (b 23 Sep, 1955), Sp: Veterinary medicine, clinical medicine, geo-medicine; Former Professor, KCVAS, H.No. 107, Block B, Bhai Randhir Singh Nagar, Ludhiana 141012, Punjab; [Tel: Cell: 9814634094; 8360313297; Email: sarnarinder@gmail.com]



2001: **RANJEKAR, Prabhakar Kamalakar** (b 26 Oct, 1941), Sp: Plant molecular biology, agricultural biotechnology; Director of Research at Bharati Vidyapeeth & Director IRSHA, Medical College Campus, Bharati Vidyapeeth University, Dhankawadi, Pune 411043, Maharashtra; Fellow, NAAS, B-11, 'Tarang' Gate 4, Abhimanashree Housing Society, Pashan Road, Pune 411008, Maharashtra; [Tel: Off. (020) 24366929; Res. (020) 25661045, 25650938; Cell: 9823437353; Email: ranjekar@vsnl.com]



1999: **RAO, A.T.** (b 21 Jul, 1940), Sp: Veterinary pathology - wildlife diseases, avian pathology, herbal medicine; Former Emeritus Scientist, ICAR, Plot No. 1021/44, Lingaraj Nagar, Bhubaneswar 751002, Odisha; [Tel: Res. (0674) 2590783; Cell: 9437025509; Email: dr.raoat@yahoo.com]



2016: **RAO, Atmakuri Ramakrishna** (b 15 Jan, 1968), Sp: Bioinformatics, Agricultural Statistics, Statistical Genetics and Genomics; ADG (PIM), Indian Council of Agricultural Research, Room No. 111, Krishi Bhawan, New Delhi 110001; H-125, DLF Capital Greens, 15, Shivaji Marg, New Delhi 110015; [Tel: Res. (011) 41011596, Cell: 9999422935; Email: ar.rao@icar.gov.in; rao.cshl.work@gmail.com]



2004: **RAO, D.L.N.** (b 26 Nov, 1954), Sp: Soil Microbiology, Biological Nitrogen Fixation, Biofertilizers, Organic Farming, Soil Health; Former ICAR-Emeritus Scientist, HIG-H/383, Ayodhyanagar, Bhopal 462041, M.P.; [Tel: Cell: 9303129740; Email: dlnrao.icar@gmail.com]



2003: **RAO, E.V.S. Prakasa** (b 24 Sep, 1953), Sp: Medicinal and aromatic plants, agronomy, soil science, water management, climate change, environmental modelling, carbon sequestration; 42, AECS II Stage, 5th Main, 16th Cross, Sanjaynagar, Bengaluru 560094, Karnataka; [Tel: Res. (080) 23418558, Cell: 9731128468; Email: evsprakasaraao@gmail.com]



1995: **RAO, Kamineni Venkata Gopala Krishna** (b 10 Oct, 1945), Sp: Irrigation and drainage engineering, reclamation of salt affected soils; 59A-8/7-12, 7th Road, Maruthui Cooperative Colony, Vijayawada 520008, A.P.; [Tel: Cell: 9849045342; Email: kvakrao@gmail.com]



2020: **RAO, Mahendrakar Sreenivasa** (b 2 Oct, 1960), Sp: Nematology, Pathology and Biotechnology; #623, A Block, 19th Main, 20th Cross, A Block, Sahakaranagar, Bengaluru 560092, Karnataka; [Tel: Cell: 9482603614, 9482603614; Email: msraobio45@gmail.com; msraobiopesticides@gmail.com]



1997: **RAO, N. Hanumantha** (b 22 Mar, 1954), Sp: Hydrology and Water Resources; Geospatial technologies applications in natural resources management and agriculture, Agricultural research management; Sustainability of agricultural systems; Science and technology policy for agriculture; Agribusiness management; Former Joint Director, NAARM, HIG (OG), Block 10, Flat 4, Baghlingampally, Hyderabad 500044, Telangana; [Tel: Res. (040) 27661383; Cell: 9246577262; Email: nhrao1954@gmail.com]; *Member Executive Council (Casual Vacancy) 1 Jan, 2016 to 31 Dec, 2017*



2012: **RAO, Surapaneni Koteswara** (b 8 Mar, 1952), Sp: Crop Improvement, Seed Systems, Agribusiness Incubator Development; Vice Chancellor, Rajmata Vijayaraje Scindia Krishi Vishwa Vidyalaya, Race Course Road, Near Mela Grounds, Gwalior 474002, M.P.; Vice Chancellor Bungalow, RVSKVV Campus, Raja Pantham Singh Marg, Gwalior 474002, M.P.; [Tel: Cell: 9111444052; Email: vcrvskvvgwl@gmail.com; skrao\_jnau@yahoo.co.in; vcrvsaugwa@mp.gov.in]



1994: **RAO, V.R.** (b 21 Jun, 1945), Sp: Microbiology, Soil Fertility and management, Natural resource management, Environmental Protection, management and conservation, Microbial biodiversity; Former Head (Soil), CRRI, F-4, Annapurna, KRV Towers I, Narayana Street, Alcot Gardens, Rajahmundry 533101, A.P.; [Tel: Cell: 9397106232; Email: drvrrao45@gmail.com]



2018: **RASTOGI, Navin Kumar** (b 16 Mar, 1968), Sp: Application of Chemical Engineering principles to Food Engineering, Non-thermal processing and Downstream processing; Chief Scientist, Department of Food Engineering, CSIR-Central Food Technological Research Institute, Mysore 570020, Karnataka; 60, CFTRI Housing Society Layout, 4th Main, 3rd Cross, Bogadi 2nd Stage, Mysore 570026, Karnataka; [Tel: Off. (0821) 2513910; Cell: 9972794896; Fax: (0821) 2517233; Email: nkrastogi@cftri.res.in; nkrastogi@yahoo.com]



2015: **RAVISHANKAR, CHANDRAGIRI NAGARAJA Rao** (b 20 Apr, 1963), Sp: Post Harvest Technology of Fish, Fish Processing and Packaging Technology, Food Science and Technology, Food Safety, Agri-business Management, Intellectual Property Rights; Director, ICAR-Central Institute of Fisheries Technology, Matsyapuri P.O., Willingdon Island, Kochi 682029, Kerala; Medhini, 14/221, Rajeev Gandhi Lane, T.K.S. Road, Maradu P.O., Kochi 682304, Kerala; [Tel: Off. (0484) 2666880; Res. (0484) 2705368; Cell: 9446474368; Fax: (0484) 2668212; Email: cnrs2000@gmail.com; director.cift@icar.gov.in; directorcift@gmail.com; ravishankar.cn@icar.gov.in]





2003: **RAVISHANKAR, Gokare Aswathanarayana** (b 12 Feb, 1954), Sp: Plant biotechnology, algal biotechnology, food biotechnology, plant tissue and cell culture, secondary metabolites, metabolic engineering, biodiversity utilization, biofuels; Vice President, R&D (Life Sciences), Dayananda Sagar Institutions, Dr. C.D. Sagar Centre for Life Sciences, Shavige Malleshwara Hills, Kumaraswamy Lay, Bengaluru 560078, Karnataka; 3101, Kristal Dolomite, Anjanapura Double Road, Doddakallasandra, Bengaluru 560062, Karnataka; [Tel: Off. (080) 42162747; Cell: 9448086775; Fax: (080) 42161747; Email: rgokare@yahoo.co.in]



2012: **RAY, Debi Prasad** (b 15 Aug, 1949), Sp: Enhancement of fruit & plantation crops; Orchard efficiency management, Varietal and Nutritional improvement, water management, propagation techniques, high density, feeder root distribution and post-harvest management of tropical & subtropical fruits and vegetables; Former VC, OUAT, HIG-105, K-5, Kalinga Vihar, Bhubaneswar 751019, Odisha; [Tel: Res. (0674) 2475093; Cell: 9437040057, 7381036054; Email: dpray1949@gmail.com]; *Member Executive Council 1 Jan, 2016 to 31 Dec, 2018*



2008: **RAY, Ramesh C.** (b 22 Nov, 1955), Sp: Food fermentation, food microbiology, bioprocessing; Principal Scientist (Microbiology), ICAR-Central Tuber Crops Research Institute (Regional Centre), Dumuduma PO, Bhubaneswar 751019, Odisha; [Tel: Off. (0674) 2470528; Res. 2351046; Cell: 9777771840; Fax: (0674) 2470528; Email: rc\_raycteri@rediffmail.com; rc.ray6@gmail.com]



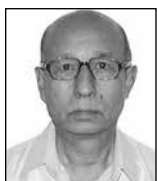
2014: **REDDY, Kotha Sammi** (b 12 Oct, 1965), Sp: Soil chemistry & fertility, soil testing, climate change, dryland agriculture, rainfed agriculture; Director (Acting), ICAR-Central Research Institute for Dryland Agriculture, Santoshnagar, Saidabad (PO), Hyderabad 500059, Telangana; H. No. 2-3-329/1, Sainagar Colony, Near Saibaba Mandir, Nagole, Hyderabad 500068, Telangana; [Tel: Off. (040) 24530177 Ext 234; Cell: 9652114864; Fax: (040) 24535336; Email: ksreddy\_iiss39@yahoo.com; k.sammireddy@icar.gov.in]; *NAAS Associate, 2006*



2015: **ROUT, Gyana Ranjan** (b 30 Dec, 1962), Sp: Biotechnology in Horticultural and Medicinal Plants, Biodiversity & Conservation, Molecular stress physiology, Environmental Biotechnology & Molecular Biology; Professor & Head, Department of Agricultural Biotechnology, College of Agriculture, Orissa University of Agriculture & Technology, Bhubaneswar 751003, Odisha; Plot No. 208/821, Khandagiri Vihar, Kolathia, PO- Aiginia, Bhubaneswar 751019, Odisha; [Tel: Off. (0674) 2397755; Cell: 9437308014, 7205881433, 6372671115; Email: grrout@rediffmail.com; rout07@rediffmail.com; grrout2012@gmail.com]



2009: **ROY, Ajoy Kumar** (b 1 Sep, 1961), Sp: Forage Genetic Resources, Forage Crop Improvement, Genetics, Biotechnology, Grassland, Silviculture; Project Coordinator, AICRP on Forage Crops & Utilization, Indian Grassland & Fodder Research Institute, Jhansi 284003, U.P.; E-09, IGFRI Colony, Indian Grassland & Fodder Res. Institute, Jhansi 284003, U.P.; [Tel: Off. (0510) 2730029; Res. (0510) 2730721, 2730639, Cell: 9415412144; Fax: (0510) 2730029; Email: royak333@rediffmail.com]



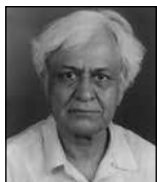
1993: **ROY, Nripendra Kumar** (b 5 Feb, 1935), Sp: Pesticide chemistry and residue analysis; Former Emeritus Scientist ICAR and DST, AN/12C, Shalimar Bagh, Delhi 110088; [Tel: Res. (011) 27473623; Cell: 9818672057; Email: roynk@ymail.com]; *Dr. K.C. Mehta Award 2003-2004*



2006: **ROY, Parimal** (b 3 Dec, 1961), Sp: Poultry and livestock diseases, diagnostics and vaccines; Professor, Tamilnadu Veterinary Animal Sciences University, Madhavaram Milk Colony, Chennai 600051, Tamil Nadu; 3 H, Jamal Greenery Apartment, 119 Arcot Road, Valasaravakkam, Chennai 600087, Tamil Nadu; [Tel: Cell: 9884472767; Fax: (080) 23093222; Email: parimalroy580@gmail.com; parimalroy@tanuvas.ac.in]; *Recognition Award 2015-2016*



1998: **ROY, Parth Sarathi** (b 13 Aug, 1952), Sp: Observation and Landscape ecology; Senior Fellow, World Resource Institute India, Visiting Fellow, University of Hyderabad; Flat No. B 504, Nalagandala, Hyderabad 500046, Telangana; [Tel: Res. (040) 67768619; Cell: 9000971952; Email: psroy13@gmail.com; parth.roy@wri.org]; *Recognition Award 2001-2002*



1995: **SACHAR, Ramesh Chandra** (b 24 Aug, 1929), Sp: Plant biochemistry & molecular biology with special reference to Phytohormonal regulation of enzymes in plants; Former Professor, DU, E-14/4, Vasant Vihar, New Delhi 110057; [Tel: Res. (011) 26148837, Cell: 9873552769]



2002: **SACHDEV, Manbir Singh** (b 6 Jun, 1949), Sp: Soil science, water management, soil fertility & fertilizer use - stable and radioactive isotope techniques; Former ICAR National Fellows, NRL, AK-1/107, Abhay Khand-I, Indirapuram, Ghaziabad 201214, U.P.; [Tel: Cell: 9818427244; Email: sachdevms@gmail.com; mssachdev@hotmail.com]



2018: **SADASHIVA, Avverahally Thammanna** (b 20 Jun, 1957), Sp: Vegetable Science (Tomato Breeding); #1420, 3rd Main, 3rd Cross, Chandra Layout, Bengaluru 560040, Karnataka; [Tel: Res. (080) 23218526; Cell: 9845097472; Fax: (080) 28466291; Email: atsbrs@yahoo.co.in; atsbrs@gmail.com]; *Dr. N.G.P. Rao Endowment Award 2017-2018*



2021: **SAHARAN, Mahender Singh** (b 10 Jun, 1967), Sp: Fungal Pathology, Host Resistance, Molecular Plant Pathology; Principal Scientist, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 6-C, Scientist Apartments, ICAR-IARI, New Delhi 110012; [Tel: Off. (011) 25843474 Cell: 9416988856; Email: mssaharan7@yahoo.co.in; mssaharan7@gmail.com]; *Young Scientist Award 2001-2002; NAAS Associate, 2008*



2019: **SAHOO, Dinabandhu** (b 9 Oct, 1961), Sp: Bioresource management, Sustainable development, Climate change, Biology of Algae, Marine science; Professor, Department of Botany, University of Delhi, Delhi 110007; [Tel: Cell: 9818165197, 8132953575; Email: dbsahoo@hotmail.com]



2016: **SAHOO, Pramoda Kumar** (b 4 May, 1965), Sp: Fish health management, host-pathogen interaction, diagnostics, vaccine development; Principal Scientist & ICAR National Fellow, Fish Health Management Division, ICAR-Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar 751002, Odisha; C2/303, Radhika Tower, Tankapani Road, Bhubaneswar 751018, Odisha; [Tel: Off. (0674) 2465446; Res. (0674) 2434120, Cell: 9437015120; Fax: (0674) 2465407; Email: pksahoo1@hotmail.com; pksahoo1@rediffmail.com]



2017: **SAHUL HAMEED, A. Sait** (b 1 May, 1960), Sp: Aquatic animal diseases, molecular diagnostics, vaccine development, herbal and viral immunostimulants, fish cell lines - development and applications. Established Repositories for fish cell lines and viral pathogens of aquatic animals; Coordinator, Aquatic Animal Health Laboratory, Abdul Hakeem College, Melvisharam, Vellore District 632509, Tamil Nadu; A9, TNHB - Phase 2, Arcot, Vellore Dist. 632509; [Tel: Off. (04172) 269487; Res. (04172) 233730; Cell: 9443211604; Fax: (04172) 269487; Email: cah\_sahul@hotmail.com]



2018: **SAI PRASAD, Sakuru Venkata** (b 21 Jun, 1967), Sp: Genetics and Plant Breeding in durum and bread wheat; Principal Scientist & Head, ICAR-IARI Regional Station, Near Agricultural College, Indore 452001, M.P.; Q. No. 2, Type III, IARI Quarters, Krishi Nagar, Indore 452001, M.P.; [Tel: Off. (0731) 2927921; Cell: 9425957920; Fax: (0731) 2701131; Email: sprasad98@gmail.com]



2014: **SALIMATH, Prakash Mrutyunjaya** (b 28 Feb, 1953), Sp: Crop Improvement, Molecular Breeding; Former VC, UASR, Flat No. 405, Raya Residency, Sanmati Nagar, Dharwad 580008, Karnataka; [Tel: Cell: 9742921300; Email: salimathpm@gmail.com]



1991: **SAMRA, Jagir Singh** (b 18 Apr, 1947), Sp: Natural resource management, agro-forestry, watershed management, wetlands, tree crop nutrition, capacity building, participatory watershed management, converged planning; Former CEO, NRAA, GOI, H.No. 17, Sector 16A, Chandigarh 160015; [Tel: Res. (0172) 2720226, Cell: 9650620999; Email: jssamra2001@yahoo.com]; *Dr. N.S. Randhawa Memorial Award 2003-2004*



1995: **SANDHU, Bikkar Singh** (b 16 Apr, 1935), Sp: Soil physics; soil-water-plant relationships; on-farm irrigation water management; 14-H, Bhai Randhir Singh Nagar, Ludhiana 141004, Punjab; [Tel: Res. (0161) 2451857]



2013: **SANDHU, Jeet Singh** (b 1 Aug, 1955), Sp: Plant Breeding and Genetics (Pulses genetics and breeding)/Research Manager & Academician; Vice Chancellor, SKN Agriculture University, Jobner, Jaipur 303329, Rajasthan; [Tel: Off. (01425) 25039; Cell: 9582898978; Email: js\_sandhuin@yahoo.com; vc@sknau.ac.in]



1991: **SANE, Prafullachandra Vishnu** (b 24 Dec, 1937), Sp: Photosynthesis, plant biochemistry, plant biotechnology; Former Director, NBRI, C-739/B, Sector - C, Mahanagar Extension, Lucknow 226006, U.P.; [Tel: Res. (0522) 3597186, Cell: 9422774972; Email: rajsane@hotmail.com]



2009: **SANGWAN, Neelam S.** (b 2 Jan, 1966), Sp: Plant Biochemistry, Biotechnology and genomics, Secondary metabolism in medicinal and aromatic plant, Plant Metabolomics; Phytopharmaceuticals, Ashwagandha Biology, chemotype development; Senior Principal Scientist, Metabolic and Structural Biology, CSIR-Central Institute of Medicinal and Aromatic Plants (CIMAP), P.O. CIMAP, Lucknow 226015, U.P.; House No. E1, CIMAP Colony, Sugandh Vihar, Vikas Nagar, Sector 7, Lucknow 226022, U.P.; [Tel: Off. (0522) 2718636; Cell: 9415766696; Fax: (0522) 2234666; Email: nsangwan5@gmail.com]; *Young Scientist Award 1999-2000*



2007: **SANGWAN, Rajender Singh** (b 24 Aug, 1958), Sp: Biochemistry and Genomics of Plant Secondary Metabolism in Medicinal & Aromatic Plants, Bioprocessing and Biotechnology for Resource Recovery and Value Added Bioproducts, Health and Functional Foods, Biosynthetic Technology, Synthetic Biology; Director (Vice Chancellor), Academy of Scientific and Innovative Research (AcSIR), AcSIR Campus at CSIR-HRDC, Sector-19, Kamla Nehru Nagar, Ghaziabad 201002, U.P.; [Tel: Cell: 9915035566, 9451246764, 9415766696; Email: sangwan.lab@gmail.com; sangwan@acsir.res.in; dr.sangwan@gmail.com]



2002: **SANYAL, Saroj Kumar** (b 16 Dec, 1950), Sp: Physical chemistry of soil, soil-water pollution, transport processes, soil humic substances, chemistry of soil potassium and phosphorus as plant nutrients, arsenic dynamics in soil-water-plant system; Former VC, BCKV, Flat No. A1 (Ground Floor), "Saptaparni", 58/3, Ballygunge Circular Road, Kolkata 700019, W.B.; [Tel: Res. (033) 24544694, Cell: 9830247072; Email: sksanyalnaip@gmail.com]; *Member Executive Council 1 Jan, 2018 to 6 Aug, 2019*



2017: **SARANGI, Arjamadutta** (b 11 Jun, 1967), Sp: Hydrologic modelling in watershed systems; Development of Decision Support Systems for enhancing water productivity; Principal Scientist, RN-12, Water Technology Centre, ICAR-Indian Agricultural Research Institute, Pusa Campus, New Delhi 110012; SA-7C, Scientists' Apartment, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25846790; Res. (011) 25848147 Cell: 9811400885; Email: asarangi@iari.res.in; arjamadutta.sarangi@mail.mcgill.ca]; *NAAS Associate, 2009*



2013: **SARKAR, Debabrata** (b 31 Oct, 1963), Sp: Plant biotechnology, breeding, genetics, genomics; Principal Scientist (Biotechnology), Division of Crop Improvement, ICAR-Central Research Institute for Jute & Allied Fibres, Barrackpore, Kolkata 700120, W.B.; Sutripti Apartment, Flat No. D, 92/3/1, Abinash Banerjee Lane, Shibpur, Howrah 711102, W.B.; [Tel: Off. (033) 25356121 Ext 227; Res. (033) 26788088; Cell: 9007965448; Fax: (033) 25350415; Email: debabrata\_s@yahoo.com; debabrata.sarkar@icar.gov.in]



1993: **SARKAR, Kumud Ranjan** (b 2 Jan, 1939), Sp: Maize Genetics; Former Head (Genetics), IARI, 77B, Ekta Apartments, A-2/B, Paschim Vihar, New Delhi 110063; [Tel: Res. (011) 25285825, Cell: 9868605866; Email: kumud.sarkar@gmail.com]



2021: **SARLA, Neelamraju** (b 22 Apr, 1955), Sp: Genetics, genomics, germplasm use, wide hybridization; ICAR National Professor (Retired), Flat 4 Block10 HIG (OG), Baghlingampally, Hyderabad 500044, Telangana; [Tel: Res. (040) 27661383; Cell: 9949077262; Email: sarla\_neelamraju@yahoo.com, nsarla.drr@gmail.com]



1995: **SARMA, P.B.S.** (b 7 Oct, 1938), Sp: Water resources management in agriculture; Former Professor and Project Director, WTC, B2-501, Sunny Valley, Plot #27, Sector - 12, Dwarka, New Delhi 110078; [Tel: Cell: 9873222125; Email: pbssarma@yahoo.com]



2009: **SATYANARAYANA, Tulasi** (b 1 Jul, 1951), Sp: Microbial Diversity, Applied & Industrial Microbiology, Bioenergy and Biofuels; Adjunct Professor, Department of Biological Sciences and Engineering, Netaji Subhas University of Technology, Azad Hind Fauj Marg, Sector 3, Dwarka, New Delhi 110078; A-113, Prodyogiki Apartments (Plot No. 11), Sector 3, Dwarka, New Delhi 110078; [Tel: Off. (011) 25000132; Res. (011) 49097627; Cell: 9810871815; Fax: (011) 25099025, 25099022; Email: tsnarayana@gmail.com; tsnarayana@nsit.ac.in]



1998: **SAWHNEY, Rajinder Nath** (b 27 Dec, 1933), Sp: Crop genetics & breeding; Fellow, NAAS, H-181, Sarita Vihar, New Delhi 110076; [Tel: Res. (011) 26972129, Cell: 9990200116, 7217733785]



2011: **SAXENA, Anil Kumar** (b 4 Jan, 1960), Sp: Plant-Microbe interactions, Molecular and functional diversity of bacteria; Director, ICAR-National Bureau of Agriculturally Important, Microorganisms, Kushmaur, Mau Nath Bhanjan 275103, U.P.; 2/35 Sarvapriya Vihar, New Delhi 110016; [Tel: Off. (0547) 2530080; Res. (011) 26562657, Cell: 9650377776; Email: saxena461@yahoo.com]



1995: **SAXENA, Kailash Narain** (b 19 Jun, 1927), Sp: Environmental entomology: insect behaviour, insect-plant relationships, bio-intensive insect pest management; Former Head (Zoology), DU, A-302 Gitanjali Apartments, Karkardooma, Delhi 110092; [Tel: Res. (011) 22374686; Cell: 9958548850; Email: saxenak@hotmail.com]



2009: **SAXENA, Krishna Gopal** (b 15 Feb, 1957), Sp: Ecology, Natural Resource Management and Sustainable Development; Professor, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi 110067; 139 Uttarakhand, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704305; Res. (011) 26741577, Cell: 9971461199; Fax: (011) 26741502, 26741262; Email: kgsaxena@mail.jnu.ac.in]



1995: **SAXENA, Mohan Chandra** (b 22 Jan, 1938), Sp: Crop physiology; soil-water-plant relations; pulses agronomy; dryland agriculture; Senior Advisor to DG, ICARDA, Aleppo, Syria, A-22/7 DLF City, Phase I, Gurugram 122002, Haryana; [Tel: Res. (0124) 4105071, Cell: 9560855894; Email: m.saxena@cgiar.org; mohan.saxena@yahoo.com]



1999: **SEETHARAM, Annadana** (b 3 Jun, 1943), Sp: Crop Improvement, Cytogenetics, Breeding of oilseeds and millets, plant genetic resources management; Former Project Coordinator (Millets), Flat No. 20133, Tower 20, Prestige Ferns Residency, Haralur Road, Off Sarjapur Road, Bengaluru 560102, Karnataka; [Tel: Res. (080) 46540897; Cell: 9880483696; Email: annada.seetharam@gmail.com]



2009: **SEETHARAMA, Nadoor** (b 14 Feb, 1948), Sp: Plant biotechnology, crop improvement for abiotic stress and transgenics; Former Director, DSR, Flat No. 105, Shanti Block in Medha Rejoice, Attapur, Hyderabad 500048, Telangana; 4105, Muirfield court, Pueblo, Colorado 81001, USA; [Tel: Cell: 9573330566, 1-512-800-4558 (USA); Email: nseetharama@gmail.com]



1997: **SEKHON, Kashmira Singh** (b 1 Oct, 1943), Sp: Cereal chemistry, food science and technology; Registrar, Eternal University, Baru Sahib, District: Sirmour 173101, H.P.; House No. B-XXX/1630, New Prem Nagar, Ludhiana 141001, Punjab; [Tel: Off. (01799) 276014, Res. (0161) 2402325, Cell: 9417410111; Fax: (01799) 276006; Email: ksse227@yahoo.com]



2018: **SELVIN, Joseph** (b 3 Feb, 1972), Sp: Microbiome Biology, Metagenomics, shrimp disease management and marine bioactive compounds; Professor and Head, Department of Microbiology, Pondicherry University (Central University), Puducherry 605014; No 13, Nethaji Street, Chinna Kalapet, Puducherry 605014; [Tel: Off. (0413) 2655358 telfax; Cell: 9944263367; Email: josephselvinss@gmail.com; jselvin.mib@pondiuni.edu.in]



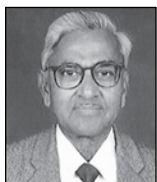
2020: **SENGUPTA, Pinaki Prasad** (b 2 Feb, 1964), Sp: Animal Health with socialization in animal parasitic diseases; Principal Scientist, ICAR-National Inst. of Veterinary Epidemiology & Disease Informatics, Yelahanka, Bengaluru 560064, Karnataka; 170-NHIG-D1, KHB, 5th Phase, Yelahanda New Town, Bengaluru 560064, Karnataka; [Tel: Off. (080) 23093100; Cell: 9480454256; Fax: (080) 23093222; Email: pinakiprasad\_s@rediffmail.com; pinaki.sengupta@icar.gov.in]



1999: **SERAGELDIN, Ismail** (b 9 May, 1944), Sp: Poverty reduction, food security, agriculture, economics and sustainable development; water issues, culture and heritage, education, gender issues; Director, Library of Alexandria, Chatby, Alexandria 21256, Egypt; [Tel: Off. (203) 4879993; Fax: (203) 4820450; Email: ismail.serageldin@bibalex.org; secretariat@bibalex.org]



1991: **SETHUNATHAN, Nambrattil** (b 2 Jun, 1937), Sp: Pesticide microbiology, microbiology of rice soils; Former Head (Soil Science & Microbiology), CRRI, Flat No. 103, Ushodaya Apartments, Sri Venkaetswara Officers Colony, Ramakrishnapuram, Secunderabad 500056, Telangana; [Tel: Res. (040) 27790758; Email: sethunathan@hotmail.com]



2000: **SEWA RAM** (b 17 Aug, 1940), Sp: Irrigation and drainage water management, surface and subsurface hydrology, watershed management, soil conservation; P.O Islamnagar, Distt. Saharanpur 247451, U.P.; [Tel: Cell: 9759562298; Email: sewaram300@gmail.com]



2020: **SHANKAR, Kalkuli M.** (b 1 Oct, 1954), Sp: Fish and Shellfish Health Management and Biotechnology; ICAR Emeritus Scientist, Veterinary College, Shimoga 577204, Karnataka; Greeshma, Neelameghum Layout, Gopal Gowda Extension, Shimoga 577205, Karnataka; [Tel: Cell: 9480571370; Email: kalkulishankar@gmail.com]



2004: **SHARDA, Vishwa Nath** (b 16 Oct, 1954), Sp: Soil & water conservation engineering, hydrology & watershed management, water harvesting, human resource development; Former Member, Agricultural Scientists Recruitment Board, Krishi Anusandhan Bhawan-I, Pusa, New Delhi 110012; Former Member, ASRB, Flat No. 202, Tower No. 3 A, Suncity Parikrama Housing Complex, Sector 20, Panchkula 134116, Haryana; [Tel: Cell: 9810505328; Email: vnsharda@gmail.com; vnsharda2@gmail.com]; *Recognition Award 2005-2006*



2004: **SHARMA, A.R.** (b 13 Apr, 1960), Sp: Nutrient management, conservation agriculture, weed management; Director Research, Rani Lakshmi Bai Central Agricultural University, Jhansi-Gwalior Road, Jhansi 284003, U.P.; Ex-Director, ICAR-DWR, Flat No. B-905, Dhauladhar Apartments, Sector 5, Plot No. 15, Dwarka, New Delhi 110075; [Tel: Cell: 9425807290; Email: sharma.ar@rediffmail.com]



2015: **SHARMA, Arun Kumar** (b 2 Oct, 1952), Sp: Food Microbiology, Food Chemistry, Food Technology and Biotechnology, Radiation Processing; Ex. Head, Food Technology Division, BARC, A-329, Palam Vihar, Gurugram 122017, Haryana; [Tel: Res. (0124) 4883631; Cell: 9599826800; Email: mail.ksarun@gmail.com]



2003: **SHARMA, B.D.** (b 19 Mar, 1952), Sp: Pedology - Soil survey, mapping, classification and land use planning, micronutrients in soils and plants; Former ICAR Emeritus Scientist, H.No. 31 Sunil Park, Barewal Road, PO Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2550380, Cell: 9417451080; Fax: (0161) 2400945; Email: bds\_pau@hotmail.com; bdsharma31@gmail.com]



1996: **SHARMA, Balram** (b 7 Sep, 1940), Sp: Plant genetics & breeding; Fellow, NAAS, I-1703, Chittaranjan Park, Delhi 110019; [Tel: Res. (011) 25853495; 25824827, Cell: 9868604901, 9818970077; Email: drbrsh@yahoo.co.in]



2016: **SHARMA, Dinesh Kumar** (b 15 Jan, 1955), Sp: Problem soil management, Agronomy, cropping/farming systems research; Emeritus Scientist, ICAR-Central Soil Salinity Research Institute, Regional Res. Station, Near Manywar Kasiram Smarak, P.O. Dilkusha, Lucknow 226002, U.P.; Former Director, ICAR-CSSRI, M-7, (near Prabhat Chauraha), Sector I, Jankipuram, Lucknow 226021, U.P.; [Tel: Cell: 9996245195, 9992960454; Fax: (0522) 2464664; Email: ds5550@gmail.com; dk.sharma@icar.gov.in]



2017: **SHARMA, G. Taru** (b 4 Aug, 1965), Sp: Molecular Reproductive Physiology, Oocyte & Embryo genomics and Stem cell biology; Principal Scientist & Head cum Director, Centre of Advanced Faculty Training in Veterinary Physiology, Division of Physiology and Climatology, ICAR-IVRI, Izatnagar 243122, U.P.; No. 10, Baker Street, IVRI Road, Izatnagar 243122, U.P.; [Tel: Off. (0581) 2301327; Cell: 9412603840; Email: gts553@gmail.com]; *Member Executive Council 1 Jan, 2021*



2013: **SHARMA, Hari Chand** (b 15 Jun, 1954), Sp: Insect biology and population dynamics, host-plant resistance, transgenic crops in IPM, biosafety of GMOs to non-target organisms, marker assisted selection, climate change effects on plant protection and IPM for sustainable crop production; Former VC, YSP-UHF, MVC 236, Omaxe Mulberry Villas, Mullanpur, New Chandigarh 140901, Punjab; [Tel: Cell: 7807803661; Email: HCsh19@gmail.com]



1998: **SHARMA, Kapil Dev** (b 19 Nov, 1950), Sp: Arid zone hydrology, numerical modelling of hydrological processes, satellite hydrology, soil erosion prediction and control, soil and water conservation engineering, sediment transport and deposition, rainwater harvesting and runoff farming, water resources development, watershed management, drought management, rehabilitation of degraded lands, etc.; Honorary Visiting Professor, IIT-R, 11/895 Nandan Van, Chopasni Housing Board, Jodhpur 342008, Rajasthan; [Tel: Res. (0291) 2711895; Cell: 9799984400; Email: drkdsharma@gmail.com]; *Recognition Award 2003-2004*



2014: **SHARMA, Kusumakar** (b 30 Jun, 1952), Sp: Animal Nutrition, Feed Resource Development, Tropical Livestock Production & Management, Higher Agricultural Education Policy and Management; Former ADG, ICAR, Flat No. 05073, ATS Greens Paradiso, Tower 05, 7th Floor, Sector Chi-4, Greater Noida 201310, U.P.; [Tel: Res. (0120) 4900326, Cell: 9650125552; Email: ksharma52@gmail.com]; *Editor 1 Jan, 2018 to 31 Dec, 2020*



2003: **SHARMA, Mahesh Chandra** (b 7 Jan, 1952), Sp: Veterinary medicine, herbal medicine, deficiency/metabolic disease, filariasis and veterinary extension; Former Director & VC, A-803, Amrapali Eden Park, Sector 50, Noida 201301, U.P.; [Tel: Cell: 9837118752; Email: dirivri@ivri.up.nic.in]; *Recognition Award 2003-2004*





2001: **SHARMA, Manju** (b 13 Feb, 1940), Sp: Plant anatomy & plant chemistry; Former Secretary, DBT, B-9, Flat No. 6476, Vasant Kunj, New Delhi 110070; [Tel: Res. (011) 26134608, Cell: 9810702411; Fax: (011) 26134608 on request; Email: manjuvps@gmail.com]



2004: **SHARMA, Pradeep Kumar** (b 11 Jan, 1955), Sp: Soil physics, water management, conservation tillage; Former VC, SKUAS&T-J, Aima, PO Palampur, Dist Kangra 176061, H.P.; [Tel: Cell: 9797388333; Email: psharma3007@gmail.com]



2014: **SHARMA, Prakash Chand** (b 9 Dec, 1956), Sp: Plant Molecular Biology, Genetics, Crop Biotechnology; Professor and Dean, University School of Biotechnology, Guru Gobind Singh Indraprastha University, Sector - 16C, Dwarka, New Delhi 110075; B-103, Professors' Residence, GGS Indraprastha University Campus, Dwarka Sector-16C, New Delhi 110075; [Tel: Off. (011) 25302301/02/06; Cell: 9899088818; Fax: (011) 28035243; Email: prof.pcsharma@gmail.com]



2018: **SHARMA, Rajan** (b 1 Aug, 1970), Sp: Dairy Science: Dairy Chemistry, Milk Quality, Detection kit, Aptamer, Sensor, Analytical Methods; Principal Scientist, Dairy Chemistry Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; #D-11, NDRI Campus, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; [Tel: Off. (0184) 2259532; Res. (0184) 2980466; Cell: 9416120181; Fax: (0184) 2250042; Email: rajansharma21@gmail.com]



2017: **SHARMA, Ram Roshan** (b 14 Mar, 1962), Sp: Pre- and postharvest management of horticultural produce; Principal Scientist (Hort.), Division of Food Science & Post-harvest Technology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 5-A, Scientist Apartments, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25842155; Cell: 9968284510; Fax: (011) 25842155; Email: rrs\_fht@rediffmail.com]



1996: **SHARMA, Rameshwer Prasad** (b 20 Feb, 1940), Sp: Plant biotechnology, genetics, cytogenetics; INSA Honorary Scientist, NRC on Plant Biotechnology, Indian Agricultural Research Institute, New Delhi 110012; INSA Honorary Scientist, C-II-204, Eldeco Ananda Apartments, Block-D, Sector 48, Noida 201301, U.P.; [Tel: Off. (011) 25841787, 25842789; Cell: 9810678220; Email: rpsnrcpb@yahoo.co.in]; Secretary 1 Jan, 2002 to 31 Dec, 2004



1995: **SHARMA, Ravindra Nath** (b 9 Apr, 1940), Sp: Entomology, plant protection and pest/vector management, biology, evolution, philosophy, bioethics, literature; Former Deputy Director, NCL, A15-16, Moraya Residency, Sus Road, Pashan, Pune 411021, Maharashtra; [Tel: Res. (020) 25870308, Cell: 9527733501; Email: rnsharma40@yahoo.com]



2007: **SHARMA, Shriniwas** (b 1 Jul, 1947), Sp: Integrated nutrient management, crop diversification, organic farming of rice-wheat cropping system; C-161, Vikas Puri, New Delhi 110018; [Tel: Res. (011) 25532563, Cell: 9313584979; Email: snsharma\_agro@yahoo.com]



2004: **SHARMA, Shyam Kumar** (b 2 Mar, 1951), Sp: Plant biotechnology; crop genetics & breeding; Former VC, CSK HPAU, Shanti Kunj, Ghuggar Tanda, Palampur 176061, H.P.; [Tel: Res. (01894) 232006, Cell: 9418009521; Email: skspbg@yahoo.co.in]



2007: **SHARMA, Tilak Raj** (b 20 May, 1965), Sp: Plant Disease Resistance, Genomics and Bioinformatics; DDG (Crop Science), Indian Council of Agricultural Sciences, Room No. 14, Krishi Bhawan, New Delhi 110001; [Tel: Cell: 9818386057; Email: trsharma1965@gmail.com; ddgcs.icar@nic.in]; NAAS Associate, 2005; Young Scientist Award 1997-1998; Recognition Award 2007-2008



2012: **SHARMA, Uttam Chand** (b 8 Sep, 1941), Sp: Soil fertility and chemistry, integrated watershed management, soil hydrology, catchment management; Former National Coordinator NATP, 222 - Adarsh Enclave, Trikuta Nagar, Sector - I Extension, Jammu 180012, J&K; [Tel: Res. (0191) -2472044; Cell: 9419187405; Email: ucsharma2@rediffmail.com]



2017: **SHASANY, Ajit Kumar** (b 1 Mar, 1967), Sp: Functional Genomics and Proteomics of Plant Secondary Metabolism; Chief Scientist, Biotechnology Division, CSIR-Central Institute of Medicinal and Aromatic Plants, P.O. CIMAP, Lucknow 226015, U.P.; E-5, CIMAP Colony, Sugandh Vihar, Sector-7, Vikasnagar, Lucknow 226022, U.P.; [Tel: Off: (0522) 2718548; Cell: 9415027245; Email: ak.shasany@cimap.res.in; akshasany@yahoo.com]



2002: **SHEORAN, Inder Singh** (b 3 Mar, 1948), Sp: Proteomics, Plant physiology and molecular biology; Scientist, Department of Physical and Chemical Sciences, University of Toronto Mississauga, 3359, Mississauga Road N., Mississauga, ON, L5L 1C6, Canada; 475, Sector 15 A, Hisar 125001, Haryana; [Tel: Off. 1-905-828-5282; Res. 1-905-488-5676; Fax: 306 966 4461; Email: sheoran2k@gmail.com]



1999: **SHETTY, Hunthrike Shekar** (b 5 Nov, 1944), Sp: Molecular plant pathology, plant biotechnology; Life Long Honorary Distinguished Professor, Downy Mildew Research Laboratory, Department of Biotechnology, University of Mysore, Manasagangotri, Mysore 570006, Karnataka; House No. 72, 19th Cross, Vijayanagar, 3rd Stage, C Block, Mysore 570030, Karnataka; [Tel: Off. (0821) 2414666; Res. (0821) 2515666; Cell: 9449837566, 7019321432; Email: hss@appbot.uni-mysore.ac.in; hss\_uom@hotmail.com; hshekarshetty@rediffmail.com]



2010: **SHIKHAMANY, Surupa Deva** (b 15 Jun, 1947), Sp: Production technologies in grapes and tropical fruits; Former Vice-Chancellor, Dr. YSR Horticultural University, 3106, Srila Towers, Hyder Nagar, Kukatpally, Hyderabad 500085, Telangana; [Tel: Cell: 9849129076; Email: sdshikhamany@gmail.com]



1995: **SHIVANNA, Kandanahalli R.** (b 30 Jun, 1940), Sp: Reproductive ecology and conservation biology; Odekar Farms, Nandihalli, Via Thovinakere, Tumkur District 572138, Karnataka; 202 Block B-3, Kendriya Vihar, Yelahanka, Bangalore 560064, Karnataka; [Tel: Cell: 9449543848; Email: shivanna@atree.org; shivannakr40@gmail.com]



2017: **SHIVAY, Yashbir Singh** (b 1 Dec, 1966), Sp: Soil fertility & fertilizer use; cropping systems; organic farming; zinc and iron biofortification of cereals and pulses; Principal Scientist and Ex-Professor, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi 110012; CGM 34, DLF Capital Greens, Phase - II, Shivaji Marg, Motinagar, New Delhi 110015; [Tel: Off. (011) 25841488; Cell: 9868337578, 9650230379; Email: ysshivay@hotmail.com; ysshivay@gmail.com; ysshivay@iari.res.in]; *NAAS Associate, 2007*



2017: **SHUKLA, Arvind Kumar** (b 3 Jan, 1966), Sp: Soil fertility and plant nutrition, site-specific nutrient management, micronutrients in soil-plant-animal-human continuum; Project Coordinator, AICRP on Micronutrients and Pollutant Elements, ICAR-Indian Institute of Soil Science, Nabi Bagh, Berasia Road, Bhopal 462038, M.P.; G-2, Kakda Abhinav Homes, Ayodhya Bypass Road, Opp. Minal Residency, Bhopal 462041, M.P.; [Tel: Off. (0755) 2734487; Res. (0755) 2689230; Cell: 9425015224; Email: arvindshukla2k3@yahoo.co.in]



2004: **SHUKLA, Lal Narain** (b 1 Nov, 1945), Sp: Sugarcane mechanization, conservation tillage machinery, farm machinery & power engineering; Former Head (Farm Power & Machinery), PAU, 658, Sector B, Aggar Nagar, Ludhiana 141004, Punjab; [Tel: Res. (0161) 2453978; Cell: 9417670881; Email: Inspau@rediffmail.com]



2020: **SHUKLA, Pratyooash** (b 2 Apr, 1977), Sp: Enzyme technology and microbial biotechnology; Protein bioinformatics; Professor & Head, Department of Microbiology, Maharshi Dayanand University, Rohtak 124001, Haryana; House No. 51/12, Arjun Nagar, Near Jila Panchayat Bhawan, Sidhi 486661, M.P.; [Tel: Off. (01262) 393398; Cell: 8813866019, 9431171157; Fax: (01262) 274133; Email: pratyooash.shukla@gmail.com]



1992: **SIDDIQ, E.A.** (b 15 Jul, 1937), Sp: Genetics, plant breeding, biotechnology; Honorary Professor Biotechnology, Institute of Biotechnology, Professor Jayashankar Telangana State Agricultural University, Rajendranagar, Hyderabad 500030, Telangana; Jasmine, Plot No. 81, Happy Homes Colony, Upperpally, Hyderguda PO, Hyderabad 500048, Telangana; [Tel: Res. (040) 24018625; Cell: 9032326727; Email: easiddiq@gmail.com; easiddiq@rediffmail.com]; *Dr. B.P. Pal Memorial Award 2011-2012*



2015: **SIDDIQUE, Kadambot Hamza Mohamed** (b 20 Nov, 1955), Sp: Agriculture, crop physiology, agronomy, genetics and breeding, abiotic stresses, farming system, conservation agriculture; higher education and capacity building in agriculture and related areas; Hackett Professor & Director, The UWA Institute of Agriculture, The University of Western Australia, MO82, LB 5005Perth 6001, Perth, Western Australia, Australia; [Tel: Off. (61) 8 6488 7012; Cell: (61) 411155396; Email: kadambot.siddique@uwa.edu.au]



1994: **SIDHU, Dalip Singh** (b 5 Aug, 1933), Sp: Agricultural marketing & price analysis; Former Member, Board of Management, PAU, 107, Jeewanpreet Nagar, Ferozepur Road, P.O. Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2550568, Cell: 9646030107]



2013: **SIKKA, Alok Kumar** (b 21 Feb, 1956), Sp: Soil & Water Conservation Engineering; Watershed Management; Natural Resource Management; IWMI Representative-India & Principal Researcher, International Water Management Institute, 2nd Floor, CG Block, NASC Complex, Pusa, New Delhi 110012; Flat No. 102, Tower 36, Lotus Boulevard Espacia, Near Pathway School, Sector 100, Noida, Gautam Budh Nagar 201301, U.P.; [Tel: Off. (011) 25840812, -11; Res. (0120) 4331491, Cell: 9810478885; Fax: (011) 25840811; Email: a.sikka@cgiar.org]



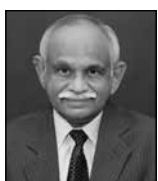
2014: **SILVA, Jose Graziano da** (b 17 Nov, 1949), Sp: Agronomy; rural development, food security and agrarian economics; Director General, Food & Agriculture Organization of the UN, Viale delle Terme di Caracalla, 00153 Rome, Italy; [Tel: Off. (+39) 06 57051; Fax: (+39) 06 570 53152; Email: FAO-HQ@fao.org]



2008: **SINGH, Ajay** (b 6 Oct, 1963), Sp: Microbial biotechnology, environmental and fermentation microbiology, bioremediation, wastewater technology; Technical Director, Lystek International Inc., 16-1425 Bishop Street North, Cambridge, Ontario, N1R 6J9, Canada; 19 Currie Drive, Morrisson, Ontario, N0B 2C0, Canada; [Tel: Off. +1-226-444-0186; Res. 905-876-5155; Email: asingh@lystek.com]



2016: **SINGH, Anand Kumar** (b 1 Jan, 1962), Sp: Tissue culture and mango breeding; Deputy Director General (Hort. Sciences), Indian Council of Agricultural Research, Room No. 421, KAB-II, Pusa, New Delhi 110012; B-16, IARI, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25842068; Res. (011) 25843137; Cell: 9899558691; Fax: (011) 25841976; Email: aksingh36@yahoo.com; ddghort.icar@gov.in]



2006: **SINGH, Anil Kumar** (b 29 Apr, 1952), Sp: Soil-water-nutrient-plant-atmosphere interactions, crop growth simulation, irrigation water management, integrated watershed management; Ex VC, RVSKVV, Flat No. 71, Aashirwad Apartments, I.P. Extension, Patparganj, New Delhi 110092; [Tel: Cell: 9425702142, 9873441488; Email: aksingh.icar@gmail.com]; *Vice President 1 Jan, 2021; Secretary 1 Jan, 2018 to 31 Dec, 2020; Member Executive Council 1 Jan, 2014 to 31 Dec, 2016*



2004: **SINGH, Anurudh Kumar** (b 12 Jul, 1946), Sp: Cytogenetics, plant breeding, plant genetic resources management and use, history of Indian Agriculture; Former Head, Germplasm Conservation, NBPGR, 409A, Hamilton Court, DLF Phase 4, Gurugram 122009, Haryana; [Tel: Res. (0124) 4110355, Cell: 9540127222; Email: anurudhksingh@gmail.com]



2019: **SINGH, Arun Kumar** (b 17 Nov, 1962), Sp: Vegetable Improvement and Production technology, Integrated farming systems in rainfed areas; Principal Scientist & Head, ICAR-Research Complex for Eastern Region, Research Centre Ranchi, Plandu, P.O. Rajaulatu, Ranchi 834001, Jharkhand; Flat No. 204, Greenfield Pinnacle Apartment, Shukla Colony, Hinoo, Ranchi 834002, Jharkhand; [Tel: Cell: 9471734839, 6204535818; Email: headicarranchi@gmail.com; aksingh171162@rediffmail.com]



2021: **SINGH, Ashish Kumar** (b 22 Apr, 1972), Sp: Dairy By-Product Utilization, Non-Thermal Processing, Dairy Nutraceutical and Functional Foods, Non-Bovine Milk Value Addition; Principal Scientist, Dairy Technology Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; D-10, NDRI Campus, Behind Students' Cafeteria, Karnal 132001; [Tel: Off. (0184) 2259291; 2259259 Cell: 9416292406; 9671392406; Fax: (0184) 23384773; Email: ashish.singh@icar.gov.in; aksndri@gmail.com, ashishndri23@gmail.com]



2011: **SINGH, Ashok Kumar** (b 1 Jul, 1962), Sp: Rice Breeding, Hybrid Rice, Genetics and Molecular Breeding; Director, ICAR-Indian Agricultural Research Institute, New Delhi 110012; B-8, IARI, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25843375, 25843375; Cell: 9899045037; Fax: (011) 25846420; Email: aks\_gene@yahoo.com; director@iari.res.in]



2020: **SINGH, Ashok Kumar** (b 1 Dec, 1962), Sp: Extension System, Models, Approaches, ICT, Impact Assessment; Deputy Director General (Agril. Ext.), Indian Council of Agricultural Research, Room No. 302, KAB-I, Pusa Campus, New Delhi 110012; B-3, NASC Complex, Dev Prakash Shastri Marg, New Delhi 110012; [Tel: Off. (011) 25843277; Cell: 9582922324; Fax: (011) 25843277; Email: aksicar@gmail.com]



2001: **SINGH, Bachchan** (b 4 Jul, 1938), Sp: Conservation tillage, zero till, ferti drill & threshing machineries; Former Dean, GBPUAT, HS 1/56, Sector A, Sitapur Road Scheme, Lucknow 226021, U.P.; [Tel: Res. (0522) 4006516; Cell: 9415084352, 8417044040; Email: bsinghgbp@gmail.com]



1994: **SINGH, Bansh Narain** (b 15 Jul, 1942), Sp: Fish nutrition, aquaculture, fisheries & fish physiology; Former DDG, ICAR, House No.: H-29, Block - H, South City, Rae Bareilly Road, Lucknow 226025, U.P.; [Tel: Res. (0522) 2443866, Cell: 9839243182; Email: bansh.singh@gmail.com]



2017: **SINGH, Bijendra** (b 1 Jul, 1960), Sp: Horticulture-Vegetable Science (Heterosis breeding, Resistant breeding, Production Technologies, Seed Production, Value addition); Director General, Uttar Pradesh Council of Agricultural Research, (UPCAR) 8th Floor, Krisan Mandi Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow 226010, U.P.; H.No. 32, Om Nagar Colony Chitaipur, BHU Panchkoshi Road, Chitaipur, P.O. Sunderpur, Varanasi 221005, U.P.; [Tel: Res. (0522) 2721626; Cell: 8004924520; Fax: (0522) 2306802; Email: upcar12@gmail.com; bsinghiivr@gmail.com]; *Dr. L.C. Sikka Endowment Award 2017-2018*



2016: **SINGH, Bir Pal** (b 1 Jul, 1953), Sp: Plant Pathology- Epidemiology, Late Blight Host Resistance and Disease Management, Biotechnology; Ex-Director, CPRI, Flat No. 8140, Arocon Golf Ville, Tower 10, (GH 7), Crossing Republic, Ghaziabad 201016, U.P.; [Tel: Cell: 9882702000; Email: birpals53@gmail.com]



2001: **SINGH, Brahma** (b 15 Dec, 1941), Sp: Horticulture (vegetables, medicinal and aromatic plants, jatropa, mushrooms, flowers, fruits, ornamental plants & landscape, postharvest technology), underutilized wonder plants like Seabuckthorn (brahmphal) and Morinda citrifolia (Noni), plant biodiversity, bio-resources and biotechnology, agroforestry, arboriculture, protected cultivation/greenhouses, cold desert horticulture and wellness; Former OSD (Horticulture), President's Secretariat, Pocket 'E' Flat No. 713, Mayur Vihar, Phase 2, Delhi 110091; [Tel: Res. (011) 22784782, Cell: 9818313660; Email: brahma88@gmail.com]; *Member Executive Council 1 Jan, 2019*



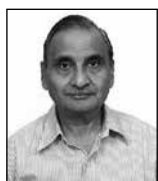
2000: **SINGH, Braja Bhoosan** (b 1 May, 1943), Sp: Stress physiology (drought and submergence), MAS; Chairman, DD Manav Uthan Sansthan, 1/33, Bahar-A, Sahara Estate, Janakipuram, Lucknow 226021, U.P.; [Tel: Cell: 9935166092]



2021: **SINGH, Brajesh** (b 16 Nov, 1970), Sp: Post-Harvest Management of Potato; Principal Scientist & Head, CPB & PHT Division, ICAR-Central Potato Research Institute, Shimla 171001, H.P.; Set no. 4, Type V, Green Park CPRI Colony, Khalini, Shimla 171002, H.P.; [Tel: Off. (0177) 2624830; Cell: 9816031628; Fax: (0177) 2624460; Email: brajesh.Singh@icar.gov.in, birju16@gmail.com]; *NAAS Associate 2010*



2018: **SINGH, Brij Bhuwan** (b 25 Jan, 1955), Sp: Genetics and Plant Breeding; Ex ADG, ICAR, A1-4/63, KDA Residency, O Block Kidwai Nagar, Kanpur 208011, U.P.; [Tel: Cell: 9999734852; Email: singhbrijbhuwan@gmail.com]



1994: **SINGH, Brijendra Pratap** (b 10 Oct, 1938), Sp: Plant biotechnology, virology and horticulture; Former Emeritus Scientist, CSIR-NBRI, 4/300, Vivek Khand, Gomti Nagar, Lucknow 226010, U.P.; [Tel: Res. (0522) 2391596; Email: bpsingh@gmail.com]



2004: **SINGH, Dhan Pal** (b 5 Nov, 1949), Sp: Grain legume breeding, biotic & abiotic stress resistance, mutation breeding; Former Director (Research), GBPUAT, C-41, Green Park, P.O. Rudrapur, Dist. Udham Singh Nagar 263153, Uttarakhand; [Tel: Cell: 9410588018; 7500314700; Email: dr.dhanpalsingh@gmail.com]



1995: **SINGH, Dharam Vir** (b 3 Nov, 1944), Sp: Plant pathology, cereal pathology, epidemiology, integrated pest management, Karnal bunt; C-14D MIG Flats, Vatika Apartments, Maya Puri, New Delhi 110064; [Tel: Res. (011) 25141748; Cell: 9810676478; Email: dvsingh44@gmail.com]; *Dr. K.C. Mehta Award 2005-2006*



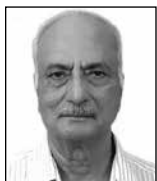
2021: **SINGH, Dheer** (b 14 Jun, 1966), Sp: Molecular endocrinology, Functional genomics & Systems Biology; Milk Exosome and their use as delivery vehicle; Cell and Nano-Biosensor development; Head, Animal Biochemistry Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; NDRI Campus, Karnal 132001; [Tel: Off. (0184) 2259478; Res. (0184) 2256173; Cell: 9416411258; Email: drdheer.singh@gmail.com; dheer.singh@icar.gov.in]



1996: **SINGH, Dhyan Pal** (b 14 Jul, 1943), Sp: Crop water management, stress physiology, soil-crop-water-atmosphere relation studies, integrated farming system, global climate change; Former Vice Chancellor, House No. 581, Sector 15 A, Hisar 125001, Haryana; [Tel: Cell: 9416206449; Email: dpsingh1943@gmail.com]



1996: **SINGH, Gajendra** (b 3 Aug, 1944), Sp: Agricultural engineering, mechanization, sustainable development and climate change; Ex DDG (Engg.), ICAR, C-98, Millennium Apartments, Plot E-10A, Sector - 61, Noida 201301, U.P.; [Tel: Cell: 9971087591; Email: prof.gsingh@gmail.com]



1997: **SINGH, Gajendra Bahadur** (b 1 Jul, 1940), Sp: Agronomy, water and nutrient management, sugarcane agronomy, agro-forestry; Ex DDG (NRM), ICAR, "Karmaha House", 3/35, Virat Khand, Gomti Nagar, Lucknow 226010, U.P.; [Tel: Cell: 9450358800; Email: gajendrabsingh@gmail.com]



1998: **SINGH, Gurbachan** (b 16 Sep, 1954), Sp: Agroforestry, agronomy, wasteland rehabilitation, drought management, climate change, agriculture development and policy; Chairman, Gurbachan Singh Foundation for Res. Education and Development (GSFRED), Beant Villa, Adjacent Adarsh, Public School, Near Power House, Kunjpura Road, Karnal 132001, Haryana; [Tel: Off. (0184) 2265621; Cell: 9991113600, 9971167767; Email: dr.gurbachan@gmail.com; info@gsfred.org]; *Dr. M.S. Randhawa Memorial Award 2013-2014; Recognition Award 2005-2006*



2015: **SINGH, Gyanendra Pratap** (b 17 Mar, 1964), Sp: Wheat improvement, abiotic stress, physiological phenotyping, MARS & MABB; Director, ICAR-Indian Institute of Wheat & Barley Research, P.B. No. 158, Kunjpura Road, Karnal 132001, Haryana; F 1, Gehoon Vihar, Indian Institute of Wheat & Barley Research, Karnal 132001, Haryana; [Tel: Off. (0184) 2267490; Res. (0184) 2209181; Cell: 9868841775, 8708529619; Fax: (0184) 2267390; Email: director.iiwbr@icar.gov.in; gp.singh@icar.gov.in; gyanendrapsingh@hotmail.com]



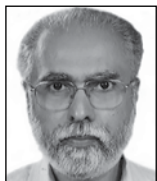
2006: **SINGH, Harikesh Bahadur** (b 18 Jul, 1953), Sp: Biopesticides & biofertilizers, biostimulants, Nanotechnology, organic farming; 13/21 Vikas Nagar, P.O. Vikas Nagar, Lucknow 226022, U.P.; [Tel: Off. (0522) 4015987; Cell: 9415355571; Email: hbs1@rediffmail.com; somvanshi.rf@gmail.com]



1998: **SINGH, Harishchandra Prasad** (b 2 Jul, 1950), Sp: Horticulture (PGR, Biotechnology, Nanotechnology, Improvement, Production System Management, Nutrient and Water management), Education Technology, Forestry (bamboo) Climate change and Human resource Development; The Founder and Chairman, Confederation of Horticulture Associations of India (CHAI), Vijayee Veer Awash, Sector 18A, Dwarka, New Delhi 110078; [Tel: Off. (011) 28085749; Res. 9871450730; Cell: 9582898983; Fax: (011) 28085749; Email: hpsingh50@gmail.com; singh2008@gmail.com]; *Member Executive Council 1 Jan, 2007 to 31 Dec, 2009*



1997: **SINGH, Harpal** (b 15 Jul, 1942), Sp: Veterinary Surgery and Radiology; Former Dean, GBPUAT, 172/18, Indra Bhawan, Deepchand Colony, Dwarkapuri, Muzaffarnagar 251001, U.P.; [Tel: Res. (0131) 2615573, Cell: 9412678436; Email: harpalsinghmzn@gmail.com]; *Dr. P. Bhattacharya Memorial Award 2005-2006*



2014: **SINGH, I.S. Bright** (b 14 Dec, 1954), Sp: Marine/Environmental Biotechnology, Aquatic microbiology, Aquatic animal health, Recirculating aquaculture systems; KSCSTE Emeritus Scientist, National Centre for Aquatic Animal Health, Cochin University of Science and Technology, Lakeside Campus, Fine Arts Avenue, Cochin 682016, Kerala; 29/452A, Bhagath Singh Road, Thykoodam, Vyttila, Cochin 682019, Kerala; [Tel: Off. (0484) 2381120; Res. (0484) 2303632, Cell: 9447631101; Fax: (0484) 2381120; Email: isbsingh@gmail.com; bright@cusat.ac.in]



2000: **SINGH, Khub** (b 19 Aug, 1943), Sp: Animal Physiology, Animal Nutrition, Reproduction, Livestock Production & Management; Chairman, Janhit Rural Development & Res. Foundation, T-23, GF, Eldeco Residency Greens, Sector Pi, Greater Noida 201306, U.P.; [Tel: (0120) 2325085, Cell: 9818552887; Email: ksingh.chairman.jrdrf@gmail.com]



1994: **SINGH, Kiran** (b 7 Jan, 1942), Sp: Agriculture (Allied): Animal Production and Health, Agriculture Policy, Environment, Farming systems, Gender issues. Wild Life, Forests and Ethics. Veterinary Sciences: Animal Physiology, Pharmacology and Biochemistry. Medical Sciences and Human Health: Neurophysiologist: Brain and Behaviour; Former DDG, ICAR, A-34, Sector 49, Noida 201301, U.P.; [Tel: Res. (0120) 4314507, Cell: 9868777661; Email: kiransingh2007@rediffmail.com]





1994: **SINGH, Kirti** (b 26 May, 1934), Sp: Vegetable science and Noni science; Former Chairman, ASRB, 38 G, Maruti Nagar, TD College Gate, Husainabad, Jaunpur 222002, U.P.; [Tel: Res. (05452) 260044, Cell: 9198331333, 9415687597; Email: kirtisinghwnrf2013@gmail.com]; *Member Executive Council 1 Jan, 1998 to 31 Dec, 1998; Secretary 1 Jan, 1999 to 31 Dec, 2001; Dr. M.S. Randhawa Memorial Award 2001-2002*



2008: **SINGH, Krishna Kumar** (b 29 Jan, 1960), Sp: Processing of Food Grains, Oilseeds, Spices and Vegetables; Member, Agricultural Scientists Recruitment Board, Room No. 204, KAB-I, Pusa, New Delhi 110012; [Tel: Off. (011) 25841168; Cell: 9582898993, 7583028993; Email: singh\_ciae@yahoo.com; member.nrm@asrb.org.in]; *Member Executive Council 1 Jan, 2014 to 31 Dec, 2016; Recognition Award 2011-2012*



2019: **SINGH, Krishna Pratap** (b 7 Jan, 1972), Sp: Threshing, Dehulling and utilization of minor millets, Development of small tools and equipment for hills and conservation agriculture; Principal Scientist, AMD, ICAR- Central Institute of Agricultural Engg., Nabibagh, Berasia Road, Bhopal 462038, M.P.; H.No. 14, Comfort Green Phase II, Near New Jail, Airport Road, Bhopal 462038, M.P.; [Tel: Cell: 8349526698; Email: kp.kp24@gmail.com]



2017: **SINGH, Kuldeep** (b 25 Dec, 1960), Sp: Plant Molecular Genetics and Breeding, Genetic Resources Management; Director, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi 110012; A-1, Director's Residence, Harbhajan Enclave, NBPGR Residence, Pusa, New Delhi 110012; [Tel: Off. (011) 25843697; Res. (011) 25841177; Cell: 9463504004; Fax: (011) 25842495; Email: director.nbpg@icar.gov.in; kuldeep.singh4@icar.gov.in]



2019: **SINGH, Kunwar Harendra** (b 12 Feb, 1968), Sp: Heterosis Breeding, Quality Improvement, Disease Resistance, Germplasm Enhancement, DUS Testing; Principal Scientist (Genetics & Plant Breeding), ICAR-Directorate of Rapeseed Mustard Research, Sewar, Bharatpur 321303, Rajasthan; Type V/1, DRMR Campus, ICAR-Directorate of Rapeseed Mustard Research, Sewar, Bharatpur 321303, Rajasthan; [Tel: Off. (05644) 260495; Res. (05644) 261986; Cell: 9413835118; Fax: (05644) 260565; Email: kharendrasingh@gmail.com]



2015: **SINGH, Major** (b 20 Jun, 1960), Sp: Genetics and Plant Breeding, Biotechnology, Vegetable Science; Director, ICAR-Directorate of Onion and Garlic Research, Rajgurunagar, Pune 410505, Maharashtra; B-42, Brij Enclave Colony, Sunderpur, Varanasi 221005, U.P.; [Tel: Cell: 9451579735; Email: singhvns@gmail.com]



2007: **SINGH, Nagendra Kumar** (b 15 Oct, 1958), Sp: Plant Genomics, Genetic Engineering and Molecular Breeding in rice, wheat, pigeonpea and chickpea Rhizobium; National Professor B.P. Pal Chair, NRC on Plant Biotechnology, Indian Agricultural Research Institute, New Delhi 110012; 148 DDA-SFS Flats, Dwarka Sector 5, Pocket 1, New Delhi 110075; [Tel: Off. (011) 25841186; Res. (011) 28081376, Cell: 9911268915; Fax: (011) 25843984; Email: nksingh4@gmail.com]; *Secretary 1 Jan, 2012 to 31 Dec, 2014; Dr. K. Ramiah Memorial Award 2011-2012*



2017: **SINGH, Narendra Pratap** (b 11 Jan, 1960), Sp: Classical genetics & cytogenetics, somatic cell genetics, transgenic research and molecular breeding; Director, ICAR-Indian Institute of Pulses Research, Kalyanpur, Kanpur 208024, U.P.; E-65, Awas Vikas No. 3, Krishna Vihar, Kalyanpur, Kanpur 208024, U.P.; [Tel: Off. (0512) 2580986, 2580992; Res. (0512) 2572546, Cell: 8005383963; Email: npsingh.iipr@gmail.com; director.icar@gmail.com]



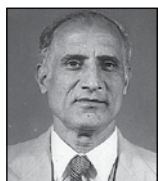
2005: **SINGH, Narpinder** (b 19 Sep, 1962), Sp: Food Science & Technology; Professor & Head, Department of Food Science & Technology, Guru Nanak Dev University, Amritsar 143005, Punjab; 101, Kabir Park, Amritsar, Punjab; [Tel: Off. (0183) 22588044, 2258802-09 Ext 3376; Res. (0183) 2255433; Fax: (0183) 2258820; Email: narpinders@yahoo.com]; *Recognition Award 2007-2008*



2021: **SINGH, Naveen Prakash** (b 15 Jul, 1970), Sp: Agricultural Economics and Policy Research; Member (Official), Commission for Agricultural Costs & Prices, Ministry of Agriculture & Farmers Welfare, Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi 110001; WZ-250 D, 3rd Floor, Inderpuri, New Delhi 110012; [Tel: Off. (011) 23385244; Res. 9958650477 Cell: 7756875290; Fax: (011) 23383848; Email: member.cacp-agri@gov.in; naveenpsingh@gmail.com]; *NAAS Associate 2008*



2019: **SINGH, Neera** (b 12 Aug, 1965), Sp: Pesticide environmental chemistry, Pesticide remediation; Professor, Division of Agricultural Chemicals, Indian Agricultural Research Institute, New Delhi 110012; B-5, Type-V Flats, IARI Campus, New Delhi 110012; [Tel: Off. (011) 25843272; Cell: 9968245202; Fax: (011) 25846420; Email: drneerasingh@yahoo.com; neerasingh@iari.res.in]; *NAAS Associate, 2006*



1991: **SINGH, Nirmal Tej** (b 31 Dec, 1933), Sp: Soil science; 2876 Roseau Way, Sacramento, CA 95833 USA; Former Director, CSSRI, 384F Shaheed Bhagat Singh Nagar, Ludhiana 141004, Punjab; [Tel: Res. (0161) 2470188; Email: nirmaltsingh@yahoo.com]



1996: **SINGH, Panjab** (b 10 Dec, 1942), Sp: Agronomy, crop production, water management & agroforestry; President, Foundation for Advancement of Agriculture and Rural Development (FAARD), Saraswati Kunj, Narainapur (Dafi), P.O. Naipura, Varanasi 221005, U.P.; [Tel: Res. (0542) 2575678; Cell: 9651666613; Email: panjabsingh03@yahoo.com; faardvaranasi@gmail.com]; *President 1 Jan, 2017 to 31 Dec 2019; Vice-President 1 Jan, 2003 to 31 Dec, 2005; Member Executive Council 1 Jan, 2001 to 31 Dec, 2002*



1991: **SINGH, Pawan Kumar** (b 31 Jul, 1945), Sp: Microbiology, virology, algology, pteridology; algal & azolla biotechnology, biofertilizers, integrated crop nutrient management, genetics, radiation biology, Ecophysiology; INSA Honorary Scientist, Department of Botany, Banaras Hindu University, Varanasi 221005, U.P.; House No. B3/22, Shivala, Post. Shivala, Varanasi 221001, U.P.; [Tel: Res. (0542) 2277705, Cell: 9415714584; Email: pksalgaee@yahoo.co.in]



2018: **SINGH, Putan** (b 31 Oct, 1960), Sp: Feed supplements & feeding strategies for ruminants, Improvement of poor quality crop residues & detoxification of unconventional oil cakes, Feeding and nutrition of ruminants and non-ruminants; Principal Scientist and Station-in-Charge, ICAR-Indian Veterinary Research Institute, Mukteswar, Nainital 263138, Uttarakhand; [Tel: Off. (05942) 286346; Res. (05942) 286060; Cell: 9411220003, 8218586653; Fax: (05942) 286347; Email: sic\_ivri@hotmail.com; putan60@gmail.com]



1992: **SINGH, R.V.** (b 1 Jan, 1932), Sp: Silviculture; forest management; Former DG, ICFRE, 176, Vasant Vihar-I, P.O. New Forest, Dehradun 248006, Uttarakhand; [Tel: Res. (0135) 2763261; Email: ranvir@nde.vsnl.net.in]



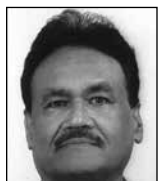
2013: **SINGH, Raj Kumar** (b 2 Jul, 1958), Sp: Biotechnology, Veterinary Microbiology, Molecular Epidemiologist, Diagnostics and Vaccinology; Former Director-cum-Vice Chancellor, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly 243122, U.P.; Former Director-cum-Vice Chancellor, ICAR-IVRI, 81, North City, Pilibhit Road, Post-Izatnagar, Bareilly 243122, U.P.; [Tel: Cell: 7534075345; Email: rks\_virology@rediffmail.com; rajks.virology@gmail.com]; *Member Executive Council 1 Jan, 2017 to 31 Dec 2019*



2020: **SINGH, Rajeev Pratap** (b 10 Jul, 1977), Sp: Waste management, Sustainable agriculture, Ecotoxicology; Assistant Professor, Institute of Environment and Sustainable Development, Banaras Hindu University, Varanasi 221002, U.P.; [Tel: Cell: 9935912997; Email: rajeevprataps@gmail.com]



2002: **SINGH, Rajendra** (b 8 Aug, 1963), Sp: Hydrological Modelling, Irrigation System Management; Professor, Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur 721302, W.B.; A-161, IIT Campus, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283148; Res. (03222) 283149; Cell: 9434016968; Fax: (03222) 282244; Email: rsingh\_iit@rediffmail.com; rsingh@agre.iitkgp.ernet.in]; *Recognition Award 2013-2014*



2020: **SINGH, Rakesh Kumar** (b 1 Jul, 1952), Sp: Food process engineering, aseptic processing, food safety engineering, high pressure processing and other emerging technologies for food processing; Professor, Department of Food Science & Technology, University of Georgia, 100 Cedar Street, Athens, GA 30602, USA; 1041 Waterford Court, Watkinsville, GA 30677 USA; [Tel: Off. (706) 5241084; Res. (706) 2080191; Cell: (706) 3381188; Fax: (706) 5421050; Email: rsingh@uga.edu]



2018: **SINGH, Rakesh Kumar** (b 1 Jul, 1961), Sp: Rice Breeding for Salt (Problem soils) Tolerance; Crop Improvement for Marginal Environments; Program Leader and Principal Scientist, Crop Diversification and Genetics, International Center for Biosaline Agriculture, (ICBA), PO Box 14660, Al Ruwayyah 2, Academic City, Dubai, United Arab Emirates; [Tel: Off. +971 4 3361100 ext. 219; Cell: +971 56 1968966; Fax: +971 4 3361155; Email: r.singh@biosaline.org.ae; rksinghirri@gmail.com]



1994: **SINGH, Ram Badan** (b 20 Jul, 1940), Sp: Plant genetics, crop improvement, plant biotechnology, policies for agriculture, farmers and agricultural research and education for development; Former President, NAAS, D1/1291, Vasant Kunj, New Delhi 110070; [Tel: Res. (011) 26136450; Cell: 9810230037; Email: rbsingh40@gmail.com]; *Member Executive Council* 1 Jan, 2014 to 31 Dec, 2016; *President* 1 Jan, 2011 to 31 Dec, 2013; *Foreign Secretary* 1 Jan, 2010 to 31 Dec, 2010; *Foreign Secretary* 1 Jan, 1998 to 31 Dec, 2000; *Member Executive Council* 1 Jan, 1996 to 31 Dec, 1997; *Dr. B.P. Pal Memorial Award* 2017-2018; *Dr. A.B. Joshi Memorial Lecture Award* 2015



2012: **SINGH, Ram Jag** (b 8 Nov, 1945), Sp: Germplasm maintenance, Plant cytogenetics, Plant genome mapping, Genomics, Plant breeding, Biosystematics, Wide hybridization, Cell and tissue culture, Plant genetic transformation; Agronomist - Soybean Cytogenetics, Department of Crop Sciences, National Soybean Research Center, University of Illinois, 1101 West Peabody Drive, Urbana, IL 61801, USA; 603 East Shurts Street, Urbana, IL 61801, USA; [Tel: Off. 217-333-8144; Res. 217-337-1483; Fax: 217-244-1707; Email: ramsingh@illinois.edu]



2001: **SINGH, Ram Kathin** (b 1 Feb, 1942), Sp: Biometrical genetics, crop breeding, participatory systems research; Executive Director, Nand Educational Foundation for Rural Development, (NEFORD), 1 Devlok Colony, Church Road, Aliganj, Lucknow, U.P.; Delhi Address: A-25, Vikalp Apartment, Plot No. 92, I.P. Extension, Patparganj, Delhi - 110 092 [Tel: (011) 22243425]; [Tel: Off. (0522) 4015742; Cell: 9721719736; Fax: (0547) 4015742; Email: rksingh.neford@gmail.com]; *Vice-President (Casual Vacancy)* 1 Jan, 2008 to 31 Dec, 2008; *Secretary*, 1 Jan 2005 to 31 Dec, 2007



2021: **SINGH, Ram Kewal** (b 31 Mar, 1962), Sp: Genetic, genomics and molecular breeding; Assistant Director General (Commercial Crops), Indian Council of Agricultural Research, Room 213 A, Krishi Bhawan, Dr. Rajendra Prasad Marg, New Delhi 110001; C-403, NASC Complex, DPS Marg, New Delhi 110012; [Tel: Off. (011) 23384323; Cell: 9450930028; Fax: (011) 23384323; Email: adgcc.icar@nic.in; ikrps@yahoo.com; ikrps62@gmail.com]



2002: **SINGH, Ram Pratap** (b 3 Jul, 1939), Sp: Agricultural economics/extension, farm management, agric. marketing & finance, rural & human resource development and management; Former VC, MPUAT, B 5/5, Vinay Khand, Gomti Nagar, Lucknow 226010, U.P.; [Tel: Res. (0522) 2393657, 2394906, 2367969; Cell: 9450932200; Fax: (0522) 2394906; Email: rpsingh1939@yahoo.co.in]; *Member Executive Council* 1 Jan, 2010 to 31 Dec, 2012



2018: **SINGH, Ram Ran Bijoy** (b 6 Mar, 1960), Sp: Animal product technology, food technology; Joint Director (Academic) & Director, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; F-1, National Dairy Research Institute, Karnal 132001, Haryana; [Tel: Off. (0184) 2259003, 2259007; Cell: 9416468437; Email: singh.rrb@gmail.com; rrb\_ndri@rediffmail.com; jda@ndri.res.in; jda@ndri.res.in]



1993: **SINGH, Randhir** (b 21 Jan, 1944), Sp: Plant biochemistry & biotechnology; Director, Seth Jai Parkash Mukund Lal Institute of Engineering & Technology (JMIT), Radaur (Yamuna Nagar) 135133, Haryana; 1717 Sector 3, Urban Estate, Kurukshetra, Haryana; [Tel: Off. (01732) 284778, 284799; Cell: 9416007488; Fax: (01732) 283800; Email: randhirbiotech@yahoo.com; principal@jmit.ac.in]; *Recognition Award* 1997-1998



1995: **SINGH, Rangil** (b 25 Dec, 1935), Sp: Plant biochemistry, metabolism of carbohydrates and their bio-regulation during growth and development of cereals, legumes, forages & other commercial crops; Former Director of Research, SKUAST-J, House No. 75, Sector No. 2, Trikuta Nagar, Jammu 180012, J&K; [Tel: Res. (0191) 2477013; Email: rangilsingh@rediffmail.com]



2019: **SINGH, Ranjay Kumar** (b 20 Apr, 1974), Sp: Agricultural Extension, Human-environment Interaction with reference to community based conservation of natural resources; Principal Scientist (Agricultural Extension), Division of Technology Evaluation and Transfer, ICAR-Central Soil Salinity Research Institute, Karnal 132001, Haryana; E-7, ICAR-Central Soil Salinity Research Institute, Kachwa Road, Zarifa Farm, Karnal 132001, Haryana; [Tel: Off. (0184) 2209432; Res. (0184) 2290111; Cell: 9996643037; Fax: (0184) 2290480; Email: ranjaysingh\_jbp@rediffmail.com; ranjaysingh74@gmail.com]; NAAS Associate, 2013



1994: **SINGH, Ranjodh** (b 4 Jun, 1938), Sp: Soil science, soil fertility, natural resource management; 65A, Swastik Vihar, Mansa Devi Complex, Sector 5, Panchkula 134109, Haryana (Jan-May); 36, Friends Colony, Holta, Near HPKV Campus, Palampur 176062, H.P. (Jun-Dec); [Tel: Cell: 9876126685; Email: ranjodhindra@yahoo.co.in]



2004: **SINGH, Ravi Prakash** (b 24 Jun, 1957), Sp: Wheat improvement - genetics, breeding, biotechnology, pathology; Distinguished Scientist, International Maize and Wheat Improvement Center (CIMMYT), Apdo. Postal 6-641, 06600, Mexico, DF; Privada Rincon de las Fuentes No. 18, Balcones de San Mateo, Naucalpan 53200, Edo. de Mexico; [Tel: Off. (+52-55) 58042004; Res. 53631055; Fax: (+52-55) 58047558; Email: r.singh@cgiar.org]



2018: **SINGH, Sanjay Kumar** (b 13 Oct, 1966), Sp: Fruit Science, Mango and grape breeding, Biotechnological interventions in breeding of Fruit crops, Genomics and MAS; Head, Division of Fruits & Horticultural Technology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-27, IARI, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25843214; Cell: 8920968154; 9868450329; Email: sanjaydr2@gmail.com; sanjaydr2@rediffmail.com]; NAAS Associate, 2007



2009: **SINGH, Shyam** (b 2 Jul, 1946), Sp: Fruit Sciences; Former Director, NRCC, B-8, Chintaman Nagar, Somalwada, Nagpur 440025, Maharashtra; [Tel: Res. (0712) 6582911, Cell: 9423680541; Email: shyamsingh\_5@yahoo.co.in]



1992: **SINGH, Sita Ram** (b 1 Jul, 1942), Sp: Agricultural engineering, irrigation & drainage engineering, soil & water conservation engineering, ground water modelling; Former Vice-Chancellor, House No. 561, Anubhawa, Sector-2, ELDECO Colony, Raebareli Road, Lucknow 226025, U.P.; [Tel: Cell: 9935631990; Email: strmsingh@yahoo.com]; Member Executive Council 1 Jan, 2002 to 31 Dec, 2004



2010: **SINGH, Surendra** (b 1 Jan, 1951), Sp: Farm Power & Machinery, Energy in Agriculture; Technical Advisor, AMMA-India, Plot No. B-37, Survey No. 15, B U Bhandari Greens Coop. Housing Society, Dhanori, Pune 411015, Maharashtra; [Tel: Cell: 7387081819, 9463354523; Email: ssingh5119@gmail.com; ssingh6116@gmail.com]



2004: **SINGH, Udai Pratap** (b 10 Oct, 1942), Sp: Plant pathology, fungal cytology, biological control; Former Head (Mycology & Plant Pathology), BHU, 22, Ganesh Dham Colony, Nevada, Sunderpur, Varanasi, U.P.; [Tel: Res. (0542) 2318388, Cell: 9415354325; Email: upneem@gmail.com]



2007: **SINGH, Uma Shankar** (b 1 Jan, 1954), Sp: Seed system, Targeted dissemination of technologies and their impact assessment, Management of abiotic and biotic stresses using microbes, Biological Control, IPM, diseases & insect pests management in organic farming, aromatic rice; South Asia Regional Coordinator & Country Manager India, Bangladesh, Nepal & Bhutan, Intl. Potato Center (CIP), CIP-South Asia Center, 2nd Floor, NASC Complex, DPS Marg, New Delhi 110012; C-118, First Floor, Inderpuri, New Delhi 110012; [Tel: Cell: 9958629944; Email: u.s.singh@cgiar.org; umesh146@yahoo.com]; *Foreign Secretary 1 Jan, 2019*



2006: **SINGH, Vijai Pal** (b 17 Jan, 1945), Sp: Rice genetics & breeding, seed production; E-9, Sector-40, Distt. Gautam Budh Nagar, Noida 201301, U.P.; [Tel: Res. (0120) 2574329, 2502899, Cell: 7042158844, 9868842098; Email: vps.iari.delhi@gmail.com; vp\_geneiari@rediffmail.com]



2008: **SINGH, Vijay Pal** (b 15 Jul, 1946), Sp: Surface-water hydrology, groundwater hydrology, hydraulic engineering, irrigation engineering; Distinguished Professor, Regents Professor and Lehrer Distinguished Chair in Water Engineering, Department of Biological and Agricultural Engineering, 321 Scoates Hall, 2117 TAMU, Texas A&M University, College Station, Texas 77843-2117, USA; 5100 Inverness Drive, Bryan, Texas 77802-6-95, USA; [Tel: Off. (979)-845-7028; Cell: (979)-820-4227; Fax: (979)-862-3442; Email: vsingh@tamu.edu]



2018: **SINGH, Vinod Kumar** (b 1 Oct, 1972), Sp: System agronomy, conservation agriculture, precision farming, farming system; Head, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-31, IARI Campus, New Delhi 110012; [Tel: Off. (011) 25841488; Cell: 9821349639; Email: vkumarsingh\_01@yahoo.com]; *NAAS Associate, 2006*



1999: **SINGH, Yadvinder** (b 16 Apr, 1951), Sp: Nutrient management in rice-wheat system, integrated nutrient management, crop residue management, conservation agriculture; 23, Professor Colony, Near Agar Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2551674; Cell: 9872218185; Email: yadvinder16@rediffmail.com]; *Recognition Award 2003-2004*



2020: **SINGH, Yash Pal** (b 1 Jul, 1959), Sp: Agronomy, Alternate land uses, Crop diversification, Integrated farming system, Farmers participatory research; Principal Scientist (Agronomy), ICAR-Central Soil Salinity Research Institute, Regional Station, P.O. Dilkusha, Lucknow 226002, U.P.; Principal Scientist, ICAR-CSSRI, D-99, Southcity, Raebareli Road, Lucknow 226025, U.P.; [Tel: Off. (0522) 2984712; Cell: 7309563010; Fax: (0522) 2984713; Email: ypsingh.agro@gmail.com; ypsingh\_5@yahoo.co.in]



2016: **SINGLA, Suresh Kumar** (b 20 Jun, 1955), Sp: Animal Reproduction, Embryo biotechnology including in-vivo, IVM-IVF and ETT and Buffalo Cloning. Bovine semen sexing; House 1028, Sector-9, Karnal 132001, Haryana; [Tel: Res. (0184) 4033028, Cell: 9416876520, 9416876540; Email: singlasuresh@yahoo.com]



1993: **SINHA, Vishwa R.P.** (b 1 Oct, 1938), Sp: Fish biology, fish endocrinology, fish reproduction, Aquaculture R&D; 1895 Pioneer Drive, Sewickley, PA 15143, USA; [Tel: Res. 412-367-2030, Cell: 412-596-3902, 724-777-8568; Email: drvrsinha@yahoo.com; vishwaraman@hotmail.com]



2004: **SIROHI, P.S.** (b 1 Jul, 1943), Sp: Vegetable Science (Breeding, genetics, agronomy, seed production & protected cultivation of vegetable crops); EA-172, 'Avantika', Arya Samaj Mandir Road, Inderpuri, New Delhi 110012; EG-97, "Aakanksha", Bankey Bihari Mandir Road, Inderpuri, New Delhi 110012; [Tel: Res. (011) 47027074, 25835555, 47562605, Cell: 9868052802, 8527319590; Email: pssirohi2005@yahoo.com]



1993: **SIVAKUMAR, Mannava V.K.** (b 30 Aug, 1950), Sp: Agroclimatology, natural resource management, climate variability, climate change; 27 Chemin des Corbillettes, 1216 Cointrin, Geneva, Switzerland; [Tel: Res. +41 22 788-1769; Email: mannavas@gmail.com]



2020: **SIVASAMY, Murugasamy** (b 5 May, 1964), Sp: Wheat improvement for yield and biotic stress resistance, particularly rust resistance; Principal Scientist & Head, ICAR-Indian Agricultural Research Institute, Regional Station, Wellington 643231, Tamil Nadu; 7/181-1, Ragavendralaya, Tharaemi, Jagathala Road, Aruvankadu (PO) 643202, Tamil Nadu; [Tel: Off. (0423) 2234796; Cell: 9442350239, 6379334104; Fax: (0423) 2230463; Email: iariwheatsiva@rediffmail.com; iariwheatsiva@gmail.com]



2011: **SOBTI, Ranbir Chander** (b 19 Aug, 1948), Sp: Animal Biology; Vice Chancellor, Babasaheb Bhimrao Ambedkar University, (a Central University), VC Residence, BBAU Campus, Vidya Vihar, Raebareli Road, Lucknow 226025, U.P.; Permanent Residence: House No. 3418, Sector 24, Chandigarh; [Tel: Off. (0522) 2440820; Res. (0522) 2440096, Cell: 9463800523, 8005002683; Fax: (0522) 2440821; Email: vc@bbau.ac.in; rcsobti@bbau.ac.in]



2004: **SONTI, Ramesh Venkata** (b 24 May, 1960), Sp: Plant-microbe interactions: microbial virulence functions, plant resistance responses; marker assisted selection; J.C. Bose Fellow, Centre for Cellular and Molecular Biology, Uppal Road, Hyderabad 500007, Telangana; Villa SM96, Saket Mithila, Hyderabad 500062, Telangana; [Tel: Off. (040) 27192577; Cell: 9441055295; Email: rameshvsonti@gmail.com; sonti@ccmb.res.in]



2002: **SOPORY, Sudhir Kumar** (b 7 Jan, 1948), Sp: Molecular plant physiology, stress biology, plant biotechnology; Former VC, JNU, 584 Sector 14, Faridabad 121007, Haryana; [Tel: Res. (0129) 4143755; Cell: 9811431741; Email: sopory@hotmail.com; sk.sopory@gmail.com]



2017: **SORGELOOS, Patrick** (b 13 Aug, 1948), Sp: Marine aquaculture, the culturing biology of *Artemia* in relation to fish/crustacean farming, as well as solar salt production and with the larviculture of fish and shellfish; Emeritus Professor of Aquaculture, Laboratory of Aquaculture & *Artemia* Reference Center, Ghent University, Coupure Links 653, Building F, 9000 Ghent, Belgium; [Tel: Off. +32 496 583081; Email: patrick.sorgeloos@ugent.be]



1996: **SREE RANGASAMY, S.R.** (b 15 Mar, 1936), Sp: Plant cytogenetics and genetics, crop improvement & Plant biotechnology, R&D in Hybrid Research and Product development, maintenance breeding, seed quality assurance & seed production; 12, First Avenue, New Thillainagar, Coimbatore 641041, Tamil Nadu; [Tel: Res. (0422) 2454031, Cell: 9443295403; Email: sreerang2002@yahoo.co.in]



2000: **SRIDHAR, Ranganathan** (b 11 Jun, 1943), Sp: Plant pathology, pathogen diversity, disease resistance, plant-pathogen interaction, rice pathology; Former Head (Plant Pathology), CRRI, Plot 54, Orchid, Padmavathi Street, Santosh Nagar Extension, Madanandapuram, Porur, Chennai 600125, Tamil Nadu; [Tel: Res. (044) 43842065, Cell: 9841029224; Email: rangsridhar@yahoo.com]



2010: **SRINIVASA GOPAL, Teralandur Krishnaswamy** (b 2 Jul, 1952), Sp: Food Technology, Fish Processing Technology and Packaging Technology; 29/660C, Surabhi, Lane 27, Janatha Road, Vyttila, Cochin 682019, Kerala; [Tel: Res. (0484) 3550448; Cell: 9446393249; Email: tksgopal1952@gmail.com]



2008: **SRINIVASA RAO, Cherukumalli** (b 4 Oct, 1965), Sp: Climate change, District agriculture contingency planning, Soil carbon sequestration, Participatory soil health management, Dryland agriculture; Director, ICAR-National Academy of Agricultural Research Management, Rajendranagar, Hyderabad 500030, Telangana; NAARM House, NAARM Campus, Rajendranagar, Hyderabad 500030, Telangana; [Tel: Off. (040) 24015070, 24581350; Cell: 9848848453; Fax: (040) 24015912; Email: chsrao\_director@naarm.org.in; cherukumalli2011@gmail.com]; *Nominee of Secretary, DARE / DG, ICAR, 1 Jan, 2019; Recognition Award 2013-2014; Young Scientist Award 1997-1998*





2005: **SRIVASTAVA, Anil Kumar** (b 1 Aug, 1957), Sp: Dairy science, pharmacokinetics, therapeutics and veterinary pharmacology & toxicology; Member, Agricultural Scientists Recruitment Board, Room No. 203, KAB-I, Pusa, New Delhi 110012; B-5, NASC Complex, DPS Marg, New Delhi 110012; [Tel: Off. (011) 25842536; Res. (011) 25841522; Cell: 9466592661; Email: aksrivastava.asrb@gmail.com; memberasrb.as@gmail.com]; *Vice President 1 Jan, 2018 to 31 Dec, 2020; Secretary 1 Jan, 2009 to 31 Dec, 2011*



1997: **SRIVASTAVA, Nath Saran Lal** (b 1 Jul, 1943), Sp: Agricultural Engineering, Agricultural Mechanisation and Renewable Energy; Executive Director, TECHNOCRATS Group of Institutions, TIT Campus Anand Nagar, PO Box 24, BHEL Piplani, Bhopal 462021, M.P.; House No. A-446, New Minal Residency, J.K. Road, Govindpura, Bhopal 462023, M.P.; [Tel: Off. (0755) 2759869; Cell: 7566535492; Email: nslsrivastava@rediffmail.com; executivedirector.titbhopal@gmail.com]; *Member Executive Council 1 Jan, 2008 to 31 Dec, 2010*



2011: **SRIVASTAVA, Ramesh Chandra** (b 1 Jul, 1956), Sp: Rain Water Management, Integrated farming System, Ground Water Management; Vice-Chancellor, Dr. Rajendra Prasad Central Agricultural University, Pusa, Samastipur 848125, Bihar; [Tel: Off. (06274) 240226, Cell: 9040033323; Fax: (06274) 240255; Email: ramesh\_cari@yahoo.co.in; vc@rpcau.ac.in]



2001: **SUBBA RAO, Annangi** (b 1 May, 1952), Sp: Soil chemistry, soil fertility, soil testing, integrated nutrient management, soil health; Former Director, IISS, 52, Narayana Guru Vihar, near Vrindavan Nagar, Ayodhya Bypass Road, Piplani, Bhopal 462022, M.P.; [Tel: Res. (0755) 2970652; Cell: 7869494664; Email: asrao110@gmail.com]



1990: **SUBBA RAO, Nanjappa Shamanna** (b 9 Dec, 1926), Sp: Soil microbiology, biological nitrogen fixation, biofertilizers, organic farming; Former INSA Senior Scientist, Apt 201, Block I, Jain Prakruti Apts., 13, Kanakapura Main Road, Jayanagar, 7th Block, Bengaluru 560070, Karnataka; [Tel: Res. (080) 26932702]



2021: **SUBBARAO, Gavaravarapu Maruthi** (b 18 Feb, 1975), Sp: Nutrition, Food Safety & Health Communication; Scientist E & Head, Nutrition Information, Communication & Health, Education (NICHE) Division, ICMR-National Institute of Nutrition, Tarnaka, Jamai-Osmai PO, Hyderabad 500007, Telangana; 12-709/18A, Navodaya Colony, Gudimalkapur, Mehedipatnam, Hyderabad 500028, Telangana; [Tel: Off. (040) 27197321; Res. (040) 23515328; Cell: 9701933391; Email: subbarao.gm@icmr.gov.in; gmsubbarao@yahoo.com]



2020: **SUBBARAO, Krishna V.** (b 8 Jul, 1958), Sp: Evolution and Systematics, Ecology and Quantitative Epidemiology, Disease Management, Host Resistance Mechanisms, Population Genetics and Fungal Genomics; Professor, University of California, Davis, C/o U.S. Agricultural Research Station, 1636 E. Alisal Street, Salinas, CA 93905, USA; [Tel: Off. (001) 831-755-2890; Cell: (001) 831-320-5642; Fax: (001) 831-755-2814; Email: kvsubbarao@ucdavis.edu]



1993: **SUBRAHMANYAM, Nekkalapudi Chinna** (b 5 Oct, 1943), Sp: Genetics, plant molecular biology, biotechnology; 76, Hill Road, Balwyn North, Victoria, Australia 3104; [Tel: Res. 613-9859 5414; Cell: 61 401 404 617; Email: ncsupra@hotmail.com]



1997: **SUBRAMONIAM, T.** (b 3 May, 1941), Sp: Crustacean reproductive biology, cryobiology, aquaculture; Professor Emeritus, Department of Zoology, University of Madras, Guindy campus, Chennai 601302, Tamil Nadu; 3/552, 3rd Cross Street, Lakshmana Perumal Nagar, Kottiwakkam, Chennai 600041, Tamil Nadu; [Tel: Off. (044) 22202842; Res. (044) 24510560; Cell: 9884175916; Fax: (044) 22352494/3309; Email: thanusub@yahoo.com; tsbl71@hotmail.com]



2019: **SUNDARAM, Raman Meenakshi** (b 23 Aug, 1972), Sp: Crop biotechnology, Rice genetics, Rice molecular breeding; Principal Scientist (Biotechnology), Biotech Lab Annexe, ICAR-Indian Institute of Rice Research, Rajendranagar, Hyderabad 500030, Telangana; Apartment No. G410, Aparna Cyber Zon, Nallangandla, Sherilingampally, Hyderabad 500019, Telangana; [Tel: Off. (040) 24591226; Res. (040) 67642332; Cell: 9440488043, 7286835684; Fax: (040) 24591217; Email: rms\_28@rediffmail.com; r.sundaram@icar.gov.in; rmsundaram34@gmail.com]; *NAAS Associate, 2013*



2019: **SWAIN, Priyabrata** (b 18 Sep, 1965), Sp: Microbiology, Immunology and Nanotechnology; Principal Scientist, ICAR-Central Institute of Freshwater Aquaculture, Kausalyaganga, Bhubaneswar 751002, Odisha; C3-303, Radhika Tower, Tankapani Road, Bhubaneswar 751018, Odisha; [Tel: Off. (0674) 2465421; Cell: 9437231099; Email: pswainy2k@yahoo.co.in; pswainy2k@rediffmail.com]



1990: **SWAMINATHAN, Monkomu Sambasivan** (b 7 Aug, 1925), Sp: Cytogenetics, plant breeding, agriculture, biodiversity & eco-development; Founder Chairman, MS Swaminathan Research Foundation, 3rd Cross Street, Taramani Institutional Area, Chennai 600113, Tamil Nadu; "Dharini", 21 Rathna Nagar, Teynampet, Chennai 600018, Tamil Nadu; [Tel: Off. (044) 22541229, 22542790; Res. (044) 24345312; Fax: (044) 22541319; Email: founder@mssrf.res.in; swami@mssrf.res.in]; *Founder Member Executive Council 5 Jun, 1990 to 30 Dec, 1991; President 1 Jan, 1992 to 31 Dec, 1996; Member Executive Council 1 Jan, 1997 to 31 Dec, 2000; President 1 Jan, 2005 to 31 Dec, 2007; Member Executive Council 1 Jan, 2008 to 31 Dec, 2010; Dr. B.P. Pal Memorial Award 1995-1996*



1999: **SWARUP, Vishnu** (b 30 Jul, 1925), Sp: Genetics & breeding, vegetable crops, flowers, olericulture, floriculture; Fellow, NAAS, E-945, Chittaranjan Park, New Delhi 110019; [Tel: Res. (011) 40551447]



1995: **SWINDALE, Leslie Denis** (b 16 Mar, 1928), Sp: Soil science, research administration; 2910 Nanihale Place, Honolulu, Hawaii 96822, USA; [Tel: Res. 1-808-988-6318; Email: l.swindale@cgiar.org]



1991: **TAKKAR, Pran Nath** (b 5 May, 1940), Sp: Soil Science, Soil Chemistry and Fertility, Fertilizer Use, Plant Nutrition, Micronutrient deficiency and Management; Former Director, IISS, H-I/114, Lajpat Nagar I, New Delhi 110024; [Tel: Res. (011) 40515622, Cell: 9953903254; Email: pntakkar@gmail.com]



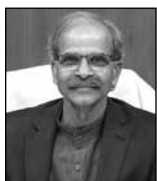
2013: **TAMANG, Jyoti Prakash** (b 16 Nov, 1961), Sp: Microbiology, biochemistry and functionality of ethnic fermented foods and beverages; Dean, School of Life Sciences, Department of Microbiology, Sikkim University (a Central University), Tadong, Gangtok 737102, Sikkim; RCIBSD, 5th Mile, Metro Point, Tadong, Gangtok 737102, Sikkim; [Tel: Off. (03592) 251403; Res. (03592) 231053; Cell: 9832061073; Fax: (03592) 251865; Email: jyoti\_tamang@hotmail.com]



1998: **TANEJA, Vijay Kumar** (b 19 Mar, 1945), Sp: Animal genetics & breeding, animal biotechnology, livestock production & management; livestock policy and planning; Former VC, GADVASU, Flat No. A3/120, Tower 7, Silver City, Sector 93, NOIDA 201304, U.P.; [Tel: Cell: 7042641222; Email: drvktaneja@gmail.com]; *Recognition Award 1997-1998*



2003: **TARAFDAR, Jagadis Chandra** (b 10 Nov, 1952), Sp: Soil biology, enzymology, nano-technology, soil chemistry, soil fertility; UGC Emeritus and ICAR Emeritus Scientist, 17E/361A, Chopasani Housing Board, Jodhpur 342008, Rajasthan; [Tel: Res. (0291) 2702662; Cell: 9414118499; 8777655733; Email: jctarafdar@yahoo.in]; *Dr. N.S. Randhawa Memorial Award 2013-2014*



2018: **TEWARI, Virendra Kumar** (b 1 Jan, 1955), Sp: Farm Machinery & Tractor System Design; Precision Agriculture; and Industrial Ergonomics & Safety Engineering; Director, Indian Institute of Technology, Kharagpur 721302, W.B.; [Tel: Off. (03222) 282002. Res. (03222) 282003; Cell: 9434014171; Email: vktfeb@agfe.iitkgp.ac.in; prof.vktewari@gmail.com; director@iitkgp.ac.in]



2018: **THAKUR, Indu Shekhar** (b 24 Feb, 1956), Sp: Environmental Science; Professor & Former Dean, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi 110067; 506, Block-I, Paschimabad, JNU Campus, Jawaharlal Nehru University, New Delhi 110067; [Tel: Off. (011) 26704321; Res. (011) 26742370; Cell: 9868558865; Email: isthakur@hotmail.com]



2015: **THIND, Harmit Singh** (b 23 Feb, 1956), Sp: Integrated Nutrient Management, Crop Residue Management, Conservation Agriculture, Water Management and Fertigation; House No. 109-C, Rajguru Nagar, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2464947, Cell: 9815364947; Email: harmit\_thind@yahoo.co.in]



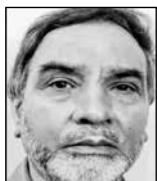
2011: **THOMAS, Pious** (b 1 Dec, 1960), Sp: Horticulture/Plant Biotechnology (Tissue culture), Basic Molecular Biology, Endophytic & Molecular Microbiology, Micropropagation of papaya; CEO & Director, Thomas Biotech & Cytobacts Centre for Biosciences (OPC) Pvt Ltd., 318, Talacauvery Layout, Amruthahalli, Bengaluru 560089, Karnataka; 'Serenity', No. 318, 1st Main, Thalakavery Nagar, Byatayaranapura, Bengaluru 560092, Karnataka; [Tel: Off. (080) 95244466; Cell: 9480514820; Email: pioust@gmail.com; thomasbiotech.opc@gmail.com]



1991: **TILAK, Kolluru Venkata Butchi Ramalinga** (b 26 Sep, 1941), Sp: Soil (Agricultural Microbiology), Biofertilizers, Biopesticides, Soil-plant-microbe interactions, Microbial biotechnology, Organic Farming, PGPR's; Emeritus Scientist, Department of Botany, Osmania University, Hyderabad 500007, Telangana; Emeritus Scientist, D-111 & 112, May Flower Park, Mallapur, Nacharam, Hyderabad 500076, Telangana; [Tel: Cell: 9885023138; Email: tilakvbr@gmail.com; tilakvbr@yahoo.com]; *Dr. K.C. Mehta Memorial Award 2009-2010*



2012: **TIWARI, Kamlesh Narayan** (b 1 Feb, 1955), Sp: Pressurized Irrigation, Protected Cultivation, Remote Sensing and GIS Application in Water Resources Management; Professor (HAG), Agricultural & Food Engineering Department, Indian Institute of Technology, Kharagpur 721302, W.B.; A-53, IIT Campus, IIT, Kharagpur 721302, W.B.; [Tel: Off. (03222) 283150; Res. (03222) 283151, Cell: 9434944443; Fax: (03222) 282244; Email: kamlesh@agfe.iitkgp.ac.in; kamlesh\_iitkgp@yahoo.com; kn.tiwari0155@gmail.com]



2011: **TIWARI, Satya Prakash** (b 14 Nov, 1947), Sp: Genetics & Plant Breeding, Plant Genetic Resources, Plant Biotechnology, Seed Science and Technology, Intellectual Property Rights; Former VC, SKRAU, 90 A, Sri Yantra Nagar, Khandwa Road, Indore 452001, M.P.; [Tel: Cell: 8989832111; Email: sptiwari999@gmail.com]



2000: **TOKY, Om Parkash** (b 10 Dec, 1952), Sp: Forest ecology, agroforestry, biodiversity conservation, sustainable development, natural resource management; Flat # 503, GHS-104E, Sector 20, Panchakula 134116, Haryana; [Tel: Cell: 9896173626; Email: optoky@gmail.com]



2006: **TOMAR, Shiv Mangal Singh** (b 5 Jan, 1946), Sp: Wheat genetics, cytogenetics and breeding, rust genetics, heterosis breeding; Former Emeritus Scientist, IARI, D11/119, Sector 8, Rohini, New Delhi 110085; [Tel: Res. (011) 27948428, Cell: 9868819098; 9971376118; Email: smstisgpb@gmail.com]



2003: **TOMAR, Vijay Singh** (b 1 Jul, 1946), Sp: Soil Science, Soil Health Management, Irrigation Management, Soil Physics/Soil Technology, Agricultural Research, Extension and Education Administration; H.No. DH 33A, Deendayal Nagar, Gwalior 474020, M.P.; [Tel: Cell: 8319911688, 9425155585; Email: vijays1946@gmail.com; vst.gwalior@yahoo.com]



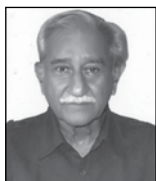
2000: **TOTEY, Satish M.** (b 2 Jul, 1956), Sp: Veterinary sciences, biotechnology; Research Director, Stem Cell Research Center, Manipal Hospital, 98, Rustom Bagh, Airport Road, Bengaluru 560017, Karnataka; [Tel: Off. (080) 25266646; Cell: 9880303527; Email: satish\_totey@relbio.com]



2009: **TRIPATHI, Anil Kumar** (b 7 Nov, 1959), Sp: Molecular Microbiology (with emphasis on abiotic stress tolerance and functional genomics in *Azospirillum brasilense*, microbial diversity and bioremediation); Director, Institute of Science, Professor, School of Biotechnology, Banaras Hindu University, Varanasi 221005, U.P.; [Tel: Off. (0522) 2719083; Cell: 9451525811; Fax: (0522) 2716141; Email: director.inst.science@gmail.com; tripathianil@rediffmail.com]



2019: **TRIPATHI, Bhupendra Nath** (b 22 Jul, 1962), Sp: Veterinary Pathology (Infectious diseases pathology) - Immunology and Molecular Microbiology; Immunopathobiology and diagnosis of infectious diseases especially paratuberculosis, clostridiosis, salmonellosis, glanders, PPR, equine infectious anaemia, equine influenza, bluetongue, equine herpes, etc; Pioneering contributions on immunology, molecular pathogenesis and diagnosis of John's disease; DDG (Animal Science), Indian Council of Agricultural Research, Room No. 113, Krishi Bhawan, New Delhi 110001; 25, Manadal Vihar, Opp. IVRI Gate 1, IVRI Road, Izatnagar, Bareilly 243122, U.P.; [Tel: Cell: 9416600475; Email: bntripathi1@yahoo.co.in; tripathibn@gmail.com]



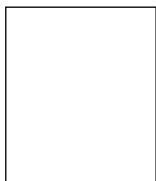
1996: **TRIPATHI, Satyendra Datt** (b 4 Dec, 1935), Sp: Capture fisheries of the estuaries & large reservoirs, culture-based fisheries of small reservoirs, fresh & brackishwater aquaculture; fish breeding & seed production; gender in aquaculture; community-based aquaculture; Former VC/Director, CIFE, 701, Ankita, Sardar Vallabhbhai Patel Nagar, Four Bungalows MHADA, Andheri West, Mumbai 400053, Maharashtra; [Tel: Res. (022) 26330631, Cell: 9820598965; Email: satyen5391@yahoo.com; sd\_tripathi@rediffmail.com]



2006: **TRIPATHY, Baishnab Charan** (b 5 Jan, 1952), Sp: Plant physiology, photobiology, plant biotechnology; Dean, School of Life Sciences, J.C. Bose National Fellow, Jawaharlal Nehru University, New Delhi 110067; 28, Dakshinapuram, Jawaharlal Nehru University Campus, New Delhi 110067; [Tel: Off. (011) 26704524, 26704530; Res. (011) 26742484, Cell: 9818104924; Fax: (011) 26742558; Email: bctripathy@mail.jnu.ac.in; baishnabtripathy@yahoo.com]



2016: **TRIVEDI, Prabodh Kumar** (b 15 Jun, 1969), Sp: Plant Molecular Biology and Genomics, Pathway Engineering for secondary plant product biosynthesis, Environmental Biotechnology; Senior Principal Scientist, Plant Gene Expression and Transgenics Division, CSIR-National Botanical Research Institute, Rana Pratap Marg, Lucknow 226001, U.P.; 14-02-C, Metrocity Apartments, Paper Mill Colony, Nishatganj, Lucknow 226007, U.P.; [Tel: Off. (0522) 2297958; Res. (0522) 3052049, Cell: 9450450521; Fax: (0522) 2205836; Email: prabodht@nbri.res.in; prabodht@hotmail.com]



1992: **TSUNODA, Shigesaburo** (b 1919), Sp: Plant breeding; Faculty of Agriculture, Tohoku University, Tsutsumi-dori, Amamiya-cho, Aobaku, Sendai 981, Japan; 51-78, Ashiai, Sakamoto, Yamamoto-cho, Japan; [Tel: Off. (022) 272-4321/211; Res. (0223) 37-2981; Fax: (022) 274-5066]



1996: **TULI, Rakesh** (*b 21 Sep, 1953*), Sp: Plant biotechnology, genomics, food and nutritional biotechnology, crop & bacterial genetics, biochemistry; Senior Research Advisor, University Institute of Engineering & Technology, Panjab University, Sector 25, Chandigarh 160016; House 765, Sector 12, Panchkula 134115, Haryana; [Tel: Off. (0172) 2544107; Cell: 9915035511; Fax: (0172) 2547986; Email: rakeshtuli@hotmail.com]



2003: **TURNER, Neil Clifford** (*b 13 Mar, 1940*), Sp: Crop physiology, agronomy, abiotic stress, adaptation of plants to water-limited environments, climate change; Adjunct Professor, UWA Institute of Agriculture and UWA School of Agriculture and Environment, M082, Uni. of Western Australia, 35 Stirling Highway, Crawley, WA 6009, Australia; 1/14 Elvire Street, Watermans Bay, WA 6020, Australia; [Tel: Off. +61 418 286 487; Cell: +61 418 286 487; Email: neil.turner@uwa.edu.au]



2011: **TUTEJA, Narendra** (*b 5 Jan, 1955*), Sp: Plant biology & biotechnology, crop improvement, stress tolerance, fungal Biology; Visiting Scientist, ICGEB, Aruna Asaf Ali Road, New Delhi 110067; E69 (TF-2), Vasant Marg, Vasant Vihar, New Delhi; [Tel: Cell: 9811233350; Email: narendratuteja@gmail.com]



2001: **TYAGI, Akhilesh Kumar** (*b 15 May, 1956*), Sp: Plant Biology; Professor and JC Bose National Fellow, Department of Plant Molecular Biology, University of Delhi, South Campus, New Delhi 110021; Number 1, Type VB Residences, University of Delhi, South Campus, New Delhi 110021; [Tel: Off. (011) 24115095; Res. (011) 24110195; Cell: 9871277558; Email: akhilesh@genomeindia.org]



2019: **TYAGI, Amrish Kumar** (*b 13 May, 1963*), Sp: Rumen Biotechnology, Value added livestock production; Assistant Director General, Animal Nutrition and Physiology, Indian Council of Agricultural Research, Krishi Bhawan, New Delhi 110001; E-10, ICAR-NDRI, Karnal 132001, Haryana; [Tel: Cell: 9416950175; Email: amrishtyagi1963@yahoo.com]



1996: **TYAGI, N.K.** (*b 12 Jan, 1947*), Sp: Water resources management, salinity, environment; Former Member, ASRB, 101/A5, Olive Country, Sector-5, GH-09, Vasundhara, Ghaziabad 201012, U.P.; Permanent Address: Houst T-64, Village: Ismilepur, P.O. Shivala, District Bijnor - 246734, U.P.; [Tel: Cell: 9818911253; Email: nktyagi1947@gmail.com]; *Recognition Award 1999-2000*



2021: **UMA, Subbaraya** (*b 1 Jun, 1962*), Sp: Horticulture, Genetic Resources, Breeding and Tissue culture using Bioreactors; Director, ICAR-National Research Center for Banana, Thayanur Post, Thogamalai Road, Trichy 620102, Tamil Nadu; No.6, 6th Cross, 8th Main Road, Srinivasanagar South, Vayalur Road, Tiruchirapalli 620017, Tamil Nadu; [Tel: (0431) 2618125; Cell: 9444090393; Email: umabinit@yahoo.co.in; director.nrcb@icar.gov.in; directornrcb@gmail.com]



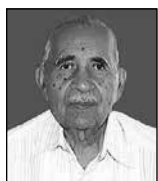
2017: **UPADHYAYA, Hari Deo** (b 12 Aug, 1953), Sp: Genetics and Plant Breeding, Plant Genetic Resources, Population Structure, Association Mapping; Director/ Head, Genebank, International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru 502324, Telangana; Villa 54, Dollar Hills, Pragati Nagar, Opposite JNTU, Kukatpally, Hyderabad 500090, Telangana; [Tel: Cell: 9866986262; Email: harideo.upadhyaya@gmail.com]



2007: **VARADACHARI, Chandrika** (b 6 May, 1956), Sp: Fertilizer technology; analytical methods; computational mineralogy; soil biogeochemistry; Director, Agtec Innovations Pvt. Ltd., Building IV, 2nd Floor, South Block, Behala Industrial Estate, 620 Diamond Harbour Rd., Kolkata 700034, W.B.; 4A Ratnabali, 7A Judges Court Road, Alipore, Kolkata 700027, W.B.; Director, Raman Centre for Applied and Interdisciplinary, Sciences, 16A Jheel Road, Kolkata 700075, W.B.; [Tel: Off. (033) 24467048, 24830029; Res. (033) 24791112, 24480537; Cell: 9831088010, 7595808146; Email: cv@rcais.res.in]; *Member Executive Council 1 Jan, 2016 to 31 Dec, 2018*



2002: **VARADARAJAN, Srinivasan** (b 31 Mar, 1928), Sp: Energy, Fertilizers, Environment, Chemical Technology, Engineering for Manufacture, Molecular Biology, Biotechnology, R&D and Industry Management, Science Policy; Former Secretary DSIR, 4A, Girdhar Apartments, 28, Feroz Shah Road, New Delhi 110001; [Tel: Off. (011) 23230828, 23221931; Res. (011) 23712512, 23713137; Fax: (011) 23231095; Email: insa@delnet.ren.nic.in; svaradaraian1928@gmail.com]



1993: **VARADE, Supda Bhiku** (b 5 Dec, 1936), Sp: Soil physics, irrigation & drainage, water & land management; Former Head (Chemistry and Soil Science), MAU, 2, Hirakhan Housing Society, Vedantnagar, Station Road, Aurangabad 431005, Maharashtra; [Tel: Cell: 9423904116; Email: walmi@sancharnet.in]



1996: **VARMA, Ajit** (b 24 Sep, 1939), Sp: Microbial technology; Chairman, Faculty Research Committee (Biosciences & Biotechnology), Distinguished Scientist & Professor of Eminence, AIMT & Vice Chairman, ASTIF, Amity University Uttar Pradesh, Sector 125, NOIDA 201303, U.P.; 501 B, King's Court, Alaknanda Road, New Delhi 110048; [Tel: Off. (0120) 4392132; Res. (011) 26180175; Cell: 9717180098, 9810899562; Fax: (0120) 2431268; Email: ajitvarma@amity.edu]



1990: **VARMA, Anupam** (b 23 Jul, 1940), Sp: Plant virology, plant pathology, plant biotechnology, crop protection; INSA Emeritus Scientist, Advanced Centre for Plant Virology, Division of Plant Pathology, Indian Agricultural Research Institute, New Delhi 110012; 253, Jaimaa Apartments, Plot 16, Sector 5, Dwarka, New Delhi 110075; House No. 136, Housing Board Colony, Palampur - 176061 (H.P.); [Tel: Off. (011) 25842134; Res. 25072511, Cell: 9810217141, (01894) 233079, 9816866744 (Palampur); Fax: (011) 25842134; Email: av.acpv@gmail.com]; *Founder Member Executive Council 5 Jun, 1990 to 30 Dec, 1991; Secretary 1 Jan, 1992 to 31 Dec, 1998; Vice-President, 1 Jan, 2015 to 31 Dec, 2017; Dr. K.C. Mehta Memorial Award 1999-2000; Editor-in-Chief, NAAS Journal 'Agricultural Research', 2012 to date.*



2010: **VARSHNEY, Rajeev K.** (b 13 Jul, 1973), Sp: Applied Genomics and Molecular Breeding; Research Program Director-Grain Legumes & Director, Centre of Excellence in Genomics & Systems Biology & Systems Biology, Patancheru 502324, Telangana; ISH 602/15, ICRISAT Campus, Patancheru 502324, Telangana; [Tel: Off. (040) 30713305; Res. (040) 30713674, Cell: 9949994070; Fax: (040) 30713074, 30713075; Email: r.k.varshney@cgiar.org; varshney.raj@gmail.com]; *Member Executive Council 1 Jan, 2019; NAAS Associate, 2008.*



2001: **VASAL, Surinder Kumar** (b 12 Apr, 1938), Sp: Plant breeding & genetics; Former Distinguished Scientist, CIMMYT, Mexico, C2-2394, Vasant Kunj, New Delhi 110070; [Tel: Res. (011) 26132298; Cell: 9773948354; Email: svasal12@yahoo.com; skvasal@gmail.com]



2005: **VASS, Kuldeep Kumar** (b 24 Nov, 1947), Sp: Fisheries Science Section covering areas of Aquatic ecology, Inland Fisheries, Coldwater Fisheries, Aquaculture, Fisheries and Environment Management in Inland waters; Ex-Director, CIFRI and DCFR, C-218, Pocket-7, Kendriya Vihar - II, Sector 82, Noida 201304, U.P.; [Tel: Res. (0120) 4539142; Cell: 9999330182; Email: vass.kuldeep76@gmail.com; kuldeepvass@rediffmail.com]; *Editor 1 Jan, 2015 to 31 Dec, 2017*



2009: **VENKATESH, Byrappa** (b 16 Apr, 1953), Sp: Comparative Genomics, Molecular Genetics, Medical Genomics; Professor and Research Director, Institute of Molecular and Cell Biology, 61, Biopolis Drive, Singapore 138673; 28, Swimming Pool Avenue Road, Malleswaram, Bangalore 560003, Karnataka; 5 Pine Grove, #04-05 Astor Green, Singapore 597591; [Tel: Off. 65-64671716; Fax: 65-7791117; Email: bvenkatesh.home@gmail.com]



2010: **VENKATESWARLU, Bandi** (b 1 Jun, 1953), Sp: Climate change, Abiotic stress management, Soil microbiology; Ex-VC, VNMKV, Parbhani & Ex-Director, ICAR-CRIDA, H No 5-5-552, Plot No 30, Abhyudayanagar, L.B. Nagar, Hyderabad 500074, Telangana; [Tel: Cell: 9652988265; Email: vbandi\_1953@yahoo.com; bandi9501@gmail.com]; *Member Executive Council 1 Jan, 2015 to 31 Dec, 2017*



2008: **VENKATESWARLU, Kadiyala** (b 1 Jun, 1951), Sp: Pesticide microbiology, agricultural microbiology, biocatalysis, bioremediation; Professor of Microbiology (Retired), Flat # 301, Navya Classic, Dilip Enclave, Near ISKCON Temple, Nellore 524004, A.P.; [Tel: Cell: 9440514477; Email: venkateswarlu.kadiyala@gmail.com; v\_kadiyala@hotmail.com]



2004: **VENUGOPAL, Vazhiyil** (b 20 Sep, 1942), Sp: Seafood processing, value addition, radiation processing and microbial spoilage of fishery products; Former Scientific Officer, BARC, Flat No. B-603, Lincoln, Concorde Manhattan, Neeladri Road, Electronic City, Phase I, Bengaluru 560100, Karnataka; [Tel: Cell: 9969855300; Email: venugopalmenon@hotmail.com; vvenugopalmenon@gmail.com]



2010: **VERMA, Ashok Kumar** (b 31 Aug, 1962), Sp: Ruminant nutrition and metabolism, methane emission and livestock production, feed and fodder technology, supplementation and strategic feeding of livestock; Head and Director, Centre of Advanced Faculty Training (CAFT) in Animal Nutrition, ICAR-Indian Veterinary Research Institute, Izatnagar 243122, U.P.; E-1061, Rajendra Nagar, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0581) 2301318; Cell: 9412318322; Fax: (0581) 2301318; Email: vermaak62@gmail.com; hdanivri@gmail.com]; *Recognition Award 2013-2014*





2008: **VERMA, Rishendra** (*b 9 Jan, 1953*), Sp: Veterinary Bacteriology, Immunology, Mycology; Laboratory Animal Science, Molecular Diagnosis of Tuberculosis, Good Manufacturing Practices (GMP/GLP); Former Joint Director, IVRI, 1219/6 E-Block, Rajendranagar, Izatnagar, Dist: Bareilly 243122, U.P.; [Tel: Cell: 9359117376; Email: rishendra\_verma@yahoo.com]



1998: **VERMA, Sewa Ram** (*b 10 Oct, 1939*), Sp: Farm machinery & power engineering, ergonomics, safety; Former Dean & Head (FPM), PAU, H.No. 14, Good Friends Colony, Barewal Road, Ludhiana 141012, Punjab; [Tel: Res. (0161) 2551096, Cell: 9872092597; Email: srverma10@yahoo.com]



1993: **VIDHYASEKARAN, Perumal** (*b 16 Jun, 1939*), Sp: Plant pathology, plant biotechnology; Former Director (CPPS), TNAU, 29, Sababathi Street, K.K. Pudur, Coimbatore 641038, Tamil Nadu; [Tel: Res. (0422) 2432048; Email: vidhyasekaran@hotmail.com]



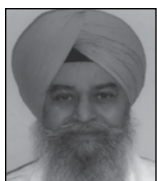
2000: **VIG, Abnash Chander** (*b 25 Jan, 1942*), Sp: Nutrient supply dynamics & bioavailability, soil testing, plant analysis, nutrient management in crops/cropping systems, fertilizer-water management, residue management, bio-availability; Fellow, NAAS, Ramindra Sadan, 252-F Kitchlu Nagar, Ludhiana 141001, Punjab; [Tel: Res. (0161) 2246854; Cell: 9217534854]



2018: **VINOD** (*b 22 Oct, 1962*), Sp: Wheat Genetics & Cytogenetics; Principal Scientist & Professor, Division of Genetics, Indian Agricultural Research Institute, New Delhi 110012; 18 D, Scientist Apartments, Indian Agricultural Research Institute, New Delhi 110012; [Tel: Off. (011) 25841077; Res. (011) 25842932; Cell: 9868388559; Fax: (011) 25841481; Email: vinod.genetics@gmail.com]



2015: **VIRAKTAMATH, Basavanneyya Chanabasayya** (*b 20 May, 1952*), Sp: Hybrid Rice Breeding; Former Director, ICAR-IIRR, Flat No. B 101, Shriram Sahaana Apts, 1st Main, Suryavamshi Layout, Opp. BMSIT College, Doddaballapur Main Road, Yelahanka Bengaluru 560055, Karnataka; [Tel: Cell: 9441217738; Email: mathrice@gmail.com]



1993: **VIRK, Daljit Singh** (*b 25 Aug, 1944*), Sp: Plant breeding & genetics, crop breeding for drought tolerance, biometrical genetics, marker-assisted selection, client-oriented plant breeding; 18 South Brae Close, Littleover, Derby DE 23 1WD, England; [Tel: Res. (+44) 1332-766629; Cell: (+44) 7799 057846; Email: dsvirk2012@gmail.com]



1995: **VIRMANI, Sant Singh** (b 5 Jul, 1940), Sp: Hybrid rice breeding, genetics, hybrid seed production, international agriculture, public-private partnership in agriculture; Former Principal Scientist (PI Breeding), International Rice Research Institute, DAPO Box 7777, Metro Manila, Philippines; Former Principal Scientist, IIRI, 4425, Partney Ct, Plano, Texas 75024, USA; [Tel: Off. +469 361 6443; Cell: +469 682 8710; Email: sant@fastmail.fm; santvirmani@gmail.com]



2016: **VISVANATHAN, Rangaraju** (b 16 Jul, 1960), Sp: Drying, storage, waste utilisation, value addition, food safety and quality control; Retd. Professor, TNAU, 12/36, Sowbhagya Nagar - A Block, Civil Aerodrome P.O., Coimbatore 641014, Tamil Nadu; [Tel: Cell: 9443129711, 7200029711; Email: drrviswanathan@gmail.com; drrviswanathan@rediffmail.com]; *Member Executive Council 1 Jan, 2020*



2018: **VISWANATHAN, Chinnusamy** (b 4 Jun, 1969), Sp: Plant Physiology, Phenomics; Principal Scientist and Head, Division of Plant Physiology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 19C, Scientist Apartment, IARI, New Delhi 110012; [Tel: Off. (011) 25842815; Res. 7838866740; Cell: 9013885245; Fax: (011) 25846420; Email: viswanathan@iari.res.in; v.chinnusamy@icar.gov.in]; *NAAS Associate, 2010*



2016: **VISWANATHAN, Rasappa** (b 15 Apr, 1963), Sp: Sugarcane Pathology, Molecular Plant Pathology, host-pathogen interactions, Molecular diagnosis; Principal Scientist & Head, Division of Crop Protection, ICAR-Sugarcane Breeding Institute, Coimbatore 641007, Tamil Nadu; 3A, Raja Illam, Srikrishna Layout, Anandanagar Extn, PN Pudur PO, Coimbatore 641041, Tamil Nadu; [Tel: Off. (0422) 2472621; Res. (0422) 2435875; Cell: 9442543875; Fax: (0422) 2472923; Email: rasaviswanathan@yahoo.co.in; r.viswanathan@icar.gov.in]



2011: **VITTAL, Kanuparthu Pandu Ranga** (b 6 Aug, 1949), Sp: Soil and Water Management in Dryland Agriculture; Ex-Director, NIASM, 202, Nipun's Gunturi Residency, Plot # 61-63, Door # 19-84/7, Ayodhyanagar, Dr. A.S. Rao Nagar, Hyderabad 500062, Telangana; [Tel: Cell: 8106258282; Email: kprvittal49@gmail.com]



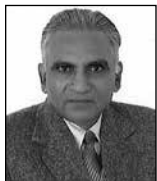
2004: **VLEK, Paul L.G.** (b 21 Jan, 1948), Sp: Soil & water sciences, ecology, Natural Resource Management and Development; Professor, Division of Ecology and Natural Resources, Centre for Development Research (ZEF-Bonn), University of Bonn, Walter-Flex-Strasse 3, D 53113 Bonn, Germany; [Tel: Off. (+49) 228-73-1865; Fax: (+49) 228-73-1889; Email: p.vlek@uni-bonn.de]



1999: **WAHID, Pallacken Abdul** (b 10 Jun, 1946), Sp: Soil health & nutrient management in perennial crops, rooting patterns of tree crops, pesticide residues in agricultural environment, radioisotope-aided research with trees; Former Director (Academic & P.G. Studies), KAU, Hira, J.T. Road, Temple Gate P.O., Thalassery 670102, Kerala; [Tel: Cell: 9495653488; Email: pawahid@gmail.com]



2002: **WALIA, Suresh** (b 2 Feb, 1951), Sp: Agrochemicals, botanical and pesticides, nutraceuticals; Consultant, AINP on Pesticide Residues, Division of Agricultural Chemicals, LBS Building, ICAR-Indian Agricultural Research Institute, New Delhi 110012; F-88, Himkunj Apartments, Sector - 14, Rohini, Delhi 110085; [Tel: Off. (011) 25846396, 25841083; Res. 27862158; Cell: 9868723959; Fax: (011) 25846396; Email: suresh\_walia@yahoo.com]



2001: **YADAV, Mahendra Pal** (b 2 Jun, 1945), Sp: Veterinary virology & bacteriology, infectious diseases, vaccinology & biotechnology; Ex. Vice Chancellor, Flat 12 C, Tower 7, Central Park II, Bellevue, Sector 48, Sohna Road, Gurugram 122018, Haryana; [Tel: Res. (0124) 4382818, Cell: 9810820093, 8920750043; Email: yadav\_mp@hotmail.com]; *Secretary 1 Jan, 2014 to 31 Dec, 2016; Member Executive Council 1 Jan, 2011 to 31 Dec, 2013; Member Executive Council (Casual Vacancy) 21 Nov, 2009 to 31 Dec, 2010; Dr. P. Bhattacharya Memorial Award 2003-2004*



2011: **YADAV, Om Parkash** (b 16 May, 1963), Sp: Crop breeding, drought tolerance, seed production, management of natural resources; Director, ICAR-Central Arid Zone Research Institute, Jodhpur 342003, Rajasthan; Director Bungalow, CAZRI, Jodhpur 342003, Rajasthan; [Tel: Off. (0291) 2786584; Cell: 9413931805; Fax: (0291) 2788706; Email: opyadav21@yahoo.com; director.cazri@icar.gov.in]



1995: **YADAV, Rattan Lal** (b 11 Nov, 1949), Sp: Agronomy of sugarcane, cropping/farming systems research, organic farming; Former Director, IISR, A 703, Ashadeep Apartment, Plot No. 3-B, Sector-2, Dwarka, New Delhi 110075; [Tel: Res. (011) 25075062, Cell: 8368905717; 9968523124, 83; Email: rattanlal.yadav@gmail.com]



2019: **YADAV, Sudesh Kumar** (b 2 Jan, 1976), Sp: Metabolic Engineering, Synthetic Biology, Bioprocess Technology, Nanobiology; Scientist-F, Center of Innovative and Applied Bioprocessing, Knowledge City, Sector 81 (Knowledge City), Mohali 140306, Punjab; House No. 1, Type 5, CIAB Campus, Mohali, Punjab; [Tel: Off. (0172) 5221494; Cell: 9418050116; Fax: (0172) 5221499; Email: sudesh@ciab.res.in; skyt@rediffmail.com]; *NAAS Associate, 2013*



2015: **YADAVA, Devendra Kumar** (b 10 Apr, 1966), Sp: Genetic enhancement of Oilseeds and Pulses using conventional and molecular approaches; Head, Division of Seed Science and Technology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-26, Pusa Campus, IARI, New Delhi 110012; [Tel: Off. (011) 25841428; Res. (011) 25847004; Cell: 9868537641; Fax: (011) 25841428, 25846420; Email: dkygenet@gmail.com; dkyadav@iari.res.in]; *Recognition Award 2017-2018*



2015: **ZEIGLER, Robert S.** (b 3 Jan, 1951), Sp: Plant pathology, sustainable disease management practices and disease resistance in rice; agricultural research and development management in Asia, Latin America, Africa and the US; Director General (Emeritus), International Rice Research Institute, Los Banos, 4031, Laguna, Philippines; [Tel: Off. 63-2-5805618, 5805600; Fax: 63-2-8920354, 5805699; Email: bob@zeiglermail.net]

## 2.6 Corporate Fellowship

1999: **Barwale Foundation**, Field of activity: Hybrid Seed Production/Biotechnology; Chairman, Barwale Foundation, Delhi Office: Mahyco, Ashok Centre, 4E/15, 3rd Floor, Jhandewalan Extension, New Delhi 110055; Bombay Office: Mahyco, 4th Floor, Resham Bhavan, 78 Veer Nariman Road, Mumbai 400020; Dawalwadi Office: Mahyco, Aurangabad-Jalna Road, At Post: Dawalwadi, Tq. Badnapur, Dist. Jalna 431203. (M.S.); [Fax: (011) 23623804; (022) 22043020 / 22047871; Email: sanjay.deshpande@mahyco.com; aban.kapadia@mahyco.com]

## 2.7 Institutional Members

The Executive Council in its meeting held on September 20, 2014 instituted a new category of Institutional Members and approved its Guidelines (**Annexure I-C**). Institutional Members inducted are as follows:

1. **Bioversity International**; Bioversity International; G-1, B-Block, NASC Complex, DPS Marg, New Delhi 110012; [Tel: (011) 25849000/02; Fax: (011) 25849002; Email: bioversity-india@cgiar.org]
2. **Borlaug Institute for South Asia (BISA)**; Managing Director; Borlaug Institute for South Asia (BISA), CG Block, NASC Complex, DPS Marg, New Delhi 110012; [Tel: (011) 65441938, 65441940; Fax: (011) 25842938; Email: a.k.joshi@cgiar.org, a.raswant@cgiar.org]
3. **International Centre for Agricultural Research in the Dry Areas (ICARDA)**; Food Legume Breeder; International Center for Agricultural Research in the Dry Areas, CGIAR Block, NASC Complex, DPS Marg, Pusa Campus, New Delhi 110012; [Tel: (011) 25847505/2; Fax: (011) 25847503; Email: a.sarker@cgiar.org, icarda-newdelhi-office@cgiar.org]
4. **International Crops Research Institute for the Semi-Arid Tropics (ICRISAT)**; International Crops Research Institute for the; Semi-Arid Tropics (ICRISAT), Patancheru 502324, Telangana; [Tel: (040) 30713071; Fax: (040) 30713074; Email: gn.kumar@cgiar.org; a.pal@cgiar.org; icrisat@cgiar.org]
5. **International Food Policy Research Institute (IFPRI)**; International Food Policy Research Institute; IFPRI South Asia Office, NASC Complex, DPS Marg, New Delhi 110012; [Tel: (011) 66166565; Fax: (011) 66781699; Email: s.rashid@cgiar.org, ifpri-NewDelhi@cgiar.org]
6. **International Rice Research Institute (IRRI)**; International Rice Research Institute; IRRI-India Office, CG Block, NASC Complex, DPS Marg, New Delhi 110012; [Tel: (011) 25807979, 25807980; Fax: (011) 25807900; Email: n.meah@irri.org]
7. **World Agroforestry Centre (ICRAF)**; South Asia Program; World Agroforestry Centre (ICRAF), NASC Complex, DPS Marg, New Delhi 110012; [Tel: (011) 25609800, 25847885; Fax: (011) 25847884; Email: j.rizvi@cgiar.org]
8. **Institute of Bioresources and Sustainable Development**; Institute of Bioresources & Sustainable Development; Takyelpat, Imphal 795001, Imphal; [Tel: 0385-2446122; Fax: 0385-2446120; Email: director.ibsd@nic.in]
9. **Acharya N.G. Ranga Agricultural University**; Acharya N.G. Ranga Agricultural University; Administrative Office, Lam, Guntur 522034, Andhra Pradesh; [Tel: (0863) 2347011; Fax: ; Email: angrau\_vc@yahoo.com, vicechancellorangrau@gmail.com]
10. **Assam Agricultural University**; Assam Agricultural University; , Jorhat 785013, Assam; [Tel: (0376) 2340013, 2340001; Fax: (0376) 2340001; Email: vc@aaau.ac.in]
11. **Bihar Animal Sciences University**; Bihar Animal Sciences University; Bihar Veterinary College Campus, Patna 800014, Bihar; [Tel: (0612) 2222221; Fax: ; Email: vc-basu-bih@gov.in, vicechancellorbasu@gmail.com]

12. **Birsa Agricultural University;** Birsa Agricultural University; Kanke, Ranchi 834006, Jharkhand; [Tel: (0651) 2450500; Fax: (0651) 2450850; Email: vc@bauranchi.org; vcbauranchi@gmail.com]
13. **Central Agricultural University;** Central Agricultural University; Lamphelpat, Imphal West, Imphal 795004, Manipur; [Tel: (0385) 2415933; Fax: (0385) 2415196; Email: vcofficecau@yahoo.in]
14. **Dr. Rajendra Prasad Central Agricultural University;** Dr. Rajendra Prasad Central Agricultural University; (formerly Rajendra Agricultural University), Pusa, Samastipur 848125, Bihar; [Tel: (06274) 240226; Fax: (06274) 240255, 240277; Email: vc@rpcau.ac.in]
15. **Dr. Y.S.R. Horticultural University;** Dr. Y.S.R. Horticultural University; Administrative Office, Venkataramannagudem, P.B. No. 7, West Godavari District, Tadepalligudem 534101, Andhra Pradesh; [Tel: (08818) 284312; Fax: (08818) 284223; Email: vc@drysru.edu.in]
16. **Govind Ballabh Pant University of Agriculture & Technology;** Govind Ballabh Pant University of; Agriculture & Technology, Pantnagar 263145, Uttarakhand; [Tel: (05944) 233333, 233500; Fax: (05944) 233500, 233473; Email: vc@gbpuat.ac.in; vcgbpuat@gmail.com]
17. **Indira Gandhi Krishi Vishwa Vidyalaya;** Indira Gandhi Krishi Vishwa Vidyalaya; Krishak Nagar, Raipur 492012, Chhattisgarh; [Tel: (0771) 2443419; Fax: (0771) 2442302; Email: vcigkv@gmail.com, spatil\_igau@yahoo.com]
18. **Kerala Agricultural University;** Kerala Agricultural University; Main Campus, Vellanikkara, KAU (P.O.), Thrissur 680656, Kerala; [Tel: (0487) 2438001; Fax: (0487) 2371928; Email: vc@kau.in]
19. **Kerala University of Fisheries & Ocean Studies;** Kerala University of Fisheries & Ocean Studies; Papangad, Kochi 682506, Kerala; [Tel: (0484) 2703781; Fax: (0484) 2700337; Email: vc@kufos.ac.in]
20. **Maharashtra Animal and Fishery Sciences University;** Maharashtra Animal and Fishery Sciences University; Futala Lake Road, Nagpur 440001, Maharashtra; [Tel: 0712- 2511088, 2511282; Fax: 0712-2511282; Email: vcmafsu@gmail.com]
21. **Mahatma Phule Krishi Vidyapeeth;** Mahatma Phule Krishi Vidyapeeth; District: Ahmednagar, Rahuri 413722, Maharashtra; [Tel: (02426) 243208; Fax: (02426) 243302; Email: vc.mpkv@nic.in, vcmpkv@gmail.com]
22. **Orissa University of Agriculture & Technology;** Orissa University of Agriculture & Technology; , Bhubaneswar 751003, Odisha; [Tel: (0674) 2397700; Fax: (0674) 2397780, 2397780; Email: vcouat@gmail.com, vc@ouat.nic.in]
23. **Professor Jayashankar Telangana State Agricultural University;** Professor Jayashankar Telangana State Agricultural University; Administrative Office, Rajendranagar, Hyderabad 500030, Telangana; [Tel: (040) 24015122; Fax: (040) 24018653; Email: vc@pjtsau@gmail.com, vc@pjtsau.in]
24. **Punjab Agricultural University;** Punjab Agricultural University; Ferozepur Road, Ludhiana 141004, Punjab; [Tel: (0161) 2401794; Fax: (0161) 402483; Email: vc@pau.edu]
25. **Rajasthan University of Veterinary & Animal Sciences;** Rajasthan University of Veterinary & Animal Sciences; Bijay Bhavan Palace Complex, Near Deen Dayal Upadhyay Circle, Bikaner 334001, Rajasthan; [Tel: (0151) 2543419, 2540021; Fax: (0151) 2549348; Email: vcrajuvas@gmail.com]
26. **Rajmata Vijayaraje Scindia Krishi Vishwa Vidhyalaya;** Rajmata Vijayaraje Scindia Krishi Vishwa Vidhyalaya; Raja Pancham Singh Marg, Gwalior 474002, M.P.; [Tel: (0751) 2970502-3; Fax: (0751) 2970504; Email: vcrrvsaugwa@mp.gov.in, pstovcrvskvv@gmail.com]

27. **Rani Lakshmi Bai Central Agricultural University;** Rani Lakshmi Bai Central Agricultural University; NH-75, Near Pahul Dam, Gwalior Road, Jhansi 284003, U.P.; [Tel: (0510) 2730777, 2730555; Fax: ; Email: vcrlbcau@gmail.com]
28. **Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir;** Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir; Shalimar Campus, Srinagar 190025, J&K; [Tel: (0194) 2462159, 2464028; Fax: (0194) 2462160; Email: vc@skuastkashmir.ac.in, skuastkvc@gmail.com]
29. **Sri Venkateswara Veterinary University;** Sri Venkateswara Veterinary University; Administrative Office, Dr. Y.S.Rajasekhara Reddy Bhavan, Tirupati 517502, Andhra Pradesh; [Tel: (0877) 2248986, 08772248986; Fax: (0877) 2249222; Email: vcsvvu@gmail.com, vcswu@gmail.com]
30. **Tamil Nadu Agricultural University;** Tamil Nadu Agricultural University; , Coimbatore 641003, Tamil Nadu; [Tel: 0422-6611251, 6611307; Fax: 0422-2431672; Email: vctnau@tnau.ac.in]
31. **University of Agricultural and Horticultural Sciences;** University of Agricultural and Horticultural Sciences; , Shivamogga 577224, Karnataka; [Tel: (08182) 267011, Cell 9480838999; Fax: ; Email: vcuahss2014@gmail.com, vc@uahs.edu.in]
32. **University of Agricultural Sciences;** University of Agricultural Sciences; UAS Campus, Lingsugur Road, Raichur 584104, Karnataka; [Tel: (08532) 221444; Fax: (08532) 220444; Email: vc@uasraichur.edu.in]
33. **University of Agricultural Sciences;** University of Agricultural Sciences; GKVK Campus, Bengaluru 560065, Karnataka; [Tel: (080) 23332442, 23330153; Fax: (080) 23330277; Email: vc@uasbangalore.edu.in, vcuasb1964@gmail.com]
34. **University of Agricultural Sciences Dharwad;** University of Agricultural Sciences; Yeltinagudda Campus, Krishi Nagar, Dharwad 580005, Karnataka; [Tel: (0836) 2447783, 2214201, 09448495300; Fax: (0836) 2448349; Email: vc@uasd.in]
35. **UP Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya Evam Go Anusandhan Sansthan;** UP Pandit Deen Dayal Upadhyaya Pashu Chikitsa Vigyan Vishwavidyalaya; Evam Go Anusandhan Sansthan (DUVASU), Mathura 281001, U.P.; [Tel: (0565) 2470199, 2470290; Fax: (0565) 2470819; Email: duvasuvc@gmail.com]

## 2.8 Fellows Deceased

1. **Abidi, S.A.H.** (b 4 Apr, 1940) (*Specialization: Fisheries/Marine Biology*) Expired in Jul 2014.
2. **Abrol, Y.P.** (b 23 Dec, 1935) (*Specialization: Crop Physiology, Biochemistry, Environmental Sciences*) Expired in Jul 2020.
3. **Achaya, K.T.** (b 6 Oct, 1923) (*Specialization: Nutrition, Food History*) Expired in Sep 2002.
4. **Ahuja, P.S.** (b 19 Dec, 1952) (*Specialization: Bio-Tech of Crops, Medicine Aromatic Plants*) Expired in Jan 2017.
5. **Anant Rao, N.K.** (b 11 Oct, 1915) (*Specialization: Agricultural Education and Agronomy*) Expired in Feb 2004.
6. **Ananthakrishnan, T.N.** (b 15 Dec, 1925) (*Specialization: Entomology, Insect-plant Interactions*) Expired in Aug 2015.
7. **Appa Rao, A.** (b 1 Jul, 1926) (*Specialization: Plant Pathology - Agricultural Education and Research Management*) Expired in Apr 2014.

8. **Arora, R.K.** (b 14 Dec, 1932) (*Specialization: Plant Genetic Resources: Conservation, Use and Management*) Expired in Mar 2010.
9. **Asana, R.D.** (b 6 Oct, 1923) (*Specialization: Plant Physiology & Agronomy*) Expired in 1999.
10. **Athwal, D.S.** (b 12 Oct, 1928) (*Specialization: Genetics & Plant Breeding*) Expired in May 2017.
11. **Bentley, C.F.** (b 14 Mar, 1914) (*Specialization: Agronomy, Soil Management and Land use*) Expired in Apr 2008.
12. **Bhargava, K.S.** (b 19 Oct, 1918) (*Specialization: Plant Pathology, Mycology, Virology, Economic Botany*) Expired in Sep 2010.
13. **Bhat, P.N.** (b 9 Oct, 1937) (*Specialization: Animal genetics and breeding, animal genetic resources conservation and management, animal production in tropics, animal biotechnology, research management systems*) Expired in June 2020
14. **Bhatia, I.S.** (b 0) (*Specialization: Agricultural Biochemistry and Enzymology*) Expired in 1999.
15. **Bhattacharya, Anoop Kumar** (b 28 Aug, 1942) (*Specialization: Entomology*) Expired in Nov 2007.
16. **Bhumbla, D.R.** (b 6 Dec, 1921) (*Specialization: Soil Science and Water Management, Dryland Farming*) Expired in Oct 2019.
17. **Bilgrami, K.S.** (b 1933) (*Specialization: Fungul Physiology, Mycotoxology, Limnology*) Expired in Feb 1997.
18. **Borlaug, Norman E.** (b 25 Mar, 1914) (*Specialization: Plant Breeding*) Expired in Sep 2009.
19. **Brar, D.S.** (b 7 Mar, 1944) (*Specialization: Genetics and plant breeding, molecular cytogenetics*) Expired in Mar 2020.
20. **Chandel, K.P.S.** (b 14 Apr, 1937) (*Specialization: Genetics and Plant Breeding, Biodiversity and Plant Genetic Resources Conservation & Utilization*) Expired in Dec 2000.
21. **Chang, Te-Tzu (T.T.)** (b 3 Apr, 1927) (*Specialization: Plant genetics and breeding*) Expired in Mar 2006.
22. **Chattoo, B.B.** (b 25 May, 1949) (*Specialization: Plant Biotechnology, Molecular Biology*) Expired in Nov 2016.
23. **Chaudhury, N.A.** (b 25 May, 1934) (*Specialization: Agricultural Chemicals/Chemistry*) Expired in Apr 2017.
24. **Chhonkar, P.K.** (b 14 Jan, 1944) (*Specialization: Soil biochemistry, soil health and quality assessment, organic farming, biofertilizers, organization and human resource development*) Expired in Apr 2020.
25. **Chopra, V.L.** (b 9 Aug, 1936) (*Specialization: Plant biotechnology, crop genetics and breeding*) Expired in May 2020.
26. **Choudhury, Bishwajit** (b 1926) (*Specialization: Vegetable Crop Improvement*) Expired in Dec 2000.
27. **Chowdhary, Kamla** (b 1920) (*Specialization: Environment Management, Social Capital*) Expired in Jan 2006.
28. **Cummings, Ralph W.** (b 13 Dec, 1911) (*Specialization: Soil fertility, Fertilizers & Crop Production*) Expired in Jun 2001.
29. **De, Rajat** (b 18 Nov, 1925) (*Specialization: Agronomy, Rainfed Agriculture*) Expired in May 2009.

30. **Dehadrai, P.V.** (b 21 Dec, 1938) (*Specialization: Fish Physiology, Endocrinology*) Expired in Jun 2011.
31. **Devadasan, K.** (b 7 Aug, 1946) (*Specialization: Fish Processing Technology*) Expired in Mar 2017.
32. **Dogra, P.D.** (b 14 Sep, 1931) (*Specialization: Forestry, Forest Genetics, Botany Reproductive Biology*) Expired in 1999.
33. **Dureja, Prem** (b 11 Mar, 1947) (*Specialization: Pesticide Chemistry "Organic Chemistry"*) Expired in May 2015.
34. **Dwivedi, S.N.** (b 16 Jun, 1933) (*Specialization: Fisheries, Environment*) Expired in Apr 2012.
35. **Evans, Lloyd Thomas** (b 6 Aug, 1927) (*Specialization: Flowering, Yield determination in Crops*) Expired in Apr 2015.
36. **Gajri, P.R.** (b 17 Sep, 1944) (*Specialization: Soil and Water Management, Tillage, Soil Physics, Rootgrowth*) Expired in Feb 2008.
37. **Ganguli, N.C.** (b 1 Aug, 1927) (*Specialization: Biochemistry, Dairy Science, Food Science*) Expired in May 2009.
38. **Gautam, O.P.** (b 1924) (*Specialization: Agronomy, Agricultural Education*) Expired in Dec 2002.
39. **Ghildyal, B.P.** (b 14 May, 1927) (*Specialization: Soil Science, Soil Physics, Soil Water Plant Relations*) Expired in Feb 2003.
40. **Gill, B.S.** (b 21 Dec, 1925) (*Specialization: Veterinary Parasitology, Epidemiology and Immunology*) Expired in Sep 2010.
41. **Gill, K.S.** (b 1 Sep, 1930) (*Specialization: Genetics & Plant Breeding*) Expired in Sep 2019.
42. **Gopalan, C** (b 29 Nov, 1918) (*Specialization: Nutrition in health and disease; maternal and child health*) Expired in Oct 2019.
43. **Gupta, Akshey K.** (b 28 Feb, 1938) (*Specialization: Genetics*) Expired in Dec 2005.
44. **Gupta, V.P.** (b 5 May, 1937) (*Specialization: Genetics and Plant Breeding*) Expired in Jun 2008.
45. **Guraya, S.S.** (b 12 Oct, 1930) (*Specialization: Reproductive Physiology of Animals*) Expired in Jul 2012.
46. **Handa, S.K.** (b 5 Jul, 1938) (*Specialization: Pesticide Residues*) Expired in Oct 2016.
47. **Intodia, S.L.** (b 18 Jul, 1939) (*Specialization: Extension Education*) Expired in Dec 2011.
48. **Jain, H.K.** (b 28 May, 1930) (*Specialization: Genetics, Agricultural Research Management*) Expired in Apr 2019.
49. **Jain, R.K.** (b 7 Oct, 1958) (*Specialization: Environmental Science, Microbiology*).
50. **Jayaraj, S.** (b 22 Nov, 1936) (*Specialization: Agricultural Entomology, Biological Pest Control-IPM*) Expired in Jun 2008.
51. **Jha, D.** (b 10 Mar, 1940) (*Specialization: Agricultural Economics*) Expired in Oct 2006.
52. **Joshi, A.B.** (b 17 Nov, 1916) (*Specialization: Cytology, Cytogenetics and Plant Breeding*) Expired in Jul 2010.
53. **Joshi, P.** (b 9 Aug, 1944) (*Specialization: Biometrical Genetics*) Expired in Nov 2015.
54. **Kadam, S.S.** (b 2 Jun, 1947) (*Specialization: Nutritional biochemistry, food science and technology*) Expired in Mar 2020.



55. **Kalra, Y.P.** (b 28 Oct, 1940) (*Specialization: Soil and Plant Analysis*) Expired in Oct 2014.
56. **Kannaiyan, S.** (b 4 Aug, 1944) (*Specialization: Agricultural Microbiology*) Expired in Oct 2011.
57. **Kanwar, J.S.** (b 10 Dec, 1922) (*Specialization: Soil Science, Agronomy*) Expired in Mar 2019.
58. **Kaushik, B.D.** (b 21 May, 1945) (*Specialization: Agricultural microbiology, biological nitrogen fixation*) Expired in Aug 2020.
59. **Kedharnath, S.** (b 10 Oct, 1921) (*Specialization: Cytogenetics, Forest Tree Breeding*) Expired in Dec 2004.
60. **Khan, Abrar M.** (b 23 Oct, 1919) (*Specialization: Plant Pathology, Nematology, Medicinal Plants*) Expired in Dec 2004.
61. **Khan, M. Wajid** (b 22 Aug, 1942) (*Specialization: Plant Pathology & Nematology, Environmental Plant Pathology*) Expired in Dec 2002.
62. **Khoshoo, T.N.** (b 7 Apr, 1927) (*Specialization: Plant Evolution & Improvement, Biomass Product, Environmental Science*) Expired in Jun 2002.
63. **Kurien, V.** (b 26 Nov, 1921) (*Specialization: Dairy Science*) Expired in Sep 2012.
64. **Mahapatra, I.C.** (b 18 Aug, 1929) (*Specialization: Agronomy and Crop Production*) Expired in Oct 2015.
65. **Meelu, O.P.** (b 30 May, 1935) (*Specialization: Soil Fertility*) Expired in May 2009.
66. **Mehrotra, K.N.** (b 1 Dec, 1930) (*Specialization: Insect Physiology & Biochemistry Entomology*) Expired in 1999.
67. **Mehta, T.R.** (b 3 Oct, 1908) (*Specialization: Genetics, Plant breeding*) Expired in Aug 2004.
68. **Minocha, J.L.** (b 15 Jul, 1936) (*Specialization: Genetics, Cytogenetics*) Expired in Mar 2004.
69. **Mohan Ram, H.Y.** (b 24 Sep, 1930) (*Specialization: Plant growth & Development, Economic Botany, Conservation Biology*) Expired in Jun 2018.
70. **Mohanty, P.K.** (b 1 Apr, 1934) (*Specialization: Bioenergetics of Chloroplasts and Mitochondria*) Expired in Mar 2013.
71. **Mukerjee, Sunil K.** (b 5 May, 1926) (*Specialization: Organic Chemistry, Agrochemicals*) Expired in Aug 2018.
72. **Mukherjee, Sushil Kumar** (b 1 Jan, 1914) (*Specialization: Physical Chemistry, Soil Science and Agricultural Chemistry*) Expired in Nov 2006.
73. **Mukhopadhyay, Sankar** (b 1 Sep, 1936) (*Specialization: Plant Protection, "Plant Virus and vector epidemiology" Tissue Culture, Medicinal plants*) Expired in Feb 2012.
74. **Murty, B.R.** (b 4 Apr, 1928) (*Specialization: Biometry and Statistical Genetics*) Expired in May 2003.
75. **Nagarajan, S.** (b 7 Nov, 1945) (*Specialization: Plant Pathology*) Expired in Dec 2016.
76. **Nair, N.B.** (b 6 Jul, 1927) (*Specialization: Aquatic Biology, Fisheries, Ecology*) Expired in Apr 2010.
77. **Nene, Y.L.** (b 24 Nov, 1936) (*Specialization: Plant Pathology*) Expired in Jan 2018.
78. **Notani, N.K.** (b 1930) (*Specialization: Plant Pathology*) Expired in 1994.
79. **Padwal Desai, S.R.** (b 7 Jun, 1940) (*Specialization: Radiation processing of Food*) Expired in Dec 2010.

80. **Pandey, R.** (b 10 Jul, 1939) (*Specialization: Animal Virology*) Expired in Apr 2016.
81. **Pandey, R.M.** (b 3 Jan, 1934) (*Specialization: Horticulture, Fruit Physiology, Horticulture Biotechnology*) Expired in Jul 2008.
82. **Pant, N.C.** (b 28 Jan, 1924) (*Specialization: Economics Entomology*) Expired in 1999.
83. **Poonia, S.R.** (b 1 Oct, 1942) (*Specialization: Soil Chemistry, Agricultural Water Management, Soil Pollution*) Expired in Apr 2019.
84. **Power, James F.** (b 18 Sep, 1929) (*Specialization: Soil Fertility*) Expired in 1999.
85. **Prakash, Ishwar** (b 17 Dec, 1931) (*Specialization: Vertebrate Ecology, Wildlife Conservation, Rodent Pest Management*) Expired in May 2002.
86. **Prakash, Shyam** (b 15 Oct, 1941) (*Specialization: Brassica Cytogenetics & Biotechnology*) Expired in Aug 2010.
87. **Prihar, S.S.** (b 15 Jul, 1932) (*Specialization: Soil Physics & Water Management*) Expired in Apr 2015.
88. **Pruthi, J.S.** (b 24 Jun, 1921) (*Specialization: Food Technology*) Expired in Sep 2003.
89. **Purkayastha, R.P.** (b 31 Aug, 1935) (*Specialization: Mycology and Plant Pathology*) Expired in Jan 2011.
90. **Qasim, S.Z.** (b 31 Dec, 1926) (*Specialization: Oceanography*) Expired in Oct 2015.
91. **Rajammal, (Ms.) Devadas P.** (b 15 Jul, 1919) (*Specialization: Home Science*) Expired in Dec 2002.
92. **Rama Das, V.S.** (b 5 Feb, 1933) (*Specialization: Plant Physiology, Photosynthesis*) Expired in Dec 2010.
93. **Randhawa, N.S.** (b 1927) (*Specialization: Soil Science, Agronomy and Agriculture*) Expired in Nov 1996.
94. **Rao, B.S. Narasinga** (b 11 Aug, 1928) (*Specialization: Nutrition*) Expired in Jan 2013.
95. **Rao, K. Manibhushan** (b 19 Nov, 1937) (*Specialization: Plant Pathology and Microbiology*) Expired in Apr 2011.
96. **Rao, M.V.** (b 21 Jun, 1928) (*Specialization: Plant Breeding & Genetics and Plant Pathology*) Expired in Mar 2016.
97. **Rao, N.G.P.** (b 5 Sep, 1927) (*Specialization: Plant Breeding and Genetics-Dryland Agriculture, Agricultural Research and Education*) Expired in Jul 2016.
98. **Rao, P.S.** (b 19 Mar, 1939) (*Specialization: Plant Cell & Tissue Culture, Plant Biotechnology*) Expired in Jul 2012.
99. **Raychaudhuri, S.P.** (b 31 Dec, 1915) (*Specialization: Plant Pathology, Virology, Phytoplasma Tissue Culture, Plant Protection, Medicinal Plants*) Expired in Aug 2005.
100. **Reddy, G.M.** (b 16 Nov, 1932) (*Specialization: Genetics, Plant Molecular Biology, Agricultural Biotechnology*) Expired in Apr 2009.
101. **Riley, Ralph** (b 23 Oct, 1924) (*Specialization: Plant Genetics, Cytogenetics*) Expired in 1999.
102. **Robin, S.** (b 14 May, 1964) (*Specialization: Genetics and Plant Breeding*) Expired in Apr 2017.
103. **Sadasivan, T.S.** (b 22 May, 1913) (*Specialization: Physiological Plant Pathology*) Expired in Aug 2001.

104. **Sahrawat, K.L.** (b 7 Nov, 1941) (*Specialization: Soil Chemistry & Fertility, Soil Biochemistry and Plant Nutrition*) Expired in Feb 2016.
105. **Sarbhoy, A.K.** (b 15 Jun, 1939) (*Specialization: Mycology & Plant Pathology*) Expired in Aug 2006.
106. **Sehgal, J.L.** (b 7 Sep, 1937) (*Specialization: Soil & Climatic Resources Appraisal, Land Evaluation for Land Use Planning*) Expired in Apr 2006.
107. **Sekhon, G.S.** (b 5 Nov, 1930) (*Specialization: Soil Fertility, Fertilizer use, Soil Management & Crop Production*) Expired in Oct 2008.
108. **Sen, S.K.** (b 24 Oct, 1936) (*Specialization: Genetics, Plant Breeding and Biotechnology*) Expired in Feb 2016.
109. **Sen-Sarma, P.K.** (b 1 Apr, 1929) (*Specialization: Forest Entomology, Termites, Agroforestry & Environmental Sciences, Insect Vectors*) Expired in Jul 2002.
110. **Seshadri, A.R.** (b 25 Sep, 1924) (*Specialization: Entomology with specialisation in Plant Nemotology*) Expired in Apr 2011.
111. **Sethuraj, M.R.** (b 26 Jun, 1939) (*Specialization: Plantation crops, natural rubber, tree crops, physiology, rubber based cropping systems, research management*)
112. **Sharma, A.K.** (b 31 Dec, 1924) (*Specialization: Cytogenetics, Cytochemistry & Cell Biology*) Expired in Jul 2017.
113. **Sharma, P.K.** (b 15 Mar, 1946) (*Specialization: Natural Resource Mapping and Management*) Expired in Oct 2013.
114. **Shastri, S.V.S.** (b 4 Nov, 1928) (*Specialization: Genetics, Cytogenetics and Plant Breeding*) Expired in 8 Feb 2019.
115. **Shekhawat, G.S.** (b 9 Jul, 1941) (*Specialization: Plant Protection*) Expired in Jan 2007.
116. **Sidhu, A.S.** (b 6 Jan, 1952) (*Specialization: Vegetable Science*) Expired in Apr 2016.
117. **Singh, B.P.N.** (b 8 Dec, 1936) (*Specialization: Agricultural Engineering*) Expired in May 2014.
118. **Singh, K.B.** (b 1 Dec, 1934) (*Specialization: Plant Breeding, Legume Improvement, Genetic Resources*) Expired in Dec 2000.
119. **Singh, Lalji** (b 5 Jul, 1947) (*Specialization: Animal Biotechnology, Molecular Biology*) Expired in Dec 2017.
120. **Singh, Ravender** (b 23 Feb, 1953) (*Specialization: Soil Science and Water Management*) Expired in Jun 2016.
121. **Singh, S.P.** (b 11 Aug, 1941) (*Specialization: Pest Management*) Expired in Dec 2014.
122. **Singh, N.N.** (b 20 Aug, 1943) (*Specialiation: Genetics and Plant Breeding*) Expired in Dec 2019.
123. **Singh, U.B.** (b 9 Jul, 1938) (*Specialization: Animal Nutrition*) Expired in 1994.
124. **Sinha, S.K.** (b 18 Jul, 1934) (*Specialization: Plant Sciences (Physiology & Biochemistry)*) Expired in Mar 2002.
125. **Sohi, H.S.** (b 25 Feb, 1930) (*Specialization: Mycology & Plant Pathology, Mushroom Culture*) Expired in Feb 2007.
126. **Soni, B.K.** (b 8 Apr, 1928) (*Specialization: Animal Production & Health*) Expired in Mar 2015.
127. **Subramanian, C.V.** (b 11 Aug, 1924) (*Specialization: Mycology and Plant Pathology, Evolution*) Expired in Feb 2016.

128. **Sukhatme, P.V.** (b 27 Jul, 1911) (*Specialization: Biometry Public Health, Hygiene and Nutrition*) Expired in Jan 1997.
129. **Swarup, Anand** (b 15 May, 1950) (*Specialization: Soil science, soil chemistry and fertility, fertilizer use, plant nutrition, salt affected & waterlogged soils, soil organic matter and carbon sequestration, integrated plant nutrient supply system and site-specific nutrient management.*) Expired in Oct 2020.
130. **Tandon, R.N.** (b 27 Nov, 1903) (*Specialization: Mycology, Plant Pathology and Physiology of Fungi*) Expired in 1999.
131. **Thomas, Joseph** (b 20 Mar, 1935) (*Specialization: Biological Nitrogen Fixation, Biotechnology*) Expired in Jan 2008.
132. **Thomas, Paul** (b 22 Mar, 1939) (*Specialization: Post-harvest physiology & technology of fruits and vegetables, food irradiation technology*) Expired in May 2020.
133. **Upadhyaya, M.D.** (b 9 Jun, 1935) (*Specialization: Plant Breeding, Cytogenetics*) Expired in Dec 2006.
134. **Verma, J.P.** (b 6 May, 1939) (*Specialization: Plant Pathology, Bacteriology, Cotton Pathology*) Expired in Sep 2005.
135. **Virmani, S.M.** (b 28 Jan, 1938) (*Specialization: Natural resource management, rainfed-dryland agriculture; agro-climatology; sustainable agriculture*) Expired in Nov 2019.
136. **Vyas, V.S.** (b 21 Aug, 1931) (*Specialization: Agricultural Policy and Rural Development*) Expired in Sep 2018.
137. **Yadav, J.S.P.** (b 30 Jul, 1922) (*Specialization: Soil Science, Water Management and Agro-forestry*) Expired in Apr 2010.
138. **Yadava, J.N.S.** (b 6 Jul, 1930) (*Specialization: Bacteriology Microbiology, Immunology, Bacterial Genetics, Virology*) Expired in Aug 2015.

### 3. NAAS ASSOCIATES

A scheme of NAAS Associates was introduced during the year 2002-03 for encouraging promising Scientists to be associated with the Academy activities. The scheme is to identify serving scientists below 40 years age group. The guidelines for selection of Associates as approved by the Executive Council are given in **Annexure I-D**. Up till now the 139 scientists have been selected as NAAS Associates out of which 39 Associates have been elected as Fellows of the Academy. Presently the following 100 scientists are NAAS Associates:



2021: **ACHARYA, Vishal** (b 21 May, 1982), Sp: Bioinformatics, Computational Biology; Senior Scientist, Biotechnology Division, CSIR-Institute of Himalayan Bioresource Technology, Post Box No. 6, Palampur 176061, H.P.; 28, Nagarkot Colony, Thakurdwara, PO Maranda, Palampur 176102, H.P.; [Tel: Off. (01894) 233339-493; Cell: 8219319536; Fax: (01894) 230433; Email: vishal@ihbt.res.in]



2007: **ADHIKARI, Tapan** (b 6 Aug, 1966), Sp: Soil Fertility/Chemistry/ Microbiology and Heavy Metal Pollution in Soils and Plants, Nanotechnology; Principal Scientist, Environmental Soil Science Division, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; A-36, Kakda Abhinav Homes, Ayodhya By-Pass Road, Ayodhya, Bhopal 462041, M.P.; [Tel: Off. (0755) 2730970 Extn 127; Res. (0755) 2689680, Cell: 9303129693; Fax: (0755) 2733310; Email: tapan\_12000@rediffmail.com]



2005: **AHMAD, Altaf** (b 5 Aug, 1972), Sp: Molecular Plant Physiology, Nanobiotechnology; Professor of Plant Biotechnology, Department of Botany, Faculty of Science, Aligarh Muslim University, Aligarh 202002, U.P.; A/B 89, Medical College Colony, AMU Campus, Aligarh 202002, U.P.; [Tel: Off. (0571) 2700920 Ext. 3309; Cell: 9999886334; Email: ahmadaltaf@yahoo.com; aahmad.bo@amu.ac.in]



2012: **BANDYOPADHYAY, Samiran** (b 23 Dec, 1977), Sp: Animal Health; Scientist (Senior Scale), ICAR-Indian Veterinary Research Institute, Eastern Regional Station, 37 Belgachia Road, Kolkata 700037, W.B.; Type IV Quarters, Quarter No. 4, IVRI, ERS Campus, 37 Belgachia Road, Kolkata 700037, W.B.; [Tel: Cell: 9434082634; Email: samiranvet@gmail.com; banerjeevet@gmail.com]



2021: **BASAK, Biraj Bandhu** (b 27 Jan, 1983), Sp: Soil Science; Scientist, ICAR-Directorate of Medicinal and Aromatic Plants, Research, Boriavi, Anand 387310, Gujarat; [Tel: Off. (02692) 271605 Ext. 239; Cell: 9099734660; Fax: (02692) 271601; Email: biraj.ssac@gmail.com; biraj.basak@icar.gov.in]



2018: **BEHARE, Pradip Vishnu** (b 7 May, 1979), Sp: dairy Microbiology; Scientist (SS), Dairy Microbiology, Room No. 112, Dairy Microbiology Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; C-24 Quarter, NDRI Residential Campus, Karnal 132001, Haryana; [Tel: Off. (0184) 2259192, 2259198; Res. (0184) 2259580; Cell: 8295726103; Fax: (0184) 2250042; Email: pradip\_behare@yahoo.com]



2017: **BEHERE, Gajanan** (b 1 Jun, 1976), Sp: Insect Molecular Biology and Insect Population Genetics; Principal Scientist (Agril. Entomology), ICAR-Central Citrus Research Institute (CCRI), Amravati Road, Nagpur 440033, Maharashtra; Duplex No: 02, Sparkling Meadows, Near Snehi Park, Panjri, Nagpur 441108, Maharashtra; [Tel: Off. (0712) 2500249, Ext 127; Cell: 9402506461; Email: ganeshbehere@gmail.com]



2013: **BERA, Asit Kumar** (b 2 May, 1972), Sp: Animal Health; Senior Scientist, Reservoir & Wetland Fisheries Division, ICAR-Central Inland Fisheries Research Institute, Barrackpore, Kolkata 700120, W.B.; [Tel: Cell.: 9432015127; Email: asitmed2000@yahoo.com]



2020: **BHANU PRAKASH** (b 1 Jun, 1985), Sp: Agricultural Entomology, Microbiology and Plant Pathology; Assistant Professor, Department of Botany, Institute of Science, Banaras Hindu University, Varanasi 221005, U.P.; Village: Bedauli (Bhitari Road), Post: Lohta, Varanasi 221107, U.P.; [Tel: Cell: 9794113055; Email: bprakash@bhu.ac.in; bhanubhu08@gmail.com]



2005: **BHILEGAONKAR, Kiran Narayan** (b 4 Jul, 1965), Sp: Veterinary Public Health; Principal Scientist and Station In-charge, Training and Education Centre, ICAR-Indian Veterinary Research Institute, Agriculture College Campus, Shivajinagar, Pune 411005, Maharashtra; A-401, Anusha Residency, Pashan-Sus Road, Near Sai Chowk, Pashan, Pune 411021, Maharashtra; [Tel: Off. (020) 25537401; Cell: 9410404828; Email: kiranvph@rediffmail.com; kiranvph@gmail.com]



2017: **BISHT, Naveen Chandra** (b 1 Feb, 1978), Sp: Plant Biotechnology; Staff Scientist V, National Institute of Plant Genome Research (NIPGR), Lab No. 106, Aruna Asaf Ali Marg, PO Box NO. 10531, New Delhi 110067; H-102, Type IV(S), NIPGR, Aruna Asaf Ali Marg, New Delhi 110067; [Tel: Off. (011) 26735183; Res. (011) 26735216; Cell: 8800840839; Fax: (011) 26741658; Email: ncbisht@nipgr.ac.in; ncbisht@gmail.com]



2016: **BISWAS, Ashim Kumar** (b 5 Mar, 1978), Sp: Livestock Products Technology; Senior Scientist, Division of Post-Harvest Technology, ICAR-Central Avian Research Institute, Izatnagar, Bareilly 243122, U.P.; No. 06, Type-IV, CARI Residential Complex, IVRI Campus, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0581) 2303223, 23300204; Cell: 8394818600, 9690171170; Fax: (0581) 2301321; Email: akb.iiss.bpl@gmail.com]



2011: **CHAKRABORTY, Debashis** (b 2 Nov, 1970), Sp: Soil and Water Management; National Fellow (ICAR), Division of Agricultural Physics, ICAR-Indian Agricultural Research Institute, NRL Building, New Delhi 110012; 2-C, Scientist Apartment, IARI, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25842321; Res. (011) 21520069; Cell: 8826743644; Fax: (011) 25846420; Email: debashis.chakraborty@icar.gov.in; debashisiari@gmail.com]



2021: **CHAKRABORTY, Koushik** (b 25 Aug, 1981), Sp: Plant Physiology; Scientist (Senior Scale), Division of Crop Physiology & Biochemistry, ICAR-National Rice Research Institute, Bidyadharpur, Cuttack 753006, Odisha; Plot No. 1152, Mahanadi Vihar, P.O. Chauliaganj, Naya Bazar, Cuttack 753004, Odisha; [Tel: Off. (0671) 2367768 Ext 2269; Cell: 8895838858, 7008513034; Fax: (0671) 2367663; Email: koushikiari@gmail.com; koushik.chakraborty@icar.gov.in]



2020: **DASH, Ch. Jyoti Prava** (b 8 May, 1980), Sp: Soil and Water Conservation Engineering; Scientist, ICAR-Indian Inst of Soil and Water Conservation, Research Centre, Sunabeda, Koraput 763002, Odisha; Quarter: Type IV/1, ICAR-Indian Inst. of Soil and Water Conservation, Research Centre, Sunabeda, Koraput 763002, Odisha; [Tel: (06853) 220125; Cell: 9178127347, 9439910251; Email: jyoti.dash@icar.gov.in; jyoti.551@gmail.com]



2016: **DATTA, Arindam** (b 17 Jul, 1979), Sp: Adaptation to climate change; Fellow, Centre for Environmental Studies, The Energy and Resources Institute, Darbari Seth Block, India Habitat Center, New Delhi 110003; 42, Elias Road, Kolkata 700058, W.B.; [Tel: Off. (011) 24682100; Res. (033) 25638156; Fax: (011) 24682144; Email: arindam.datta@teri.res.in]



2019: **DEB, Rajib** (b 5 Apr, 1981), Sp: Animal Biotechnology; Scientist (SS), ICAR-National Research Center on Pig, Rani, Guwahati 781131, Assam; Type III/II, CIRC Campus, ICAR-CIRC, Grass Farm Road, Meerutcantt, Meerut 250001, U.P.; [Tel: Off. (0121) 2645598; Cell: 7060385213; Fax: (0121) 2657134; Email: drrajibdeb@gmail.com; rajib.deb@icar.gov.in]



2020: **DEY, Shyam Sundar** (b 28 Nov, 1981), Sp: Horticulture (Vegetable Science); Senior Scientist, Division of Vegetable Science, ICAR-Indian Agricultural Research Institute, New Delhi 110012; EG-87, 1st Floor, Inderpuri, New Delhi 110012; [Tel: Cell: 9816270402; Fax: (011) 25847148; Email: ssdey@iari.res.in; shyam.iari@gmail.com]



2011: **DHALI, Arindam** (b 13 Nov, 1972), Sp: Animal Production, Animal Biotechnology; Senior Scientist (Biotechnology-AS), ICAR-National Institute of Animal Nutrition and Physiology, Adugodi, Bengaluru 560030, Karnataka; Type III, Qtr No. 16, Residential Complex, NIANP, Adugodi, Bengaluru 560030, Karnataka; [Tel: Off. (080) 25711304; Cell: 9449810329; Fax: (080) 25711420; Email: dhali72@yahoo.com; dhali72@rediffmail.com]



2010: **DHAMA, Kuldeep** (b 15 Aug, 1969), Sp: Veterinary Microbiology and Avian Health; Principal Scientist, Avian Diseases Section, Division of Pathology, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly 243122, U.P.; Officer Q.No. D-50, Type IV, IVRI Campus, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0581) 2310074; Cell: 9837654996; Fax: (0581) 2303284, 2302179; Email: kdhama@rediffmail.com]



2011: **DUBEY, Vikash Kumar** (b 1 May, 1975), Sp: Medical Biotechnology/ Plant Protease/Natural Products; Professor, School of Biochemical Engineering, Indian Institute of Technology (BHU) Varanasi, Varanasi 221005, U.P.; Klion Enclave City, Flat No. 3201, Sunderpur, Varanasi 221005, U.P.; [Tel: Off. (0361) 2582203; Res. (0361) 2584203; Fax: (0361) 2582249; Email: vkdubey.bce@iitbhu.ac.in]; *Young Scientist Award 2009-2010*



2021: **FIRAKE, Dnyaneshwar Madhukar** (b 9 May, 1983), Sp: Agricultural Entomology; Senior Scientist (Agril. Entomology), ICAR-Directorate of Floricultural Research, Mundawa, Pune 411036, Maharashtra; [Tel: Cell: 9402195450; Email: dfirake@gmail.com]



2021: **GIRI, Rajanish** (b 1 Mar, 1984), Sp: Biochemistry, Protein Folding, Drug Discovery, Zika virus; Assistant Professor, School of Basic Sciences, Indian Institute of Technology Mandi, Kamand Campus, VPO Kamand, Distt. Mandi 175005, H.P.; C5 Block, G1 Flat, Indian Institute of Technology Mandi, Kamand Campus, VPO Kamand, Distt. Mandi 175005, H.P.; [Tel: Off. (01905) 267134; Cell: 9816014007; Email: rajanishgiri@gmail.com; rajanishgiri@iitmandi.ac.in]



2019: **GOTYAL, Bheemanna Somanna** (b 25 Jun, 1981), Sp: Agricultural Entomology; Senior Scientist, Division of Crop Protection, Room No. 109, Central Research Inst. for Jute and Allied Fibres, Saheb Bagan, Nilgunj, Barrackpore, Kolkata 700121, W.B.; Type-III quarter, No. 2, Saheb Bagan, Nilgunj, Barrackpore, Kolkata 700121, W.B.; [Tel: Off. 9007497351; Fax: (033) 25350415; Email: gotyalento@gmail.com]



2008: **HATI, Kuntal Mouli** (b 28 May, 1969), Sp: Soil Physics; Principal Scientist, Division of Soil Physics, ICAR-Indian Institute of Soil Science, Nabibagh, Berasia Road, Bhopal 462038, M.P.; Jasmine-426, New Minal Residency, J.K. Road, Bhopal 462023, M.P.; [Tel: Off. (0755) 2730970; Res. (0755) 6543888, Cell: 9407259212; Fax: (0755) 2733310; Email: kmh@iiss.res.in; kuntalmouli@gmail.com]



2021: **HATI, Subrota** (b 2 May, 1984), Sp: Dairy Microbiology; Assistant Professor, Department of Dairy Microbiology, SMC College of Dairy Science, Anand Agricultural University, Anand 388110, Gujarat; Q. No. B-12 (Veterinary Staff Quarter), AAU, Anand 388110, Gujarat; [Tel: Cell: 9409669561; Email: subrota\_dt@yahoo.com]



2007: **HAYAT, Shamsul** (b 12 Feb, 1968), Sp: Plant Physiology & Biochemistry; Professor, Plant Physiology Section, Department of Botany, Aligarh Muslim University, Aligarh 202002, U.P.; A-2, Al-Hafeez Apartment, Iqra Road, New Sir Syed Nagar, Aligarh 202002, U.P.; [Tel: Off. (0571) 2702016; Cell: 9412328593; Email: shayat@lycos.com; hayat\_68@yahoo.co.in]





2020: **IQUEBAL, Mir Asif** (b 11 Nov, 1980), Sp: Agricultural Statistics, Bioinformatics / Computational Biology; Senior Scientist, Room No. 105, Centre for Agril. Bioinformatics, ICAR-Indian Agril. Statistics Research Institute, New Delhi 110012; CGD 094, D Block, DLF Capital Greens, 15, Shivaji Marg, New Delhi 110015; [Tel: Off. (011) 25847121 Ext. 4324; Cell 8860912108; Fax: (011) 25841564; Email: ma.iquebal@icar.gov.in; jiqubal@gmail.com]



2007: **JADHAO, Sanjay Balkrishna** (b 23 Sep, 1968), Sp: Animal Nutrition and Metabolism; Director, Research and Development, International Nutrition, 9707 Jefferson Plaza #12, Omaha NE 68127, USA; 19, Sarjan CHS, RSC-2, MHADA, Malwani, Malad (W), Mumbai 400095, Maharashtra; [Tel: Off. +1-352-222-0652; Email: jadhao.sanjay@gmail.com]



2021: **JAT, Shankar Lal** (b 3 Feb, 1983), Sp: Conservation Agriculture & nutrient management; Scientist (Senior Scale), No. 105, Cummings Lab, ICAR-Indian Institute of Maize Research, Delhi Unit, Pusa Campus, New Delhi 110012; HA-05, Kaveri Apartments, Pusa Campus, New Delhi 110012; [Tel: Off. (011) 25841805; Cell: 9953009711; Fax: (0161) 2430038; Email: sliari@gmail.com; sliari2016@gmail.com; sl.jat@icar.gov.in]



2021: **JHA, Shailendra Kumar** (b 1 Mar, 1981), Sp: Genetics and Plant Breeding; Senior Scientist, Division of Genetics, ICAR-Indian Agricultural Research Institute, Pusa, New Delhi 110012; NRC6/46, ICAR-IARI, Pusa, New Delhi 110012; [Tel: Cell: 8920056519, 9868574102; Email: jhashail78@gmail.com]



2019: **KASHYAP, Prem Lal** (b 22 Nov, 1981), Sp: Plant Pathology; Scientist, ICAR-Indian Institute of Wheat and Barley Research, (IIWBR), P.O. 158, Agarsain Marg, Karnal 132001, Haryana; Ward No. 7, Purani Tehsil Bhawan, Sheela Kakar, Arki, Distt. Solan 173207, H.P.; [Tel: Off. (0184) 2267495; Res. (01796) 220159; Cell: 9459428705; Fax: (0184) 2267390; Email: plkashyap@gmail.com; prem.kashyap@icar.org.in]



2017: **KAUR, Amritpal** (b 3 Mar, 1978), Sp: Food Technology; Assistant Professor, Department of Food Science and Technology, Guru Nanak Dev University, Grand Trunk Road, Off NH1, Amritsar 143001; 14, Amrit Vihar, Lane No. 3, B/s Municipal Corp Zone-8, Chehharta, Amritsar; [Tel: Off. (0183) 2258802-09 Ext 3214; Fax: (0183) 2258820; Email: amritft33@yahoo.co.in]



2006: **KAUSHAL, Pankaj** (b 30 Sep, 1970), Sp: Fodder Crops Genetics and Breeding, Apomixis; Principal Scientist & Joint Director (Research), ICAR-National Inst. of Biotic Stress Management, Raipur 493225, Chhattisgarh; S-301, Shanti Tower, 85/1 Basant Vihar, Civil Lines, Jhansi 284002, U.P.; [Tel: Off. (0771) 2225353; Cell: 9198890991; Fax: (0771) 2225333; Email: pkaushal70@gmail.com]



2021: **KOLEY, Tanmay Kumar** (b 14 Mar, 1984), Sp: Horticulture; Scientist, Division of Socio-Economics & Extension, ICAR-Research Complex for Eastern Region, ICAR Parisar, Patna 800014, Bihar; Village-Binola, P.O. Thalia, Howrah 711401, W.B.; [Tel: Off. (0612) 2223962; Cell: 9369641602; Fax: (0612) 2223956; Email: tanmay.iari@gmail.com]



2020: **KRISHNAMURTHY, S.L.** (b 16 Jun, 1980), Sp: Genetics and Plant Breeding; Scientist (Plant Breeding), Division of Crop Improvement, Central Soil Salinity Research Institute, Karnal 132001, Haryana; S/o Late S.M. Lakshmaiah, Saraswathipura, Kadur, Chikmagalur Dist 577548, Karnataka; [Tel: (0184) 2290388; Cell: 8053726399; Fax: (0184) 2290480; Email: krishnagene@gmail.com]



2014: **KULWAL, Pawan Laxminarayan** (b 10 Apr, 1977), Sp: Genetics and Plant Breeding; Professor (CAS), State Level Biotechnology Centre, Mahatma Phule Krishi Vidyapeeth, District: Ahmednagar, Rahuri 413722, Maharashtra; D-20, Arvind Colony, Mahatma Phule Krishi Vidyapeeth Campus, District: Ahmednagar, Rahuri 413722, Maharashtra; [Tel: Off. (02426) 243578; Res. (02426) 243033, Cell: 9404113740; Fax: (02426) 243578; Email: pawankulwal@gmail.com]



2017: **KUMAR, Amit** (b 2 Oct, 1977), Sp: Animal Genetics and Breeding; Senior Scientist, Animal Genetics, ICAR-Indian Veterinary Research Institute, Bareilly 243122, U.P.; 23-Narendra Vihar, Rajendranagar, Bareilly 243122; [Tel: Off. (0581) 2303382; Cell: 9219614456; Fax: (0581) 2303284; Email: vetamitchandan07@gmail.com]



2020: **KUMAR, Bhupender** (b 27 Dec, 1981), Sp: Genetics and Plant Breeding; Scientist (Senior Scale), ICAR-Indian Institute of Maize Research, IARI, Pusa Campus, New Delhi 110012; NRC-27, Block 4, Type-IV Quarters, IARI, Pusa, New Delhi 110012; [Tel: (011) 25841805; Cell: 8178853070; Email: bhupender.iimr@gmail.com]



2007: **KUMAR, Dinesh** (b 22 Jan, 1969), Sp: Plant Biochemistry (Potato & Barley quality); Principal Scientist (Plant Biochemistry), ICAR-Indian Institute of Wheat & Barley Research, Maharaja Aggarsain Marg, Karnal 132001, Haryana; House No. G/C 501, CHD City (Opp. Karna Lake), Karnal 132001, Haryana; [Tel: Off. (0184) 2209198; Cell: 9467964836; Fax: (0184) 2267390; Email: dkbiochem69@gmail.com]



2008: **KUMAR, Parveen** (b 19 Mar, 1970), Sp: Agronomy (Management of salt affected soil and poor quality water; Potato Agronomy); Principal Scientist, Natural Resources Management Division, Room No. 110, KAB-II, ICAR, New Delhi 110012; House No. 1204, Sector 6, Karnal 132001, Haryana; [Tel: Off. (011) 25842716; Cell: 9468409209, 8930409204; Fax: (0184) 2290480; Email: pkumarcssri@gmail.com; parveen.kumar@icar.gov.in]



2011: **KUMAR, Rajesh** (*b 16 Jan, 1973*), Sp: Development of Agrochemicals; Principal Scientist, Division of Agricultural Chemicals, ICAR-Indian Agricultural Research Institute, New Delhi 110012; AA-287, Shalimar Bagh, Delhi 110088; [Tel: Off. (011) 25841390; Cell: 9810760252; Fax: (011) 25843272; Email: rkb\_1973@yahoo.co.in; rajesh\_agchem@iari.res.in]



2015: **KUMARESAN, A.** (*b 23 Jul, 1974*), Sp: Animal Reproduction; Principal Scientist (Animal Reproduction), Theriogenology Laboratory, Southern Regional Station of ICAR-NDRI, Adugodi, Bengaluru 560030, Karnataka; D-4, ICAR-NDRI Campus, Hosur Road, Adugodi, Bengaluru 560030, Karnataka; [Tel: Cell: 9671673108; Fax: (080) 25710161; Email: ogkumaresan@gmail.com; a.kumaresan@icar.gov.in]



2015: **LENKA, Narendra Kumar** (*b 22 May, 1974*), Sp: Soil and Water Management; Principal Scientist (Soil Physics & SWC), ICAR-Indian Institute of Soil Science, Nabi Bagh, Berasia Road, Bhopal 462038, M.P.; House No. Rose-360, New Minal Residency, J.K. Road, Bhopal 462023, M.P.; [Tel: Off. (0755) 2730970; Cell: 8109237320, 9826735583; Email: nklenka@rediffmail.com]



2013: **MADHAV, Maganti Sheshu** (*b 24 Aug, 1972*), Sp: Plant Biotechnology; Principal Scientist (Biotechnology), Crop Improvement Section, ICAR-Indian Institute of Rice Research (IIRR), Rajendranagar, Hyderabad 500030, Telangana; Plot No. 1/A, Road No. 4, Anathula Colony, Sai Nagar, Hyderabad 500068, Telangana; [Tel: Off. (040) 24591208; Cell: 9581239979; Fax: (040) 24591217; Email: sheshu24@gmail.com]



2010: **MALIK, Yashpal Singh** (*b 14 Oct, 1973*), Sp: Diagnostic & Environmental Microbiology; Dean, College of Animal Biotechnology, Guru Angad Dev Veterinary and Animal Sciences Uni., Ludhiana 140004, Punjab; D61 Type IV Quarter, IVRI, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0161) 2920191, 2920192; Cell: 7500777999, 7618370001; Email: deancoabt@gmail.com; malikyps@gmail.com]



2021: **MANDAL, Sandip** (*b 25 Apr, 1983*), Sp: Farm Machinery & Power; Scientist (SG), ICAR-Central Institute of Agricultural Engineering, Nabibagh, Berasia Road, Bhopal 462038, M.P.; R402, Comfort Heights, Neori, Nr New Jail, Bhopal 462038, M.P.; [Tel: Off. (0755) 2521128; Cell: 9720323421; Email: smandal2604@gmail.com]



2014: **MANGARAJ, Shukadev** (*b 18 Jun, 1975*), Sp: Agricultural Process Engineering; Principal Scientist, ICAR-Central Institute of Agricultural Engineering, Nabibagh, Berasia Road, Bhopal 462038, M.P.; H-17, Kakda Abhinav Homes, Ayodhya Bypass Road, Bhopal 462041, M.P.; [Tel: Off. (0755) 2521064; Cell: 9630860191; Fax: (0755) 2734016; Email: sukhdev0108@gmail.com]



2017: **MANGRAUTHIA, Satendra Kumar** (b 1 Jan, 1982), Sp: Plant Biochemistry; Scientist (SS), Biotechnology Section, ICAR-Indian Institute of Rice Research, Formerly DRR, Rajendranagar, Hyderabad 500030, Telangana; Flat No. 509, Lahiri Fort View Apartment, Behind Janapriya, Hyderguda, Attapur, Hyderabad 500048, Telangana; [Tel: Off. (040) 24591342; Cell: 9346533605; Fax: (040) 24591217; Email: skmdrr@gmail.com]



2016: **MASTO, Reginald Ebhin** (b 12 May, 1977), Sp: Soil Science; Senior Scientist (E1) & Asst. Professor (AcSIR), Environmental Management Division, CSIR-Central Institute of Mining and Fuel Research, Digwadih Campus, PO: FRI, Dhanbad 828108, Jharkhand; Type IV/8, CIMFR Colony, PO: FRI, Dhanbad 828108, Jharkhand; [Tel: Off. (0326) 2388339; Res. (0326) 2382908; Fax: (0326) 2381113; Email: mastocfri@yahoo.com]



2012: **MATHEW, Deepu** (b 17 May, 1976), Sp: Vegetable Science; Assistant Professor, Centre for Plant Biotechnology & Molecular Biology, College of Horticulture, Kerala Agricultural Univ., IT-BT Complex, KAU Post, Thrissur 680656, Kerala; Quarter No. III C, KVK, Vellanikkara, KAU Post, Thrissur 680656, Kerala; [Tel: Off. (0487) 2438585; Cell: 9446478503; Fax: (0487) 2371994; Email: deepuhort@gmail.com; deepu.mathew@kau.in]



2020: **MEENA, Vijay Singh** (b 14 Nov, 1988), Sp: Soil Science; Project Coordinator, Borlaug Institute for South Asia (BISA), Pusa, Samastipur 848125, Bihar; Quarter No. 10, Type III, ICAR-VPKAS Colony, Experimental Farm Hawalbagh, Kosi, Almora 263643, Uttarakhand; [Tel: Cell: 9410971469; Email: vijayssac.bhu@gmail.com; vijay.meena@icar.gov.in]



2018: **MISHRA, Gyan Prakash** (b 3 Mar, 1978), Sp: Genetics and Plant Breeding; Principal Scientist (Genetics and Plant Breeding), Division of Genetics, ICAR-Indian Agricultural Research Institute, Pusa, New Delhi 110012; H.No. D-41, Type IV, Ground Floor, (Near Saraswati Hostel), IARI, New Delhi 110012; [Tel: Off. (011) 258414817; Cell: 8140128622; 8810254373; Email: gyan.gene@gmail.com; gyan.mishra@icar.gov.in]



2019: **MOHAN, C.O.** (b 20 Jun, 1979), Sp: Fish Processing & Technology; Senior Scientist, ICAR-Central Institute of Fisheries Technology, Cochin 682029, Kerala; 'Sannamma-SAMRIDHI', House No. 7B, DD Highway Heights, Behind Maradu Vegetable Market, Moothedom Road, Maradu, Cochin 682040, Kerala; Permanent Address: S/o Shri C.R. Obaiah, B. Devaraju Road, Karuvinakatte Circle, Chitradurga 577501 Karnataka; [Tel: Off. (0484) 2412366; Cell: 8136850121; Fax: (0484) 2668212; Email: comohan@gmail.com]



2008: **MONDAL, Mohan** (b 3 Nov, 1973), Sp: Animal Physiology; Senior Scientist, ICAR-National Dairy Research Institute, Eastern Regional Station, A-12 Block, Kalyani 741235, W.B.; A-10/367, Kalyani 714235, W.B.; [Tel: Off. (033) 25828264; Cell: 8902258026; Fax: (033) 25828264; Email: drmmondal@gmail.com; mmondal@icar.org.in]



2012: **NANDI, Sumanta** (b 14 Nov, 1971), Sp: Animal Physiology; Senior Scientist, Animal Physiology Division, ICAR-National Inst of Animal Nutr. & Physiology, Adugodi, Bengaluru 560030, Karnataka; No. 8, Type-IV, NIANP Residential Complex, NIANP, Adugodi, Bengaluru 560030, Karnataka; [Tel: Off. (080) 25711164; Res. (080) 25704146; Cell: 9964310877; Fax: (080) 2570420; Email: snandi71@yahoo.co.in; snandi71@gmail.com]



2019: **NEERAJ KUMAR** (b 10 May, 1982), Sp: Fish Nutrition and Biochemistry; Scientist, ICAR-National Institute of Abiotic Stress Mangt., Malegaon, Baramati, Pune 413115, Maharashtra; Permanent Address: S/o Shri Ashok Kumar Achal, At: New Bigrah Pur, Near Lower Primary School, Post: GPO, Dist: Patna 800001, Bihar; [Tel: Off. (02112) 254058 / 57; Cell: 7743832938; Fax: (02112) 254056; Email: neeraj.rishu@gmail.com; neeraj\_journal@live.in]



2016: **ONTERU, Suneel Kumar** (b 23 Jun, 1976), Sp: Animal Biochemistry; Senior Scientist (ABC), Animal Biochemistry Division, ICAR-National Dairy Research Institute, Karnal 132001, Haryana; GB-SF-58, CHD City, Sector-45, Opp to Oasis/Karan Lake, Karnal 132001, Haryana; [Tel: Off. (0184) 2259123; Cell: 8950735613; Fax: (0184) 2250042; Email: suneelvet@gmail.com]



2017: **PANDEY, Manish Kumar** (b 10 Apr, 1978), Sp: Genetics, breeding and plant biotechnology; Scientist - Groundnut Genomics, Center of Excellence in Genomics (CEG), Research Program-Genetic Grains, International, Center Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, Hyderabad 502324, Telangana; Flat No. 302, SS Aditya Sreebalaji Apartments, Tellapur Road, Nallagandla, Hyderabad 500019, Telangana; [Tel: Off. (040) 30713430; Cell: 8790057150; Fax: (040) 30713074/75; Email: manishgenetics@gmail.com; m.pandey@cgjar.org]



2013: **PANDEY, Sudhir Kumar** (b 1 Nov, 1978), Sp: Ecology and Environmental Sciences; Assistant Professor, Department of Botany, Guru Ghasidas Vishwavidyalaya, Koni, Bilaspur 495009, Chhattisgarh; C-6, Ganesh Enclave Colony, Chhotti Koni, Bilaspur 495009, Chhattisgarh; [Tel: Off. (07752) 260471; Cell: 7587194630, 7752260123; Fax: (07752) 260148; Email: skpbhu@gmail.com]



2019: **PARAMESWARI, Balasubramaniam** (b 20 Jun, 1980), Sp: Plant Pathology; Senior Scientist (Plant Pathology), ICAR-NBPGR Regional Centre, Rajendra Nagar, Hyderabad 500030, Telangana; House No. 118, Dhannis 9 Square, Hyderabad 500030, Telangana; [Tel: Off. (040) 24014072; Cell: 9468178283; Fax: (040) 24014072; Email: paramathnem@gmail.com]



2019: **PARIHAR, Ashok Kumar** (b 9 Sep, 1982), Sp: Plant Breeding & Genetics; Scientist (Sr Scale), ICAR-Indian Institute of Pulses Research, Kalyanpur, Kanpur 208024, U.P.; Type IV/IV, ICAR-IIIPR, Residential Colony, Kalyanpur, Kanpur 208024, U.P.; [Tel: Off. (0512) 2580985; Cell: 7376301342; Fax: (0512) 25840992; Email: ashoka.parihar@gmail.com]



2008: **PATEL, V.B.** (b 19 Aug, 1975), Sp: Horticulture - Fruit Science; Principal Scientist, Division of Fruits and Horticultural Technology, Indian Agricultural Research Institute, New Delhi 110012; D-II/1, Type V Quarters, ICAR-IARI, New Delhi 110012; [Tel: Off. (011) 25843214; Cell: 8294290141; Fax: (011) 25843214; Email: patelvb@iari.res.in; patelvb7@gmail.com]



2014: **PATRA, Amlan Kumar** (b 13 Jun, 1975), Sp: Animal Nutrition; Lecturer, Department of Animal Nutrition, Faculty of Veterinary Sciences, W.B. University of Animal & Fishery Sciences, 37, K.B. Sarani, Belgachia, Kolkata 700037, W.B.; Dewanchak, P.O. - Chowka, District: Midnapur (West) 721232, W.B.; [Tel: Off. (033) 25569234; Cell: 9163760697; Fax: (033) 25571986; Email: patra\_amlan@yahoo.com]



2017: **PRAJAPATI, Vijay Kumar** (b 5 Jul, 1984), Sp: Animal Biochemistry and Biotechnology; Assistant Professor, Dept. of Biochemistry, School of Life Sciences, Central University of Rajasthan, Bandarsindri, Kishangarh, Ajmer 305801, Rajasthan; [Tel: Cell: 7597271362; Email: vkprajapati@curaj.ac.in; vijay84bhu@gmail.com]; *Young Scientist Award 2015-2016*



2005: **PRASANNA, Radha** (b 2 Aug, 1964), Sp: Plant-microbe interactions and Microbial inoculants; Professor, Division of Microbiology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; C-115, First Floor, Inderpuri, New Delhi 110012; [Tel: Off. (011) 25842112; Res. (011) 25835014; Cell: 9911188793; Fax: (011) 25846420; Email: radhapr@gmail.com; radhapr@iari.res.in]



2012: **RAJKHOWA, Swaraj** (b 1 Jan, 1972), Sp: Animal Health (Veterinary Medicine); Senior Scientist (Veterinary Medicine), National Research Centre on Pig, ICAR-Indian Council of Agricultural Research, Rani, Guwahati 781131, Assam; East Gotanagar, Maligaon, Guwahati 781131, Assam; [Tel: Off. (0361) 2847195, 2847221; Cell: 9435732488; Fax: (0361) 2847195; Email: swaraj.rajkhowa@gmail.com]



2014: **RANJAN, Rakesh** (b 9 Mar, 1975), Sp: Animal Health (Veterinary Medicine); Senior Scientist (Veterinary Medicine), ICAR-National Research Center on Camel, Post Bag No. 7, Jorbeer, Bikaner 334001, Rajasthan; [Tel: Off. (0151) 2230183; Cell: 9462470522; Fax: (0151) 2231213; Email: rakesh\_ranjan3@rediffmail.com; ranjanpau@gmail.com]



2019: **RANJAN, Ravi** (b 11 Dec, 1979), Sp: Animal Physiology; Senior Scientist, Animal Physiology and Reproduction Division, ICAR-Central Inst. for Research on Goat, Makhdoom, Farah, Mathura 281122, U.P.; Ex-333, Bhawna Estate, Sikandra, Agra 282007, U.P.; [Tel: (0565) 2763380; 9897794493; Fax: (0565) 2763246; Email: dr\_raviranjan@yahoo.co.in]



2012: **RAO, Eguru Sreenivasa** (b 23 Jul, 1973), Sp: Vegetable breeding; Senior Scientist, Division of Vegetable Crops, ICAR-Indian Institute of Horticultural Research, Hessaraghatta Lake Post, Bengaluru 560089, Karnataka; 319, SF-407, Yelahanka New Town, Bengaluru 560064, Karnataka; [Tel: Off. (080) 28466420; Res. (080) 28463079; Fax: (080) 28466291; Email: esrao@iihr.ernet.in]



2006: **REDDY, D. Damodar** (b 15 Jun, 1967), Sp: Soil Science - Soil Chemistry/Fertility; Director, ICAR-Central Tobacco Research Institute, Bhaskar Nagar, Rajahmundry 533105, A.P.; #F-1, Director's Residence, CTRI Quarters, Opp. Ramakrishna Math, Korukonda Road, Rajahmundry 533105, A.P.; [Tel: Off: (0883) 2448995, Cell: 9440802569; Fax: (0883) 2410555; Email: ddreddy132@yahoo.com; ddreddy132@gmail.com]



2012: **ROY, Anirban** (b 2 Jun, 1975), Sp: Plant Pathology; Principal Scientist, Advanced Centre for Plant Virology, Division of Plant Pathology, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 721, Krishi Kunj, New Delhi 110012; [Tel: Off. (011) 25843474; Res. (011) 25832033; Cell: 9560083999; Fax: (011) 25840772; Email: anirbanroy75@yahoo.com]



2005: **RUPA, T.R.** (b 9 Jul, 1968), Sp: Soil Science (Soil Chemistry & Fertility); Principal Scientist (Soil Science), ICAR-Indian Institute of Horticultural Research, Hesaraghatta Lake Post, Bengaluru 560089, Karnataka; Q.No. Type IV/3, ICAR-IIHR Staff Quarters, Hesaraghatta Lake Post, Bengaluru 560089, Karnataka; [Tel: Off. (080) 23086100; Cell: 9740680519; Fax: (080) 28466291; Email: sairupa.tr@gmail.com; Rupa.TR@icar.gov.in]; *Young Scientist Award 2001-02*



2014: **SAHA, Ritesh** (b 15 Jan, 1974), Sp: Soil Physics and Soil & Water Conservation; Principal Scientist (Soil Physics and SWC), ICAR-Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore, Nilgaung, Kolkata 700120, W.B.; C/o Shri P.K. Saha, 94, Swami Vivekananda Sarani, Barasat, 24 Parganas (North), Kolkata 700124, W.B.; [Tel: Off. (033) 2358052; Cell: 8972589424; Fax: (033) 25350415; Email: saharitesh74@rediffmail.com; saharitesh74@gmail.com]



2013: **SAHA, Supradip** (b 10 May, 1975), Sp: Agricultural Chemicals; Principal Scientist, Division of Agricultural Chemicals, ICAR-Indian Agricultural Research Institute, New Delhi 110012; 68, Maitri Apartment, Mayur Vihar, Phase-I, New Delhi 110091; [Tel: Off. (011) 25842860; Res. (011) 22758068, Cell: 9013127773; Fax: (011) 25841390; Email: s\_supradip@yahoo.com]



2017: **SAHARAWAT, Yashpal Singh** (b 1 Mar, 1977), Sp: Conservation and Precision Agriculture; Principal Agronomist and Country Manager, ICARDA-South Asia and China Office, NASC Complex, DPS Marg, New Delhi 110012; 1321, 2nd Floor, Sector 9A, Gurugram, Haryana; [Tel: 9311007818; Email: y.saharawat@cgiar.org]



2013: **SAMANTA, Indranil** (b 27 Mar, 1976), Sp: Animal Health; Assistant Professor, Department of Veterinary Microbiology, West Bengal University of Animal & Fishery Sciences, 37, K.B. Sarani, Kolkata 700037, W.B.; 57/2, Pailan Park, P.O. Pailan, Kolkata 700104, W.B.; [Tel: Off. (033) 255669234, Res. (033) 24978032, Cell: 9062918679, 9433540298; Fax: (033) 25571986; Email: isamanta76@gmail.com]



2019: **SARIKA** (b 2 Apr, 1979), Sp: Agricultural Statistics, Computational Biology, Bioinformatics; Senior Scientist, Centre for Agricultural Bioinformatics, Room No. 104, Computer Building, ICAR-IASRI, Library Avenue, Pusa, New Delhi 110012; CGD 094, DLF Capital Greens, Shivaji Marg, New Delhi 110015; [Tel: Off. (011) 25847121-24 Ext 4315; Cell: 9718833806; Fax: (011) 25841564; Email: sarika@icar.gov.in; aijaiswal@gmail.com]



2006: **SARKAR, Mihir** (b 24 Oct, 1965), Sp: Molecular Endocrinology; Principal Scientist, Division of Physiology & Climatology, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly 243112, U.P.; 5A Mondal Vihar, Izatnagar, Bareilly 243122, U.P.; [Tel: Off. (0581) 2301327; Cell: 9756905650; Email: msarkar24@gmail.com]



2011: **SARMA, Birinchi Kumar** (b 11 Sep, 1972), Sp: Plant Pathology; Professor, Department of Mycology & Plant Pathology, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi 221005, U.P.; #521, D-Block, Rudra Towers, Karmajeetpur, Sunderpur, Varanasi 221005, U.P.; [Tel: Cell: 9454350649; Fax: (0542) 2368993; Email: birinchi\_ks@yahoo.com]



2020: **SELOKAR, Naresh Lalaji** (b 12 Jun, 1984), Sp: Animal Biotechnology; Scientist, Division of Animal Physiology and Reproduction, ICAR-Central Institute for Research on Buffaloes, Hisar 125001, Haryana; Post: Andhalgaon, Tah; Mohadi, Dist: Bhandara 441914, Maharashtra; [Tel: (01662) 281647; Cell: 9541860387, 7027922214; Email: selokarnareshlalaji@gmail.com; selokar.lalaji@icar.gov.in]



2014: **SELVAKUMAR, Govindan** (b 27 May, 1974), Sp: Microbiology; Principal Scientist, Division of Natural Resources, ICAR-Indian Institute of Horticultural Research, Hessaraghatta Lake Post, Bengaluru 560089, Karnataka; No.311, Mahaveer Desire, Chikkabanavara Post, Bengaluru 560090, Karnataka; [Tel: Off. (080) 28466420; Cell: 9482214963; Fax: (080) 28466291; Email: selvakumar.g@icar.gov.in; gselva74@rediffmail.com]



2016: **SETIA, Raj K** (b 30 Jun, 1978), Sp: Soil Science; Scientist SD, Punjab Remote Sensing Centre, PAU Campus, Ludhiana 141004, Punjab; House No. 72-F, Kitchlu Nagar, Ludhiana 141004, Punjab; [Tel: Off. (0161) 2303484; Cell: 9646105308; Fax: (0161) 2303483; Email: setiark@gmail.com]





2020: **SHAHID, Mohammad** (b 13 Aug, 1980), Sp: Carbon dynamics, nutrient management in lowland rice particularly under climate change scenario, resource conservation technology, problem soil management and microbial resource management; Senior Scientist, Soil Science & Microbiology, Crop Production Division, ICAR-National Rice Research Institute, Cuttack 753006, Odisha; Flat No. 4G, Block B, Swastik Enclave, Mission Road, Buxi Bazar, Cuttack 753001, Odisha; [Tel: (0671) 2367768 Ext. 2326; Cell: 9439638083; Fax: (0671) 2367777; Email: shahid.vns@gmail.com; m.shahid@icar.gov.in]



2016: **SHARMA, Neelesh** (b 15 Sep, 1975), Sp: Veterinary Medicine; Assistant Professor (Senior Scale), Division of Veterinary Medicine, F.V.Sc. & A.H., Sher-e-Kashmir University of Agricultural Sciences & Technology of Jammu, R.S. Pura, Jammu 181102, J&K; 24A, Shatabdipuram, Gwalior 474005, M.P.; [Tel: Off. (01923) 250242; Cell: 9419248061; Fax: (01923) 250639; Email: drneeshsharma@yahoo.co.in; drneeshsharma@gmail.com]



2013: **SHIVACHANDRA, Sathish Bhadravati** (b 21 May, 1974), Sp: Veterinary Microbiology; Principal Scientist, ICAR-National Institute of Veterinary Epidemiology and Disease Informatics (NIVEDI), Post Box # 6450, Yelahanka, Bengaluru 560064, Karnataka; A1-213, Century Commander Vista Apartments, Anantapura, Yelahanka, Bengaluru 560064, Karnataka; [Tel: Off. (080) 2309310 Ext. 133; Cell: 7026155963; Fax: (080) 23093222; Email: sbshivachandra@gmail.com; sb.shivachandra@icar.gov.in]



2014: **SINGH, Anil Kumar** (b 5 May, 1973), Sp: Agronomy; Principal Scientist, ICAR Reserach Complex for Eastern Region, P.O. Bihar Veterinary College, Patna 800014, Bihar; Flat No. 104, Kashyap Narayan (Behind Big Baajar), Bailey Road, Khajepura, Patna 800014, Bihar; [Tel: Off. (0612) 2223962; Cell: 9430559183; Fax: (0612) 2223956; Email: anil.icarpat@gmail.com]



2010: **SINGH, Dhananjaya Pratap** (b 12 Feb, 1970), Sp: Microbial Biotechnology with Implications in Agriculture; Principal Scientist (Plant Biotechnology), ICAR-National Bureau of Agriculturally Important Microorganisms (NBAIM), Kushmaur, P.O. Kaithauli, Mau Nath Bhanjan 275101, U.P.; 57, Om Nagar, Lane 1, Benipur, Pahriya, P.O. Sarnath, Varanasi 221007, U.P.; [Tel: Off. (0547) 2530080; Res. (0542) 2582719; Fax: (0547) 2530358; Email: dpsfarm@rediffmail.com]



2017: **SINGH, Nirbhay Kumar** (b 25 Dec, 1976), Sp: Animal Health; Associate Professor, Department of Veterinary Parasitology, College of Veterinary Science, Guru Angad Dev Veterinary and Animal Sciences University, Ludhiana 141004, Punjab; 10/46 PAU Campus, Ludhiana 141004, Punjab; [Tel: Off. (0161) 2414029; Cell: 9417336332; Fax: (0161) 2400822; Email: nirbhayksingh@yahoo.co.in]



2020: **SINGH, Shiva Pratap** (b 6 Oct, 1980), Sp: Animal Physiology; Senior Scientist, Animal Physiology and Reproduction Division, ICAR-Central Institute for Research on Goats, Makhdoom, Farah, Mathura 281122, U.P.; House No. 39, Pushpanjali Bagh Extension, Dayal Bagh, Agra 282005, U.P.; [Tel: (0565) 2763246; Cell: 9458264962; 9068008062; Fax: (0565) 2763246; Email: spsinghmail1@gmail.com; shivapratapsingh@rediffmail.com]



2021: **SINGH, Surender** (b 5 Nov, 1981), Sp: Microbiology; Associate Professor, Department of Microbiology, Central University of Haryana, Mahendergarh 123031, Haryana; A-401, Type-II, CUH Campus, Jant-Pali, Mahendergarh 123031, Haryana; [Tel: Cell: 9999440484; Email: ssriari@gmail.com]



2019: **SOOD, Salej** (b 24 Jul, 1979), Sp: Plant Breeding & Genetics; Scientist (SS), Crop Improvement Division, ICAR-Central Potato Research Institute, Shimla 171001, H.P.; Set No. 3, Type IV Quarters, ICAR-CPRI Colony, Lower Lab, Kanlog, Shimla 171001, H.P.; [Tel: Off. (0177) 2625953; Cell: 9411706285; Fax: (0177) 2624460; Email: salej1plp@gmail.com; salej.sood@icar.gov.in]



2017: **SRIVASTAVA, Sudhakar** (b 1 Dec, 1980), Sp: Plant Biotechnology; Assistant Professor, Institute of Environment & Sustainable Development, Banaras Hindu University, Varanasi 221005, U.P.; Flat No. 524, D-Block, Rudra Towers, Sunderpur, Varanasi 221005, U.P.; [Tel: Off. (0542) 26703555; Cell: 9369607936, 9670924410; Email: sudhakar.srivastava@gmail.com; sudhakar.iesd@bhu.ac.in]



2020: **STANLEY, Johnson** (b 8 Oct, 1980), Sp: Agricultural Entomology; Senior Scientist (Agri. Entomology), ICAR-Indian Institute of Millets Research, Hyderabad 500030, Telangana; 895, Timber Depot Road, Rainthottam, Nagercoil, Dist. Kanyakumari 629001; [Tel: (05962) 230208; Cell: 8979517923; Email: stanley\_icar@rediffmail.com; j.stanley@icar.gov.in]



2018: **TIWARI, Jagesh Kumar** (b 10 Jan, 1980), Sp: Potato Molecular biology; Senior Scientist, Division of Crop Improvement, ICAR-Central Potato Research Institute, Shimla 171001, H.P.; Set No. 15, Type-IV, Green Park CPRI Colony, Khalini, Shimla 171002, H.P.; [Tel: Off. (0177) 2625181 Ext. 522; Cell: 8629079084; Fax: (0177) 2624460; Email: jageshtiwari@gmail.com]



2018: **UPADHYAY, Santosh Kumar** (b 5 Feb, 1984), Sp: Plant Biotechnology; Assistant Professor, Department of Botany, Panjab University, Sector 14, Chandigarh 160014; Flat No. B-903, Victoria Heights, Peer Muchalla, Zirakpur 140603, Punjab; [Tel: Cell: 8699207045; Email: skupadhyay@pu.ac.in; santoshpandit16@gmail.com]; *Young Scientist Award 2017-2018*



2016: **VENKATESAN, Gnanavel** (b 3 Apr, 1980), Sp: Veterinary Virology (Viral vaccines, molecular diagnostics and epidemiology); Senior Scientist, Pox Virus Disease Laboratory, Division of Virology, ICAR-Indian Veterinary Research Institute, Mukteswar Campus, Nainital 263138, Uttarakhand; Type IV Quarters, Officer's Colony, IVRI Campus, Mukteswar, Nainital 263138, Uttarakhand; [Tel: Off. (05942) 286348; Res. (05942) 286065, Cell: 9410657548; Fax: (05942) 286347; Email: gnanamvirol@gmail.com]



2018: **VIKAS, V.K.** (b 17 May, 1978), Sp: Crop Improvement; Scientist (Senior Scale), ICAR-Indian Agricultural Research Institute, Regional Station, Wellington, The Nilgiris 643231, Tamil Nadu; Type III Quarters, ICAR-Indian Agricultural Research Institute, Regional Station, Wellington, The Nilgiris 643231, T.N.; [Tel: Off. (0423) 2230463; Cell: 9442921061; Fax: (0423) 2230463; Email: vkvikaswtn@gmail.com]



2018: **VISHNU KUMAR** (b 24 Jul, 1982), Sp: Plant Breeding & Genetics; Associate Professor (Plant Breeding), RLBCAU, Near Pahuj Dam & IGFR, Gwalior Road, Jhansi 284003, U.P.; H.N. B/13, Sanjay Nagar, Bharatpur 321001, Rajasthan; [Tel: Off. (0184) 2267490; Cell: 9255568506; Fax: (0184) 2267390; Email: vishnupbg@gmail.com; vishnu.kumar@icar.gov.in]



2016: **VISWAS, Konasagara Nagaleekar** (b 24 Feb, 1976), Sp: Animal Health; Principal Scientist, Division of Bacteriology and Mycology, ICAR-Indian Veterinary Research Institute, Izatnagar, Bareilly 243122, U.P.; 42, Mandal Vihar Colony, IVRI Road, Bareilly 243122, U.P.; [Tel: Off. (0581) 2301865; Cell: 8954525012; Fax: (0581) 2301865; Email: vkn111@gmail.com]

## 4. STATUTORY COMMITTEES

The bye-laws of the Academy provide for constitution of the following statutory committees for its efficient functioning:

### 4.1 Sectional Committees:

The Executive Council shall appoint eight Sectional Committees. The number of members in each Committee shall not exceed ten including the Convener who, as far as possible, represents the subject area in the Executive Council. While identifying the members of the Sectional Committees, care should be taken that they represent the spectrum of scientific disciplines of the concerned Committee. The tenure of the Convener and the members will be for a maximum period of 3 years, 1/3<sup>rd</sup> members will retire every year. There will be a 3 years' cooling period for the retiring Sectional Committee members. These Sectional Committees deal with various matters pertaining to the disciplines they represent or any other matter referred to them by the Executive Council or any of the office bearers. This includes evaluating and making recommendations on the nominations received for election of Fellows and selection of Associates. The recommendations of these Sectional Committees are put up to the Executive Council for final approval. Details of these Committees for 2020 and eight sections and the areas covering under these sections are given below:

### Sectional Committees 2020

- I. Crop Sciences**, covering Genetics and Plant Breeding, Plant Genetic Resources, Plant Biotechnology, Plant Physiology, Plant Biochemistry and Seed Technology  
Dr. K.V. Prabhu, Convener  
Dr. O.P. Yadav  
Dr. (Ms) Vidya Shrikant Gupta  
Dr. S.K. Rao  
Dr. B. Mishra  
Dr. A.K. Tripathi
- II. Horticulture Sciences**, covering Fruit Science, Vegetable Science, Ornamental Horticulture & Landscape Gardening, Plantation Crops and Spices, Medicinal and Aromatic Crops  
Dr. D.P. Ray, Convener  
Dr. Pious Thomas  
Dr. Anand K. Singh  
Dr. (Ms) K. Madhavi Reddy  
Dr. Shyam Singh  
Dr. S.K. Chakrabarti
- III. Animal Sciences**, covering Animal Genetics & Breeding, Animal Nutrition, Animal Physiology, Animal Biochemistry and Biotechnology, Animal Production, Animal Health, Animal Products Technology, Dairy Sciences and Poultry Sciences  
Dr. A.K. Srivastava, Convener  
Dr. S.M.K. Naqvi  
Dr. M.S. Chauhan  
Dr. N.K.S. Gowda  
Dr. R.N. Chatterjee  
Dr. (Ms) Minakshi Prasad
- IV. Fisheries Sciences**, covering Fish Genetics & Breeding, Fish Nutrition, Fish Pathology, Fish Biotechnology, Fish Biosystematics, Fish Processing & Technology, Fisheries Resource Management and Aquaculture  
Dr. M.V. Gupta, Convener  
Dr. B.B. Jana  
Dr. A.K. Pal  
Dr. P.K. Sahoo  
Dr. C.N. Ravishankar  
Dr. S. Dam Roy
- V. Natural Resource Management**, covering Agricultural Meteorology, Agronomy, Environmental Science, Forestry & Agroforestry, Soil Science, Water Management and Agricultural Physics  
Dr. Arvind Kumar, Convener  
Dr. Madhoolika Agrawal  
Dr. Masood Ali  
Dr. A.R. Sharma  
Dr. Ch. Srinivasa Rao  
Dr. A. Subba Rao

- VI. Plant Protection**, covering Agricultural Chemicals, Agricultural Entomology, Plant Pathology, Nematology, Microbiology and Organic Chemistry
- |                           |                                |
|---------------------------|--------------------------------|
| Dr. H.C. Sharma, Convener | Dr. A.K. Saxena                |
| Dr. Appa Rao Podile       | Dr. R. Sridhar                 |
| Dr. S.M. Paul Khurana     | Dr. (Ms) Geetha Gopalakrishnan |
- VII. Agricultural Engineering and Technology**, covering Farm Machinery & Power, Soil and Water Engineering, Agricultural Process Engineering, Food Science & Nutrition, Food Technology, Textile Chemistry and Computer Application in Agriculture
- |                                 |                    |
|---------------------------------|--------------------|
| Dr. N.S.L. Srivastava, Convener | Dr. R. Visvanathan |
| Dr. L.N. Shukla                 | Dr. K.N. Tiwari    |
| Dr. A.S. Bawa                   | Dr. K.V.G.K. Rao   |
- VIII Social Sciences**, covering Agricultural Economics, Agricultural Statistics, Extension Education, Home Science and Bioinformatics
- |                            |                |
|----------------------------|----------------|
| Dr. C. Ramasamy (Convener) | Dr. A.R. Rao   |
| Dr. Satinder Bajaj         | Dr. Prajneshu  |
| Dr. K. Palanisami          | Dr. A.K. Singh |

## 4.2 Organisational Committee

This Committee deals with subjects relating to organisational, personnel, finances, and investments. It frames guidelines on these matters including delegation of powers. The recommendations of this Committee are put up to the Executive Council for final approval. It consists of:

- One Vice-president nominated by the President Chairman
- Treasurer
- One Editor nominated by the President
- One Member of the Executive Council to be nominated by the President
- ICAR Nominee
- Two Secretaries
- Executive Director Convener

## 4.3 Programme Committee

This Committee deals with matters relating to preparation and finalization of calendar of activities of the Academy, implementation of programmes, establishing international linkages, preparation, editing and printing of publications, financial support to other research institutions/ societies for specific programmes, etc. The recommendations of this Committee are put up to the Executive Council for final approval. The committee consists of:

- One Vice-President nominated by the President Chairman
- Two Editors
- One Member of the Executive Council to be nominated by the President
- ICAR Nominee
- Foreign Secretary
- Two Secretaries
- Executive Director Convener

## 4.4 Purchase Committee

This Committee deals with all the purchases, civil works, procurement of equipments, setting up of infrastructural facilities and decisions regarding placing of purchase orders. Committee consists of:

- Secretary to be nominated by the President Chairman
- Treasurer
- Secretary (II)
- Accounts Officer
- Director (Works) ICAR (when civil works proposals are to be considered)
- Executive Director Convener

## 5. REGIONAL CHAPTERS

**5.1** The Academy has twelve Regional Chapters. The Regional Chapters make suggestions with regard to policies and problems concerning their areas of operation and also of national importance. The main activities undertaken by these Chapters are:

- to arrange lectures on current topics;
- to organize workshops/brainstorming sessions on important topics;
- to undertake public awareness exercises on popularization of science;
- to publish a directory of agricultural scientists in their respective towns/regions;
- to bring out periodicals/newsletters; and
- to undertake schemes for recognizing and motivating young scientists.

**5.2** The location of Regional Chapters and their Conveners are as under:

Chapter	Region	Convener
Bengaluru	Karnataka	Dr. Raghavendra Bhatta
Bhopal	Madhya Pradesh, Chhattisgarh, Vidarbha	Dr. A.K. Patra
Cuttack	Odisha	Dr. A.K. Nayak
Coimbatore	Tamil Nadu, Puducherry, Kerala, Lakshadweep	Dr. R. Viswanathan
Hyderabad	Andhra Pradesh, Telangana	Dr. Ch. Srinivasa Rao
Karnal	Haryana, Rajasthan, Chandigarh	Dr. M.L. Madan
Kolkata	West Bengal, Andaman & Nicobar Islands	Dr. Biswapati Mandal
Lucknow	Western U.P., Uttarakhand, Bundelkhand	Dr. S.K. Pandey
Ludhiana	Punjab, Himachal Pradesh, Jammu & Kashmir	Dr. B.S. Dhillon
Pune	Western Maharashtra, Goa, Gujarat, Marathwada	Dr. Himanshu Pathak
Barapani	Assam, entire North East	Dr. U. K. Behera
Varanasi	Bihar, Eastern U.P, Jharkhand	Dr. Sudhakar Pandey

### Activities of the

#### 1995

- A Lecture organized by Ludhiana Chapter on *Ecological Green Revolution* was delivered by Dr. M.S. Swaminathan, President, NAAS on April 19, 1995
- Brainstorming Session on *Planning Education for Agriculture Beyond 2000 AD* was organized by Hyderabad Chapter.

#### 1996

- Ludhiana Chapter organized a talk on *Water Resources Management vis-à-vis Sustainability of Food Needs of India* by Dr. S.S. Prihar, an eminent Soil Scientist and Fellow of NAAS, INSA and American Society of Agronomy

Delhi Chapter organized three lectures as under:

- *India's Changing Agricultural Research Policy and Priorities* by Dr. H.K. Jain, Former Director, IARI and DDG, ISNAR.
- *Management of Agricultural Research: Myth or a Necessity* by Dr. K.V. Raman, Member, ASRB.
- *The Ozone Problem: Issues and Perspectives* by Dr. A.K. Mitra, Former DG, CSIR.

#### 1998

- Brainstorming Session on *Scientists' Perception for Agriculture – 2020* was organized on June 4-5, 1998 at New Delhi by Hyderabad Chapter

Ludhiana Chapter organized three lectures as under:

- *Impact of Man on Mountain Ecosystem* by Dr. Santosh Singh (Retd) Head, Department of Zoology and Entomology, St. John's College, Agra
- *Soil and Water Management for Sustaining High Productivity* by Dr. P.R. Gajri, Senior Soil Physicist, Department of Soils, PAU, Ludhiana.
- *Wheat – A Century of Plant Breeding and Vision for Future* by Dr. G.S. Nanda, Head, Department of Plant Breeding, PAU, Ludhiana.
- *Methane Emission from Rice Fields and its Contributions Towards Global Warming* by Dr. M.S. Aulakh, Visiting Scientist Institut für Forstbounanikk and Baumphysiologies, Albert-Ludwigs-UniversitätsFreiburg, Freiburg.

## 2000

- Southern Regional Chapter organized a one day discussion on *Good Governance and Agricultural Research* at NAARM on December 2, 2000.

Northern Regional Chapter organized the following lectures:

- *Protecting the food resource base of northern India – Challenges ahead* by Dr. S. Nagarajan, Project Director, Directorate of Wheat Research, Karnal.
- *Recent Developments in Food Engineering* by Dr. Manjit Singh, Chairman, Professor of Food Engineering University of Georgia.
- *University-Industry Interaction Under the Scenario of WTO* by Shri D.L. Sharma, President & Executive Director, Mahavir Spinning Mills Limited, Ludhiana.

## 2001

Northern Chapter organized the following lectures:

- *Scientific Development in Relation to Sustainable Agriculture* by Dr. G.F. Hall, Emeritus Professor, Ohio State University, USA on April 11, 2001.
- *Agricultural and Postharvest Research for the 21st Century* by Dr. M.S. Reid, Programme Leader Agriculture Productivity, University of California, Davis, USA on April 23, 2001.

Western Chapter organized the following lectures:

- *Nuclear Reactor – A personal experience* by Dr. S.M. Sundaram, Director, Nuclear Reactors, BARC on July 18, 2001
- *Enzymes as quality indices and Post-mortem changes in fish and quality assessment* by Dr. K. Gopakumar, DDG (Fisheries), ICAR on July 22, 2001.
- *Endocrine Regulation of Calcium in Vertebrates* by Dr. Krishna Swarup, FNA on October 11, 2001.

## 2002

Northern Chapter organized the following lectures:

- *WTO & Globalization* by Mr. Devinder Sharma, formerly Agricultural Editor, Indian Express on March 19, 2002 at PAU, Ludhiana.
- *Improving the readability of scientific and technical writing* by Dr. V.P. Gupta, former VC, Rajendra Agricultural University, Pusa, Samastipur on July 19, 2002 at PAU, Ludhiana
- *International Treaty on Plant Genetic Resources – An Appraisal and Protection of Plant Varieties and Farmers' Rights – Indian Scenario* by Dr. B.S. Dhillon, Director, NBPGR in August, 2002.

## 2010

The Eastern Chapter organized the following Seminar Lectures at CRRI, Cuttack in October 2010.

- *ECOSEE – Simulating Greenhouse Gas Emissions Across Different Temporal and Spatial Scale* by Prof. Joanne U. Smith, University of Aberdeen, Scotland, UK



- *Global Greenhouse Gas Mitigation Potential in Agriculture* by Prof. Pete Smith, Royal Society – Wolfson Professor of Soils and Global Change, Institute of Biological and Global Change, Institute of Biological and Environmental Sciences, University of Aberdeen, Scotland, UK.
- The North Eastern Chapter organized a Brainstorming session on *Scope and Strategies for Mechanization of Hill Agriculture in NEH Region* on November 19-20, 2010 at College of Agricultural Engineering and Post-Harvest Technology, Ranipool, Sikkim.

## 2011

- A National Seminar on *Fly Ash-based Amendments for Amelioration of Degraded Soils to Increase Crop Production in the Gangetic Plains* was organized during May 7-8, 2011 at Lucknow by the Northern Regional Chapter of the Academy in association with National Institute of Ecology, CSSRI, RRS, Lucknow and Centre for Fly Ash Research & Management (C-FARM) by Dr. P.S. Pathak, Convener of the Chapter. It was inaugurated by Prof. R. B. Singh, President of the Academy.
- The Southern Chapter of the Academy along with Hyderabad Chapter of the Indian Society of Soil Science jointly organized *World Soil Day* on December 5, 2011

## 2012

- *Strategies for Agricultural Development in Eastern Region - Stakeholders Meeting* was jointly organized with ICAR Research Complex for Eastern Region, Patna on March 3, 2012 at ICAR-RCER, Patna.

## 2013

- Southern Chapter's Policy Dialogue on *Coping with Droughts/Monsoon Aberrations through Mainstreaming of Government Schemes at Field Level* on December 5, 2012 at UAS, Bangalore.
- Consultation on *Mechanization for small holder farms* at UAS, Bangalore on October 6, 2013.
- Eastern Chapter organized *Agri Summit, 2013 - A Step towards Second Green Revolution* on April 8-9, 2013 at ICAR Research Complex for Eastern Region, Patna.

## 2014

- *Meet on IPR in Agriculture* was organized by Patna Chapter on February 27-28, 2014 at Ranchi Center of ICAR Research Complex for Eastern Region, Patna.
- Brainstorming Session on *Agenda for Rainfed Agricultural Research and Drought preparedness* was organized by Hyderabad Chapter on May 9-10, 2014 at New Delhi in collaboration with AICRP for Dryland Agriculture, Hyderabad.
- Seminar on *Application of Biotechnology for sustainable agriculture productivity* was organized by Karnal Chapter on July 26, 2014 at NDRI, Karnal.
- Mumbai Chapter organized Silver Jubilee Rally on *Fisheries and its Importance* on November 29, 2014 at CIFE, Mumbai
- Karnal Chapter organized a Special Lecture on *Progress on Transgenic Animal Production in India* by Dr. Subeer Majumdar, Scientist, National Institute of Immunology, New Delhi on December 27, 2014
- Lucknow Chapter organized a discussion on *Reducing the cost of cane cultivation vis a vis sugar production: A growing concern of Indian Sugar Industry* on December 29, 2014 at IISR, Lucknow

Bhubaneswar Chapter organized following programmes:

- *Interaction meeting and address* by Prof. V.L. Chopra, Past President, NAAS was organized by Bhubaneswar Chapter on November 12, 2014 at CRRI, Cuttack.
- Interaction Meet with school students during Agriculture Education Day on November 14, 2014 at CRRI, Cuttack
- Interaction Meet with Prof. M.S. Swaminathan, former President on November 16, 2014 at CRRI, Cuttack

## 2015

- Jodhpur Chapter organized following lectures:

*Present Status and Future scope of Nanotechnology in Production Paradigm of 2015* by Dr. S.R Vadera, Director Defence Research and development organization on January 16, 2015 at CAZRI, Jodhpur.

A series of three lectures organized on (i) Attitudinal and behavioral attributes of those excelling in science; (ii) How to attain excellence in science and (iii) Improving software infrastructure at work place and home for attaining science excellence by Prof. P.K. Chhonkar, Ex-head IARI during September 28-29, 2015

- Ludhiana Chapter organized lecture on *Packaging and its vital role in extending the shelf life of food products and waste reduction* on June 10, 2015 at PAU, Ludhiana.
- Kochi Regional Chapter organized a one-day Seminar on *Chitin in Agriculture, Medicine and Allied Fields* in association with the Society of Fisheries Technologists (India), Kochi, ICAR-Central Institute of Fisheries Technology (CIFT), Kochi, Indian Chitin and Chitosan Society (ICCS) Erode and ICAR – Central Marine Fisheries Research Institute, Kochi on September 29, 2015 at CIFT, Kochi, Kerala.
- Karnal Regional Chapter organized a Brainstorming Session on *Targeting maximum achievable yield in wheat* on December 19, 2015 at ICAR-Indian Institute of Wheat and Barley Research, Karnal.

## 2016

- Ludhiana Chapter organized a Special Lecture by Dr. (Ms) Madhuri Sharon, Director, Walchand Centre for Research in Nanotechnology and Bionanotechnology on *Entry of Nanotechnology in Agricultural Arena* on January 19, 2016 at PAU.

- Hyderabad Chapter organized following programmes:

Lecture on *Crop Planning for Rainfed Agriculture* by Dr. M. Velayutham, Former Director, NBSS & LUP, Nagpur on January 8, 2016 at ICAR-Central Research Institute for Dryland Agriculture (CRIDA), Hyderabad.

National Science Day celebrations on February 29, 2016 at ICAR-CRIDA, Hyderabad.

A quiz competition for class X students to celebrate the 88<sup>th</sup> Birth Anniversary of Late Dr. M.V. Rao at ICAR – CRIDA on June 18, 2016 in association with Indian Society of Dryland Agriculture (ISDA).

- Karnal Chapter organized following programmes:

Special lecture by Prof. Nagendra P. Shah, The University of Hong Kong, Hong Kong on *How to write and how not to write research papers and strategies to improve citation and h-index* at ICAR-National Dairy Research Institute (NDRI), Karnal on February 22, 2016.

Special lecture by Prof. Sham S. Kakar, UL School of Medicine, University of Louisville, Kentucky, USA on *Stem cells in Regenerative Medicines and Tumorigenesis* at ICAR-NDRI on March 10, 2016.

- Patna Regional Chapter organized a discussion meeting on *Agro-forestry for Rehabilitation of Water-Congested Ecologies of the Eastern Region* at ICAR-Research Complex for Eastern Region, Patna on April 5, 2016.
- Bhubaneswar Chapter organized a discussion meeting on *Minimizing water use in Agriculture* at ICAR-Indian Institute of Water Management, Bhubaneswar on September 3, 2016
- NEH-Region Chapter organized the following programmes:
- Lecture on *Relevance of Home Science Education to Address Socio-Economic Issues* by Dr. Minaxi Pathak, Former Dean, Faculty of Home Science, Assam Agricultural University (AAU) on June 10, 2016 at AAU, Jorhat.
- Lecture on *Agricultural Development in Eastern India and Integrated Farming System for Resource Conservation* by Dr. B.P. Bhatt, Director, ICAR Research Complex for Eastern Region, Patna on September 2, 2016 at AAU, Jorhat.

- Dr. S.P. Biswas, Professor, Department of Life Sciences, Dibrugarh University and an eminent fishery scientist of the region, delivered a lecture on “Prospects and Challenges of Rearing Small Fish Species” at the College of Fisheries, Raha, Assam Agricultural University, on October 25, 2016.
- Dr. C. K. Rajkonwar, Former Associate Dean, Lakhimpur College of Veterinary Science, AAU, and former Director, Department of Animal Husbandry and Veterinary, Govt. of Assam, delivered a lecture on “Growth and Development of Veterinary Profession over a Period of 100 Years in Assam” at the College of Veterinary Science, Khanapara, on November 10, 2016.

## 2017

- Kochi Chapter: A special lecture was organized by NAAS, Kochi Chapter at CMFRI, Kochi on January 09, 2017, A lecture on *Economics and Nature* was delivered by Dr. Pranab Mukhopadhyay, Professor of Economics, Goa University.
- Hyderabad Chapter: Special lecture on *Climate Smart Agriculture – Concept for Sustainable Land Management* was delivered on January 13, 2017 by Dr. J.C. Katyal, Former DDG (EDN), ICAR and Vice-Chancellor, CCS HAU, Hisar.

The Chapter organized Quiz, Elocution and Painting competitions for VIII to IX standard students from different schools on April 6, 2017 at CRIDA, Hyderabad. The topic for elocution was *How to make farming a lucrative profession* and theme selected for painting was Swatchh Bharat. The main purpose of this programme was to create awareness and consciousness about agricultural sciences among the school children.

- Ludhiana Chapter: A special lecture on *Cloning and Characterization of Genes and their Application in Rice Improvements - A Success Story* was delivered by Dr. Tilak Raj Sharma, Director, National Agri-Food Biotechnology Institute (NABI), Mohali on March 1, 2017 at Punjab Agricultural University, Ludhiana.

Special lecture on *Expectations from Wheat for Food Security* was delivered by Dr. Arun Kumar Joshi, South Asia Regional Director, CIMMYT and Managing Director, Borlaug Institute of South Asia on March 9, 2017 at Punjab Agricultural University, Ludhiana.

Dr. Pramod Aggarwal, NAAS Fellow and Regional Program Leader (CCAFS), IWMI, India, New Delhi, delivered special lecture on *Managing Climatic Risks in Agriculture: Big Data Provide New Opportunities*, at Punjab Agricultural University (PAU), Ludhiana on August 9, 2017.

- Karnal Chapter: A meeting of Karnal Chapter was convened by Dr. M. L. Madan, on 6th May 2017 at NDRI, Karnal and was attended by regional fellowship and associates including scientists from NDRI and IIWBR. The topics identified for Brainstorming Session include *Prospects and Challenges on Milk Production in Haryana; Feed and Fodder for Gaushalas; Decline in R&D investment in Agriculture and its effect on Agriculture Research; Privatization in Agricultural Research; How to attract youth into Agriculture etc.*

Karnal Chapter organized an invited lecture by Dr. P.S. Birthal, ICAR-National Professor, ICAR-National Institute of Agricultural Economics and Policy Research, New Delhi on September 19, 2017 at NDRI campus, Karnal on *Economic Viability in Indian Agriculture: Challenges and Perspectives*.

- Kolkata Chapter: A two-day National Seminar entitled “Nutrients and pollutants in soil-plant-animal-human continuum for sustaining soil, food and nutritional security-way forward” was organized by BCKV in collaboration with the National Academy of Agricultural Sciences, New Delhi during June 9-10, 2017 at Kalyani.
- Bhubaneswer Chapter: The NAAS Bhubaneswer Chapter organized a National Seminar on “Climate Change: Impact on Aquatic Environment and Fish Health” on 06 September 2017, in collaboration with ICAR-Central Institute of Freshwater Aquaculture and Association of Aquaculturists (AoA), Bhubaneswar.
- Lucknow Chapter: A one day training program on Development of Soft Skills for Attaining Excellence in Science at ICAR-IISR, Lucknow on September 12, 2017 by Dr. P.K. Chhonkar, Adjunct Faculty, IARI.

- Nagpur Chapter: NAAS Nagpur Chapter organized a guest lecture on 'What prevents public sector organizations from successfully commercializing their GM crop developments?' on 18 September 2017 at ICAR-Central Institute for Cotton Research, Nagpur. Dr. Derek Russell, Hon. Prof. Faculty of Veterinary and Agricultural Sciences, University of Melbourne, Australia delivered the lecture.
- Hyderabad Chapter: *An Interactive Meeting of National Academy of Agricultural Sciences (NAAS), Hyderabad Chapter* was conducted at ICAR-National Academy of Agricultural Research Management, Hyderabad on January 12, 2018. The event was coordinated by Dr. S. K. Soam, Joint Director (I/c), NAARM. Dr. Sammi Reddy, Director, CRIDA presented the activities done by Hyderabad Chapter.  
A "Krishi Kala Utsav" was organized by NAAS-Hyderabad Chapter in association with ICAR NAARM during October 27, 2018 to November, 2, 2018 at ICAR-NAARM, Hyderabad.
- Varanasi Chapter: Prof. Panjab Singh, President, NAAS inaugurated the office of NAAS Varanasi Chapter on May 2, 2018 located in the campus of ICAR-Indian Institute of Vegetable Research, Varanasi. The Regional Chapter also organized *Kisan Kalyaan Divas* to mark the inauguration under the aegis of Gram Swaraj "*Sabka-Sath, Sabka-Gaon, Sabka-Vikash*" which was attended by scientists of ICAR-IIVR, Varanasi, BHU, 50 farmers of this region and 5 representatives of FPOs.
- Patna Chapter: Patna Regional Chapter and ICAR-NRC on Mithun, Medziphema, Nagaland; ICAR Research Complex for NEH Region, Umiam and ICAR RCER, Patna, jointly organized a meet at ICAR-NRC on Mithun, Medziphema, Nagaland on July 10, 2018 and at ICAR Research Complex for NEH Region, Barapani on July 11, 2018. Convener of the Chapter, Dr. B.P. Bhatt highlighted the *Researchable Issues in Agriculture for the North Eastern Region* which needs to be addressed and suggested to take up some studies.
- Cuttack Chapter: A one day workshop on *Climate Change, Biodiversity and Conservation Agriculture in Relation to Rice* was organized by National Academy of Agricultural Sciences (NAAS), Bhubaneswar-Cuttack Chapter in collaboration with ICAR-National Rice Research Institute (NRI), Cuttack on August 24, 2018.
- Ludhiana Chapter : A Brainstorming Workshop on *Crop Residue Management* was organized by Ludhiana Chapter of National Academy of Agricultural Sciences (NAAS) at PAU, Ludhiana, on September 6, 2018. A lecture from Dr. P.K. Ghosh, National Coordinator, NAHEP (ICAR) on *Sustainability Concern in Indian Agriculture: Needs Science-led Innovation*, was organized at PAU on October 30, 2018.
- Kolkata Chapter: *World Soil Day* was celebrated by the Kolkata Chapter of the National Academy of Agricultural Sciences in collaboration with Bidhan Chandra Krishi Viswavidyalaya, Dhaanya Ganga Krishi Vigyan Kendra and Ramakrishna Mission Ashram at Sargachi, Murshidabad on December 5, 2018.

## 2019

- Varanasi Chapter: A Special Lecture was organized on *Feeding 1.37 billion with Nutritional Security: Bigger Challenge* at ICAR-Indian Institute of Vegetable Research, Varanasi on January 29, 2019.
- Bengaluru Chapter: One day workshop was organised on February 16, 2019 on *Awareness and Popularization of Popular Varieties of Paushtic Rice as a Natural Source for Protein and Micro-nutrients* for the benefit to men and women farmers. The importance of cultivation and cooking aspects were also deliberated upon.
- Lucknow Chapter: One day interactive cum special lecture on *Science Led Food Production to Feed Future India with Nutrition* was organized at ICAR-Indian Institute of Sugarcane Research, Lucknow on March 1, 2019.

Lucknow Chapter in collaboration with ICAR-CISH, Lucknow organized a brainstorming meet on August 20, 2019 at ICAR-CISH, Lucknow to *Commemorate the Success of ICAR-FUSICONT Technology Developed for the Management of Fusarial Wilt of Banana* and further strengthen the technology for registration, licensing and large scale adoption.

- Mumbai Chapter: A lecture on *Food Security, Intensive Food Production Systems and Ecological Footprints* was organized on March 29, 2019 at ICAR-Central Institute of Fisheries Education, Mumbai.

A lecture on *India's Journey from Food Security to Nutritional Security* at the Central Institute of Fisheries Education (Deemed University), Mumbai, on July 10, 2019 on the occasion of Fish Farmers Day.

Mumbai Chapter: Under the auspicious of NAAS (Western Chapter), a lecture was delivered by Dr. R. K. Singh, Director & Vice Chancellor, ICAR-Indian Veterinary Research Institute, Izatnagar, UP on Combating Zoonoses - "One Health" Approach at CIFE, Mumbai on December 21, 2019.

- Hyderabad Chapter: A talk was delivered by Padmashri Prof. E.A. Siddiq on *Way Forward for Genomics in Agriculture: Policy Needs* on April 4, 2019 at ICAR-NAARM, Hyderabad.

A five-day *Krishi Kala Utsav* (KKU) was conducted jointly by Hyderabad Chapter of NAAS and ICAR-NAARM, Hyderabad during November 4-8, 2019.

- Ludhiana Chapter : A lecture was organized on *Self Propelled Active Living Matter* on April 11, 2019 at Punjab Agricultural University, Ludhiana by Dr. J.V. Yakhmi, FNASI.

- Coimbatore Chapter : A meeting of Coimbatore regional chapter was held on August 24, 2019 at ICAR-SBI, Coimbatore. Some of the issues discussed are: *Depletion of Ground Water and Increasing Salinity of Soil and Water; Climate Change Issues Especially on Unpredictable North East Monsoon; Developments in Food Processing and Value Addition; Agri Start-ups.*

Coimbatore Chapter organized one day meeting on Post Harvest Technology and Value Addition in December 4, 2019 in association with Society for Sugarcane Research and Development (SSRD) at ICAR-SBI, Coimbatore. A Career Guidance Workshop was organized by Dr. R.Viswanathan, Convener of Coimbatore Chapter. The role played by NAAS in spreading agricultural education, policy decisions and innovations in agriculture was informed and lecture was delivered on Career Opportunities in ICAR and Preparation of ICAR JRF/SRF Examination on November 15, 2019 to undergraduate students of TNAU.

- Bhopal Chapter : On the occasion of the launching of the Bhopal Chapter, a one day workshop on *Improving Soyabean Yield in Central India* was organized on October 1, 2019 under the aegis of the National Academy of Agricultural Sciences (NAAS) – Bhopal Chapter at Indian Institute of Soil Science, Bhopal.

## 2020

- Hyderabad Chapter organized following programmes:

A panel discussion on *Challenges and Opportunities in Meat Sector* was organized in association with National Research Centre on Meat, Hyderabad was organized on January 20, 2020. More than 100 delegates including representatives from the meat industry and government departments, entrepreneurs and processors took active part in the discussion.

Guest lecture on NAAS and Science Excellence in Agriculture by Dr. A.K. Singh, Secretary, NAAS was organized on February 7, 2020 at NAARM, Hyderabad. He covered various activities of NAAS since its inception on June 5, 1990.

A virtual meeting of NAAS Associates based in Telangana and Andhra Pradesh was held in a virtual mode on June 24, 2020 to review the on-going activities of the Hyderabad Chapter, and plan for future activities.

Compilation and release of an informative brochure/ booklet highlighting the details and contributions of Fellows and Associates based in Telangana and AP States.

Shri Govinda Rajulu Chintala, Chairman, NABARD interacted with Fellowship and Associates of Hyderabad Chapter of NAAS virtually at ICAR-NAARM on August 27, 2020. He highlighted various activities of NABARD on agricultural development and stressed the need for reforms in research, education and extension.

Co-sponsored a two-day national level Business-Fest (Sankalp-2020) organized on-line by Post Graduate Diploma-Agribusiness Management (PGD-ABM) students of ICAR-National

Academy of Agricultural Research Management, Hyderabad on October 4-5, 2020. The event attracted 5004 registrations from 40 institutes including several IIMs and leading Management colleges in India. The event aimed to help improvise skills, think innovatively and to inspire and ignite young minds.

A scientific essay writing competition on *Balanced animal protein consumption for improved nutrition and implications on human health in India* among UG, PG/Ph. D students of State Agricultural/Veterinary Universities in Telangana and Andhra Pradesh in the month of November, 2020.

- Varanasi Chapter organized following programmes:

A special lecture on Molecular Breeding for Development of Climate Smart Rice Varieties was delivered by Dr. Ashok K. Singh, Director, ICAR-IARI, New Delhi on January 30, 2020, at ICAR-Indian Institute of Vegetable Research, Varanasi. During his deliberation, Dr. A.K. Singh shared the success story of improvement of basmati rice and informed that annual export earnings from basmati rice alone have reached US \$ 2.5 billion.

An awareness programme for the B. Sc. (Ag) students of Microtek College of Management and Technology, Varanasi focusing on the roles and activities of the National Academy of Agricultural Sciences on August 31, 2020 was conducted by Dr. Sudhakar Pandey, Convener, NAAS. On this occasion, Dr. Rakesh Kumar Dubey, from ICAR-IIVR delivered a talk on the scope and role of under-exploited and minor vegetables towards increasing farmers' income and nutritional security, particularly during Covid-19 pandemic.

An awareness programme on scientific ways of vegetable cultivation was organized at Block Narayanpur of Mirzapur district among the Scheduled caste farmers on November 19, 2020.

A science awareness campaign on Career Opportunities in Agriculture and Allied sciences was organized among students of Science and Agriculture at Government Inter College, Jakhini Varanasi on December 22, 2020.

- Bhopal Chapter: A virtual felicitation function was organized by ICAR-Indian Institute of Soil Science jointly with Bhopal Chapter of National Academy of Agricultural Sciences and Indian Society of Soil Science on July 21, 2020 in honour of Dr. Rattan Lal, Fellow of NAAS and the winner of the World Food Prize 2020.
- Ludhiana Chapter organized following programmes

An online panel discussion on National Educational Policy-2020 and Agricultural Education & Research under the chairmanship of Padma Shri Dr. Baldev Singh Dhillon, Vice Chancellor, PAU at Punjab Agricultural University, Ludhiana on September 16, 2020.

A webinar was organized on Crop Residue Management in collaboration with Krishi Vigyan Kendra, Ropar with the aim to sensitize the school students on the issue of stubble burning and natural resource management on September 29, 2020. Another one on this topic was organized in association with Krishi Vigyan Kendra, Bahawal, District Hoshiarpur through students of classes +1 and + 2 from Doaba Public School, Dohlrn (Mahilpur) on September 30, 2020.

An online lecture on *Modern Tools and Techniques in Today's Digital World of Communication* by Dr Atul, Former Director of Extension Education, CSK Himachal Pradesh Krishi Vishwavidyalaya (HPKV), Palampur organized on October 1, 2020.

A campaign on Crop Residue Management was conducted at Sahibzaada Ajit Singh Public School at village Ladhewal (Mahilpur) in association with KVK, Bahawal (Mahilpur), District Hoshiarpur on December 7, 2020.

- Lucknow Chapter: Two important publications of NAAS (Policy Papers 90 and 91) were translated into Hindi and published for their wider circulation and effective implementation of the recommendations proposed in these documents.
- Cuttack Chapter: An online 'COVID-19 Pandemic General Awareness Quiz' was organized for the students of the CRR High School, Cuttack on September 18-19, 2020 to create awareness about the causes, effects and remedial measures to contain this global pandemic.
- Kolkata Chapter: Dr T.K. Adhya, Professor, School of Biotechnology, KIIT, Bhubaneswar delivered a talk on Biodiversity and soil functions in a changing scenario to celebrate World Soil day on December 5, 2020.

## 6. LINKAGES

**6.1 National:** The Academy implements most of its programmes through the ICAR Institutes, State Agricultural Universities, and other Research Organizations/NGOs with whom it has strong linkages. These linkages are nurtured and strengthened by its Fellows working in these organizations. The Academy also joined the initiative taken recently to establish linkages among the science Academies of India, such as the Indian National Science Academy (INSA), Indian Academy of Sciences, Bangalore, Indian National Academy of Engineering, National Academy of Sciences, Allahabad and National Academy of Medical Sciences, to address issues concerning (a) better public understanding of science in the country, and (b) identification of frontline issues facing the country in which science and scientists have a stake.

**6.2 International:** The Academy has taken steps to establish and renew linkages with Science Academies in other countries as well. Discussions have been held with thirteen such Academies for entering into Memoranda of Understanding indicating the areas of collaboration. So far, nine Memoranda of Understanding have been signed which include the Academia Nacional de Ciencias de Bolivia, La Paz; the Russian Academy of Agricultural Sciences; the Agricultural Research Institute of the Hungarian Academy of Sciences; Academy of Scientific Research and Technology, Egypt; African Academy of Sciences; National Academic Centre for Agrarian Research, Kazakhstan; Hungarian Academy of Sciences; Chinese Academy of Agricultural Sciences (CAAS); and Italian National Academy of Sciences. The Academy participated in the deliberations of the International Human Rights Network of World Academies and Scholarly Societies organized by the US National Academy of Sciences in 2001 in Paris and has now become an integral part of the network. The Academy is getting regular inputs from the network. A delegation of the Academy, comprising Professor V.L. Chopra (Leader), Drs. Panjab Singh, R.P. Sharma, and S.M. Virmani visited People's Republic of China during 15-21 November 2004, under the provision of MoU signed with CAAS in October 2003. On March 13, 2015 the MoU was formalized by Dr. S. Ayyappan, President and Dr. Vijaya Gopal Kakani, President of Association of Agricultural Scientists of Indian Origin in US (AASIO).

**Establishment of Afghanistan Academy of Agricultural Sciences** - During the India-Afghanistan Symposium on "Converting Deserts into Oasis" organized by the Academy at New Delhi on November 19-21, 2006. His Excellency, the President of Afghanistan, Mr. Hamid Karzai expressed his strong desire to reform agriculture sector in Afghanistan. Following this meeting, the Indo-Afghan Joint Committee deliberated on this suggestion and arrived at a conclusion to recommend the establishment of a dedicated organization to strengthen the National Agricultural Research System (NARS) in Afghanistan and to look after the needs of Afghan farmers and farming systems in particular, and management of natural resources and agriculture sector in general.

The Indo-Afghan Joint Committee suggested the formation of an "Afghanistan Academy of Agricultural Sciences (AAAS)" under the patronage of Ministry of Agriculture, Government of Afghanistan as an apex organization to manage and promote agricultural research & education in the country. On an agreement between the Governments of India and Afghanistan, it was suggested that a Team of experts from the National Academy of Agricultural Sciences, India, should visit Afghanistan to study the feasibility of setting up of an Afghanistan Academy of Agricultural Sciences assigned with the responsibility of human resource development, technology generation and transfer, and international collaboration in areas of HRD, research, bio-security, etc. The Ministry of External Affairs (MEA), Government of India in consultation with the Government of Afghanistan arranged for the visit of a 5-member National Academy of Agricultural Sciences (NAAS) delegation (Dr. M.L. Madan, Dr. S.P. Ghosh, Dr. R.K. Singh, Dr. Farid Waliyar and Dr. P.S. Pathak) for preparing an operational plan for setting up the Afghanistan Academy of Agricultural Sciences (AAAS). The team visited Kabul during 15-22 May, 2007 and had intensive discussions with the senior officials of relevant Ministries and other related agencies and organizations to seek their opinion on the feasibility and mode of implementation of such a proposal.

The team of experts noted the major constraints of Afghan agriculture and studied the current status of the National Agricultural Research System (NARS) in Afghanistan, and the need and

scope for its restructuring and strengthening. It also studied the feasibility of establishment of an Afghanistan Academy of Agricultural Sciences (AAAS) in Kabul with clearly defined goals and structure. The Report of the team of expert has been sent to the concerned Ministries of both the Indian and Afghan Governments for their consideration and implementation.

### **NAAS - ttz Bremerhaven Interaction**

A German team comprising of Dr. Gerhard Schories, Technical Director and Dr. (Ms.) Barbara de Mena, Project Manager (Waste Management) of ttz Bremerhaven visited the Academy on 7th June 2011 and interacted with selected NAAS Fellows, Office Bearers and a few invited scientists. They had met Prof. R.B. Singh prior to their visit. Dr. S.M. Virmani, Dr. B.S. Pathak, Dr. Anwar Alam, Dr. C. Devakumar, Dr. A. Bandyopadhyay, Dr. B.B. Nayak, Dr. D.K. Singh and Dr. H.V. Raghu participated in this meeting. After an elaborate interaction, treatment of industrial effluents and biomass management were identified as the two areas of common interest. The EU team indicated that on their return to Germany, they would submit a few proposals to EU for approval. Subsequently, two proposals were received by Dr. C. Devakumar who in turn forwarded them to Dr. A.K. Singh, DDG (NRM), ICAR for possible collaboration. In the nutshell, the interaction has been fruitful.

Michigan State University (M.S.U.), U.S.A. delegation interaction with NAAS / NARES on February 16, 2015 in New Delhi.

Senior officials and members of NAAS, ICAR, IARI and Michigan State University (MSU) interacted in the roundtable meeting organized on September 9, 2016 to discuss and identify key areas and innovative approaches for sustained long-term collaboration among the DARE/ ICAR, NAAS, SAUS and MSU.

The NAAS interacted with one of the world's Leading research universities—Johns Hopkins University (JHU), Washington DC, USA. On January 11, 2017, a JHU delegation visited the Academy and held discussion with selected Delhi-based NAAS fellows and IARI Students. The Indian Council of Food and Agriculture (ICFA), a Delhi-based NGO, also participated. The JHU delegation was led by Dr. Sharon Yanagi, Associate Director of the School of Advanced International Studies (SAIS), JHU. Prof. R.B. Singh, on behalf of the NAAS welcomed the JHU delegation and other participants. He reiterated the centrality of the NAAS as the nation's think tank for transforming agriculture to reshape India.

A meeting on the Role of NAAS in International Collaboration under South-South Cooperation (SSC) with focus on Africa and BIMSTEC was held on June 18, 2019 in NAAS Secretariat under the Chairmanship of Prof. Panjab Singh, President, NAAS. The meeting commenced with a brief background about potential opportunities for agricultural research and higher education for development in countries of Africa and BIMSTEC with suitable interventions of NAAS for the cause.

### **Fostering India-Africa Collaboration in Agricultural Biotechnology**

The NAAS hosted an eight-member high-level delegation from seven African countries on February 10, 2020 as a part of 10-day Agricultural Biotechnology and Biosafety Study tour organized by Michigan State University in collaboration with African Union Development Agency (AUDANEPAD), The Energy and Resources Institute, New Delhi and Bejo Sheetal Biosciences Foundation, Jalna.

The delegation showed keen interest in gene editing, regulatory mechanisms, sharing of genetic resources, regular flow of adequate quality seed from breeders' plots to farmers' fields, nutritional security, food safety (freedom from aflatoxin), and human resources development. The meeting recommended that a tripartite India-Africa-MSU (USA) collaborative project with defined outcomes, timeframe, and financing mechanism should be formulated and implemented soon to enable proven modern, safe, bio-secure, productive and remunerative technologies reach the unreached, ensuring that no one is left out.



### **Empowering Youth in India, Africa and Michigan-USA**

The National Academy of Agricultural Sciences (NAAS), hosted an eight-member delegation from Michigan State University at the National Agricultural Science Complex in New Delhi on February 20, 2020.

The participants of this joint meeting fully supported the idea of a joint event involving youth from India, Africa and Michigan-USA for active dialogue and networking on global issues related to food security and sustainable development. It was decided to have further discussions with the World Food Prize Foundation to make this joint India-Africa-Michigan programme a reality in establishing the youth forum.

## 7. MEDALS AND AWARDS

**7.1** The Academy has instituted the following awards to recognize scientists for excellence in research in Agricultural and Allied Sciences including Environment and Nutrition:

- (i) Memorial Awards
- (ii) Recognition Awards
- (iii) Young Scientists Awards
- (iv) Endowment Awards

These awards are presented at the Agricultural Science Congress organized once in two years. The Executive Council has framed guidelines in this regard and the same are appended at **Annexure II**.

### 7.2 Awards for the Biennium 2019-2020

Academy's awards for the biennium 2019-2020 will be presented at the Inaugural function of XV Agricultural Science Congress on November 13, 2020 at BHU, Varanasi.

The details of the awards given since inception are listed below:

#### A. Memorial Awards

Name of Award	Year of Award	Name of Awardee
<b>Dr. B. P. Pal Award</b> (Instituted in 1992)	1992	Dr. N. Parthasarthy
	1995	Dr. Verghese Kurien
	1997	Dr. M. S. Swaminathan
	1999	Dr. H.K. Jain
	2001	Prof. V.L. Chopra
	2003	Dr. R. S. Paroda
	2005	Dr. K. L. Chadha
	2007	Dr. M. L. Madan
	2009	Dr. G.S. Khush
	2011	Dr. S. Ayyappan
	2013	Dr. E.A. Siddiq
	2015	Dr. B.S. Dhillon
	2017	Dr. (Ms.) Uma Lele
	2019	Prof. R.B. Singh
	2021	Prof. Rattan Lal
<b>Dr. K. Ramiah Award</b> (Instituted in 1992)	1992	Dr. S. V. S. Shastry
	1995	Dr. J. S. Kanwar
	1997	Dr. G. S. Khush
	1999	Dr. S. K. Sinha
	2001	Dr. P. Das
	2003	Dr. B. R. Murty
	2005	Dr. Shyam Prakash
	2007	Dr. A. S. Raghavendra
	2009	Dr. K. V. Peter
	2011	Dr. P.N. Bahl
	2013	Dr. M.L. Lodha
	2015	Dr. N.K. Singh
	2017	Dr. (Mrs.) Shailaja Hittalmani
	2019	Dr. K.C. Bansal
	2021	Dr. Gyanendra Pratap Singh

**Dr. K. C. Mehta Award***(Instituted in 1994)*

1995  
1997  
1999  
2001  
2003  
2005  
2007  
2009  
2011  
2013

Prof. T. S. Sadasivan  
Dr. S. P. Raychaudhuri  
Dr. T. N. Ananthakrishnan  
Prof. Anupam Varma  
Dr. B. S. Parmar  
Dr. N. K. Roy  
Dr. D. V. Singh  
Dr. (Ms.) Prem Dureja  
Dr. K.V.B.R. Tilak  
Dr. B.V. David  
Dr. (Ms.) Gita Kulshrestha  
Dr. P.B. Kirti  
Dr. A.N. Mukhopadhyay  
Dr. Appa Rao Podile  
Prof. S.R. Niranjana

2015  
2017  
2019  
2021

**Dr. M. S. Randhawa Award***(Instituted in 1995)*

1997  
1999  
2003  
2007  
2011  
2013

Professor P. V. Sukhatme  
Dr. Prem Narain  
Dr. Kirti Singh  
Dr. A. G. Pawar  
Dr. P.K. Joshi  
Dr. K.D. Kokate  
Dr. (Mrs.) B. Meenakumari  
Dr. Gurbachan Singh  
Dr. Mruthyunjaya  
Dr. P.K. Ghosh  
Dr. Rakesh Chandra Agrawal

2015  
2017  
2019  
2021

**Dr. N. S. Randhawa Award***(Instituted in 1996)*

1997  
1999  
2003  
2005  
2007  
2009  
2011  
2013  
2015  
2017  
2019  
2021

Dr. D. R. Bhumbra  
Dr. S. S. Prihar  
Dr. J. C. Katyal  
Dr. J. S. Samra  
Dr. C. L. Acharya  
Dr. Bijay Singh  
Dr. T.K. Adhya  
Dr. P.K. Chhonkar  
Dr. J.C. Tarafdar  
Dr. M.S. Aulakh  
Dr. Biswapati Mandal  
Dr. Himanshu Pathak

**Dr. P. Bhattacharya Award***(Instituted in 1997)*

1999  
2001  
2003  
2005  
2007  
2009  
2011  
2013  
2015  
2017  
2019  
2021

Dr. P. N. Bhat  
Dr. N. Balakrishnan Nair  
Dr. K. Pradhan  
Dr. M. P. Yadav  
Dr. Har Pal Singh  
Dr. P. P. Gupta  
Dr. Gaya Prasad  
Dr. W.S. Lakra  
Dr. A.K. Misra  
Dr. D.N. Kamra  
Dr. S.K. Bhatia  
Dr. Manmohan Singh Chauhan

**B. Recognition Awards***(Instituted in 1998)*

<b>Year</b>	<b>Name of Awardee</b>	<b>Field</b>
1999	Dr. Randhir Singh Dr. B. S. Parmar Dr. S. K. Jalota Dr. V. K. Taneja	Plant Improvement Plant Protection Soil, Water & Environmental Sciences Animal Sciences
2001	Dr. K. V. Peter Dr. (Ms.) Prem Dureja Dr. Bijay Singh Dr. S. K. Bhatia Dr. N. K. Tyagi	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2003	Dr. B. S. Dhillon Dr. P. S. Roy Dr. S. Ayyappan Dr. S. K. Gupta	Plant Improvement Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2005	Dr. A. S. Raghavendra Dr. Opendra Koul Dr. Yadvinder Singh Dr. M. C. Sharma Dr. K. D. Sharma	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2007	Dr. P. A. Kumar Dr. R. K. Jain Dr. Gurbachan Singh Dr. B. S. Prakash Dr. V. N. Sharda	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2009	Dr. Jai Gopal Dr. T. R. Sharma Dr. O. P. Chaturvedi Dr. D. N. Kamra Dr. Narpinder Singh	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2011	Dr. K.C. Bansal Dr. Himanshu Pathak Dr. A.B. Mandal Dr. Rintu Banerjee	Plant Improvement Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2013	Dr. Ajay Kumar Parida Prof. Wasim Ahmad Dr. G. Kar Dr. Jag Mohan Dr. K.K. Singh & Dr. S.N. Jha	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2015	Dr. T. Mohapatra Dr. S.R. Niranjana Dr. Ch. Srinivasarao Dr. A.K. Verma Dr. Rajendra Singh Dr. P.S. Birthal	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology Social Sciences

2017	Dr. J.C. Rana Dr. K.R. Kranthi Dr. S.K. Chaudhari Dr. Parimal Roy Dr. Rajender Parsad	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Social Sciences
2019	Dr. D.K. Yadava Dr. Kaushik Banerjee Dr. R. Dinesh Dr. K.K. Krishnani Dr. Hukum Chandra	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Social Sciences
2021	Dr. Sudesh Kumar Yadav Dr. Supriya Chakraborty Dr. Arvind Kumar Shukla Dr. Kajal Chakraborty Dr. C.R. Mehta Dr. A.R. Rao	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology Social Sciences

**C. Young Scientists' Awards**  
(Instituted in 1998)

1999	Dr. Pramod Kumar Dr. T. R. Sharma Dr. Ch. Srinivasarao Dr. S. Barbuddhe Dr. V. Venkata Subramanian	Plant Improvement Plant Protection Soil, Water & Environmental Sciences Animal Sciences Social Sciences
2001	Dr. (Ms.) Neelam S. Sangwan Dr. R. Dinesh Dr. Subhendu Kumar Otta Dr. Virendra Kumar Vijay Dr. Rajendra Prasad	Plant Improvement Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology Social Sciences
2003	Dr. M. S. Saharan Dr. (Ms.) T. R. Rupa Dr. (Ms.) D. Nagalakshmi Dr. Anjani Kumar	Plant Protection Soil, Water and Environmental Sciences Animal Sciences Social Sciences
2005	Dr. Manoj Prasad Dr. Mohd. Akram Dr. (Ms.) Shalini Singh Tandon Dr. T. K. Bhattacharya Dr. P. V. K. Sasidhar	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Social Sciences
2007	Dr. Vishaw Bandhu Patel Dr. Pradeep Sharma Dr. V. K. Singh Dr. Mohan Mandal Dr. Abhijit Kar	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology
2009	Dr. H. C. Prasanna Dr. Anupama Dr. K. Ramesh Dr. S. Girish Patil Dr. B. Krishna Rao	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology

2011	Dr. V.K. Dubey Dr. Anirban Roy	Plant Improvement Plant Protection
2013	Dr. Mukesh Jain Dr. Samiran Bandyopadhyay Dr. B.K. Tiwari	Plant Improvement Animal Sciences Agricultural Engineering & Technology
2015	Dr. S.K. Parida Dr. G. Venkatesan	Plant Improvement Animal Sciences
2017	Dr. Rachit Saxena Dr. P.L. Kashyap Dr. Surender Singh Dr. V.K. Prajapati Dr. R.K. Paul	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Social Sciences
2019	Dr. S.K. Upadhyay Dr. D.M. Firake Dr. Vijay Pooniya Dr. Subrota Hati Dr. V.E. Nambi Dr. E. Varghese	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology Social Sciences
2021	Dr. Ranjith Kumar Ellur Dr. Susheel Kumar Sharma Dr. Vijay Singh Meena Dr. Monika Saini Dr. R. Pandiselvam Dr. S. K. Srivastava	Plant Improvement Plant Protection Soil, Water and Environmental Sciences Animal Sciences Agricultural Engineering & Technology Social Sciences

**D. Endowment Award**  
**Shri L. C. Sikka Award**  
*(Instituted in 2005)*

2007	Dr. S.K. Pandey
2009	Dr. A.S. Sidhu
2011	Dr. P.S. Naik
2013	Dr. R.B. Rai
2015	Dr. S.K. Chakrabarti
2017	None
2019	Dr. Bijendra Singh
2021	Dr. C.N. Ravishankar

**Dr. Prem Dureja Award**  
*(Instituted in 2015)*

2017	Dr. (Ms.) Rintu Banerjee
2019	Dr. (Ms.) Chandish R Ballal
2021	Dr. Subbaraya Uma

**Dr. N.G.P. Rao Award**  
*(Instituted in 2017)*

2019	Dr. A.T. Sadashiva
2021	Dr. Ram Kewal Singh

**E. Dr. A.B. Joshi Memorial Lecture Award**

2013	Dr. Mangala Rai
2015	Prof. R.B. Singh
2017	Dr. Anil Kakodkar
2019	Dr. R.A. Mashelkar
2021	Dr. R.S. Paroda

## 8. PROGRAMMES

### 8.1 Scientific Programmes upto 2020

Programmes undertaken since the establishment of the Academy up to 2020 are as under:

#### 1991

- Symposium on Population, Natural Resources and Food Security

#### 1992

- I Agricultural Science Congress, themes: (i) Global Climate and Agriculture (ii) Rio Agenda 21 – Priorities for Agricultural Research and (iii) Capital Requirements for Modernisation of Agriculture.

#### 1994

- Second Asia-Pacific Conference on *Agricultural Biotechnology*

#### 1995

- Symposium on *National Water Policy - Agricultural Scientists' Perceptions*
- II Agricultural Science Congress, themes: (i) *National Water Policy* (ii) *Vector Biology* and (iii) *Integrated On-farm and Off-farm Employment*
- National Workshop on *Animal Research and Development*
- Felicitation to Dr. M. S. Swaminathan, President of the Academy, on his 70<sup>th</sup> Birthday
- Workshop on *Planning Education for Agriculture beyond 2000*

#### 1996

- Release of *Common Agenda for Sustainable National Food Security for inclusion in the Manifesto of Political Parties*.
- Symposium on *Biochemical Basis of Host-Plant Resistance to Insects*.
- National Symposium on *Plant Nutrient Needs, Supply, Efficiency and Policy Issues: 2000-2025*.
- First Foundation Day Lecture by Dr. R.A. Mashelkar, Director General, Council of Scientific and Industrial Research, on *Indian Science and Technology in Post Liberalization Era: The Emerging Challenges and Opportunities*.
- Science Academies' Summit on *Uncommon Opportunities for Achieving Sustainable Food and Nutrition Security*
- Second International Crop Science Congress, theme: *Crop Productivity and Sustainability – Shaping the Future*

#### 1997

- National Seminar on *Harnessing and Management of Water Resources for Enhancing Agricultural Production in Eastern Region*, themes: (i) Sustainable Management of Intensive Agriculture (ii) Implications of Biotechnology Use in Agriculture and (iii) Indian Agriculture in next 50 years – Role of Science and Technology
- III Agricultural Science Congress, themes: (i) Sustainable management of intensive agriculture (ii) Implications of biotechnology use in agriculture, and (iii) Indian agriculture in the next 50 years
- Second Foundation Day Lecture by Dr. M. S. Swaminathan, UNESCO Professor in Ecotechnology, on *State of Sustainable Agriculture: Five Years after Rio*
- Workshop on *National Concern for Management, Conservation and Use of Agrobiodiversity*
- National Workshop on *New Economic Policy, Opportunities and Challenges for Sustainable Development of Fisheries and Conservation of Aquatic Resources*.
- National Consultation for *Sanitation and Phytosanitation Related Issues*

## 1998

- Interdisciplinary Dialogue on *Malthus and Mendel: Population, Science and Sustainable Food Security*
- Brainstorming session on *Scientists' Perception for Agriculture 2020*
- Third Foundation Day Lecture by Dr. V. Kurien, Chairman, National Dairy Development Board, on *The Competitive Challenge Facing India's Agriculture: The Role of Research*
- Workshop on *Climate Change and Perspective for Agriculture*

## 1999

- IV Agricultural Science Congress, theme: *Sustainable Agricultural Export*
- Fourth Foundation Day Lecture by Dr. Ismail Serageldin, Chairman, CGIAR and Vice-President, World Bank on *The New Biological Century – Promises and Perils*
- Scientific Presentations of Academy's Young Scientists' Awards for the biennium 1997-1998
- National Seminar on *Strategies for Agricultural Research in the North-East*
- Symposium on *Diversification of Agriculture for Human Nutrition*

## 2000

- National Workshop on *Conservation and Management of Livestock Genetic Resources*.
- Workshop on *Priority Setting in Agricultural Research*
- Fifth Foundation Day Lecture by Shri K. C. Pant, Vice-Chairman, Planning Commission, on *Planning for Agriculture: Challenges and Opportunities in the 21st Century*.
- Invited Lecture on *Helping Cereals to Get More Nitrogen from the Air* by Professor E. C. Cocking, a Foreign Fellow of the Academy and Director, Centre for Crop Nitrogen Fixation, University of Nottingham
- National Seminar on *Hi-tech Horticulture*.
- National Seminar on *Sustainable Fisheries and Aquaculture for Nutritional Security*.

## 2001

- 88<sup>th</sup> Session of the Indian Science Congress, theme: *Food, Nutrition and Environmental Security*
- V Agricultural Science Congress, theme: *Sustainable Development of Mountain Agriculture*
- A Workshop on *Globalization of Agriculture: R&D in India*.
- A National Seminar on *Empowerment of Women in Agriculture*.
- A Special Lecture by Dr. Norman E. Borlaug Nobel Laureate on *Role of Biotechnology in Agriculture*
- Sixth Foundation Day Lecture by Dr. C. H. Hanumantha Rao, on *A Viable Agriculture in the New International Trade Regime Scenario*
- Popular Lecture Series (i) *Implications of Genomics on R&D* by Dr. R. P. Sharma and (ii) *Protection of Plant Varieties and Farmers' Rights Act: The Way Ahead* by Dr. S. P. Sharma
- A Brainstorming Session on *Plant Varieties and Farmers' Rights*
- A Special Lecture by Dr. Lloyd Thomas Evans, a Foreign Fellow of the Academy on *World Food Situation*.
- Scientific presentations by the Fellowship: *Agricultural Policy, Challenges and options*- Dr. S. S. Acharya; *Crop Modelling: A Tool for Accelerating knowledge Integration and Utilization* - Dr. P. K. Aggarwal; *Biological Control of Pests & Diseases* - Dr. S. P. Singh; *New Opportunities in Nutrient Management for Efficient Agriculture* - Dr. A. Subba Rao.



## 2002

- Workshop on *Agricultural Policy: Designing R&D Programmes to Achieve the Objectives*
- Workshop on *Dichotomy Between Grain Surplus and Widespread Endemic Hunger*
- Round Table on *Intellectual Property Rights in Relation to Agriculture*
- Workshop on *Agriculture-Industry Interface: Value Added Farm Products*
- *Good Governance for Agricultural Research Management*
- *International Transgenic Rice Biosafety Workshop - Expert Consultation.*
- Seventh Foundation Day Lecture by Dr. R. Chidambaram, Principal Scientific Advisor to the Government of India, DAE – Homi Bhabha Professor, BARC and Chairman, Technology Information, Forecasting & Assessment Council, on *Technology Foresight and Rural Development*
- Popular Lecture Series: (i) *Resource Conserving Technologies – The New Opportunities for Sustaining the Rice Wheat Production System* by Dr. Raj K. Gupta, Regional Facilitator, Rice-Wheat Consortium for Indo-Gangetic Plains, CIMMYT. (ii) *Current Status of Research in Neem with Particular Reference to India*, by Dr. B. S. Parmar, Head, Division of Agricultural Chemicals, IARI
- Scientific Presentations by the Fellowship:
- A Special Lecture on *Transforming Indian Agriculture* by Dr. Jim Peacock of CSIRO, Australia

## 2003

- VI Agricultural Science Congress, theme: *Multi-enterprize Farming Systems for Viable Agriculture*
- Brainstorming Session on *Export Potential of Dairy Products*
- Workshop on *Priorities of Research and HRD in Fisheries' Biotechnology*
- Round Table discussion on *Seaweed Cultivation and Utilization*
- Brainstorming Session on *Peri-Urban Vegetable Cultivation in the NCR Delhi*
- Eighth Foundation Day Lecture by Dr. M.S. Valiathan, President, Indian National Science Academy, on *Glimpses of Our Medicinal Past*
- Scientific Presentations by Fellowship: *Crop Productivity in Water-limited Environments: Progress and Future Development* - Dr. N.C. Turner; *Enhancing Reproduction in Buffaloes: Major Constraints and Possible Interventions* - Dr. A.S. Nanda; *Managing Potato Viruses for Sustaining Potato Yields* - Dr. S.M. Paul Khurana; *Genetic Diversity in Medicinal & Aromatic Plants and its Conservation in India* - Dr. P. Pushpangadan.
- Popular Lecture Series: (i) *New Century – New Directions for Agricultural Research, Education and Management* by Dr. H.K. Jain; (ii) *Genome to Gene-Doable but Difficult Walk* by Dr. Madan Mohan, Group Leader, Plant Resistance Group, ICGER; (iii) *Knowledge Chain Management in Agriculture* by Dr. K. R. Srivathsan, Director, Indian Institute of Information Technology and Management, Trivandrum; (iv) *Impact of Climate and Weather on Agriculture*, by Dr. J. S. Samra, Deputy Director General (NRM), Indian Council of Agricultural Research, New Delhi and (v) *Boro Rice – A Silent Revolution in Deep Water Areas*, by Dr. R. K. Singh, Representative, IRRI-India Office, New Delhi

## 2004

- Brainstorming Session on *Employment Oriented Agricultural Education and Training*
- Workshop on *Disaster Management in Agriculture*
- Round Table on *Impact of Inter River Basin Linkages on Fisheries*
- Brainstorming Session on *Strategies for Science and Technology Database for Indian Agriculture*
- Workshop on *Organic Farming – Approaches and Possibilities in the Context of Indian Agriculture*

- Brainstorming Session on *Biosafety Issues Related to Commercialization of Transgenic Crops in India*
- *Redefining Agricultural Education and Extension Systems in Changed Scenario*
- *Grading of Scientific Journals*

## Lectures

- Foundation Day Lecture 2004 by Dr. S. S. Johl, Vice Chairman, Punjab State Planning Board, on *When the State Abdicates Responsibility in Social Sector*
- Scientific Presentations by Fellowship: *Healthy Livestock Wealthy Farmer*: Dr. S.K. Bandyopadhyay; *Stigma of Sex in Plants: What a 'STYLE'* - Dr. K.N. Ganeshaiah; *Policy Reforms in India: What Can Make Agriculture 'Shine'?* - Dr. Ashok Gulati; *Rhizosphere Competent Bacteria for Biological Control and Holistic Plant Health Care in Agriculture* - Dr. C.S. Nautiyal; *Hydrologic Modeling and Evaluation of Conservation Measures in Agricultural and Forest Lands* - Dr. V.N. Sharda
- Popular Lecture Series: (i) *Harvesting the Potential of Horticulture in India*: Dr. K.L. Chadha, former Vice-President, NAAS and former DDG (Horticulture), ICAR, New Delhi and (ii) *MEMS Microsensor Development*: Dr. S. Ahmad, Director Grade Scientist, Central Electronics Engineering Research Institute, Pilani

## 2005

- Brainstorming Session on *Role of Science and Society in Protecting Our Genetic Resources*
- Brainstorming Session on *Role of Information Communication Technology in Taking Scientific Knowledge/Technologies to the End Users*
- Brainstorming Session on *Emerging Issues on Water Management-Who Should Own It - State, Private Sector or Community?*
- VII Agricultural Science Congress, theme: *Entrepreneurship Development in Agriculture*
- Meeting to discuss CGIAR System Priorities for 2005-2015
- Brainstorming Session on *Role of Professional Associations in Agricultural Sciences*.
- National Consultation on *Public-Private Partnership for Agricultural Research and Technology Development including Contract Farming*
- Brainstorming Session on *Improving the quality of Indian Journals in Agricultural Research, Education and Development*
- National Consultation on *Policy Options for Efficient Nitrogen Use*
- Brainstorming Session on *Ten Years After Beijing - Gender, Science & Technology- New Deal for Women in Agriculture*
- Brainstorming Session on *WTO and Indian Agriculture: Policy and R&D implications*

## Lectures

- A Special Lecture on the New Year Get-together by Dr. J.C. Katyal, DDG (Education), ICAR on *Agricultural Research Direction and Distance*
- Foundation Day Lecture 2005 by Dr. M.K. Bhan, Secretary, Department of Biotechnology on *Biotechnology Policy in India*
- Scientific Presentations by Fellowship: *Technical & Allocative Efficiency in Indian Edible Oilseed Sector : Analysis & Implications* - Dr. Mruthyunjaya; *Marker Assisted Selection for leaf rust resistance in Wheat* - Dr. K.V. Prabhu
- The Environment Day Address on *Water Situation in the Country – Quality and Quantity of Water* by Dr. (Ms.) Sunita Narain in the Special Scientific Session on *Environmental Challenges in the Era of Urban-Rural Continuum*
- Lecture by Prof. C.J. Nelson on *Sustainability of Agriculture; Issues, Observations and Outlook*

## 2006

- A Brainstorming Session on *Low and Declining Crop Responses to Fertilizers* (Convener: Dr. Rajendra Prasad, Ex National Professor, New Delhi) was held on February 20-21, 2006 at NAAS, New Delhi.
- A Brainstorming Session on *Below Ground Biodiversity with Special Reference to Cropping Systems*; (Convener: Dr. B.N. Johri, Emeritus Scientist and Editor, NAAS) was held on March 10, 2006 at Barkatullah University, Bhopal (M.P.).
- A planning meeting of the Academy proposed brainstorming session on *Employment Opportunities in Farm and Non-farm Sector Through Technological Interventions with Emphasis on Primary Value Addition* was held at CFTRI, Mysore on January 14-15, 2006.
- International Conference on *Agriculture for Food, Nutritional Security and Rural Growth* (Convener: Dr. Vibha Dhawan, VC, TERI-SAS, New Delhi) was held on May 25-27, 2006 at India Habitat Centre, Lodhi Road, New Delhi.
- A Round Table on the *Fabric of Cotton: Seeds, Farmers and Textiles* (Convener: Dr. Sunita Narain, Director, Centre for Science and Environment, New Delhi) was held on July 10, 2006 at New Delhi.
- Workshop on *Harmonization of Databases for Land Use and Land Evaluation* (Convener: Dr. S.M. Virmani, Foreign Secretary, NAAS; Co-convenor: Dr. P.S. Roy, Deputy Director, NRSA, Hyderabad) was held at NRSA, Hyderabad on July 28-29, 2006.
- A Round Table on the *National Horticulture Mission: How to Make it Succeed?* (Convener: Dr. S. P. Ghosh, Member, Executive Council, NAAS; Co-convenor: Dr. Kirti Singh, Former Secretary, NAAS) was held on August 8, 2006 at New Delhi.
- Dr. B.P. Pal Centenary Symposium on *Search of New Genes* (Convener: Prof. V. L. Chopra, Member, Planning Commission, GOI, and Past-President, NAAS) was held at NAAS/IARI premises on September 1-2, 2006.
- *GDEST India-US Workshop on Agricultural Bio-Technology* (Convener: Prof. V.L. Chopra) was held in collaboration with MSSRF during October 4-6, 2006 at Chennai
- International Rice Congress – 2006 (Chair: Prof. M.S. Swaminathan, Co-Chairs: Dr. Mangala Rai and Dr. Robert S. Zeigler) was organized jointly with ICAR during October 9-13, 2006 in New Delhi
- *Innovations in Rural Institutions: A driver for Rural Prosperity* (Conveners: Dr. R.K. Singh, Dr. Panjab Singh and Dr. B.C. Barah of NCAP) was held on October 24, 2006 in New Delhi
- India-Afghanistan Symposium on *Converting Deserts into Oasis* (Convener: Dr. R.K. Singh) was held at NASC/NAAS premises on November 19-21, 2006.

## Lectures

- A Special Lecture on the New Year Get-together by Dr. S. Ayyappan, DDG (Fisheries) on *Blue Revolution: The Saga of Indian Fisheries*
- A Lecture on *2006-07: Year of Agricultural Renewal* by Prof. M.S. Swaminathan was organized on February 11, 2006 at MPUAT, Udaipur.
- A Special Lecture on *Future Research Requirements on Micronutrient in Soils, Crops and Livestock* was delivered by Dr. Umesh C. Gupta on March 13, 2006 at NAAS, New Delhi.
- Foundation Day Lecture on *Information Communication Technology and Agricultural Renaissance*, delivered by Shri Y. C. Deveshwar, Chairman, ITC.
- Scientific Presentations by Associates: *Inclusion of Legume in Rice-Wheat Cropping System for Conserving Soil Organic Matter and Enhancing Nutrient Use Efficiency*- Dr. V.K. Singh; *Biotechnological Approaches for Reduction of Cold-induced Sweetening in Potato*- Dr. Debasis Pattanayak; *Endocrinology of Yak Reproduction*- Dr. Mihir Sarkar

- Scientific Presentations by Fellowship: *Can Aerobic Rice Cultivation with Suitable Genotypes Address the Receding Water Situation in the County?* - Dr. Shailaja Hittalmani; *Development of Transgenics against Emerging Plant Viruses* - Dr. R.K. Jain; *Holistic Approach to Poultry Disease Management in the Country - Strategies and Achievements* - Dr. J.M. Kataria
- A Special lecture on *National Agriculture Innovation Project – Concept and Components* by Dr. J.C. Katyal
- Presidential address on *Restoring Farmers' Faith In Farming* by Prof. M. S. Swaminathan

## 2007

- VIII Agricultural Science Congress on the theme *Science for Food, Livelihood Security and Rural Prosperity*, was held at Tamil Nadu Agricultural University, Coimbatore, during February 15-17, 2007; Convener: Prof. C. Ramasamy, Vice-Chancellor, TNAU, Coimbatore.
- A Round Table Discussion on *Sustainable Action Plan for Bringing 10 Million Hectares of Additional Land Under Irrigation as proposed under Bharat Nirman* was held at New Delhi on February 22, 2007; Convener: Dr. A.K. Singh, Project Director, Water Technology Centre, IARI, New Delhi
- Expert Meeting on *Review of Curriculum in Agricultural Meteorology* was held from March 14-16, 2007 at New Delhi; Convener: Dr. M.V.K. Sivakumar, Chief, Agricultural Meteorology Division, World Meteorological Organization (WMO) and Foreign Fellow, NAAS.
- Foundation Day Function and Annual General Body Meeting, New Delhi, June 4-5, 2007.
- Scientific Presentations by Fellowship: *Rainfed Agriculture and High Value Commodities* - Dr. P.K. Joshi; *The Common Genespace Between Rice and Wheat* - Dr. N.K. Singh; *Environmental and Nutritional Aspects of Larviculture* - Dr. Rina Chakrabarthi
- Scientific Presentations by Associates: *Heavy Metal Pollution in Soils and Plants and Its Management* - Dr. T. Adhikari; *In Vitro Crop Improvement and Micropropagation of Recalcitrant Fruit Crops* - Dr. S.K. Singh; *Innovative Methods in Post Harvest Management of Horticultural and Arable Crops* - Dr. Abhijit Kar
- Foundation Day Programme: To commemorate 60 Year of India's Independence the Academy organized a National Symposium on *Agriculture Cannot Wait: New Horizons* on June 5, 2007, New Delhi.

At this occasion, His Excellency the President of India Dr. A.P.J. Abdul Kalam delivered a Special Lecture on *Innovate to Empower Agriculture*. Around 300 scientists attended this symposium, wherein the following very high dignitaries made their presentations:

- Prof. M.S. Swaminathan gave the Introductory Address
- Dr. Montek Singh Ahluwalia, delivered the Keynote Address
- Shri G Madhavan Nair, Chairman, ISRO: Space Applications in Agriculture
- Dr. Anil Kakodkar, Secretary, DAE & Chairman, AEC: Nuclear Technology including Nuclear Energy in Agriculture
- Dr. M.K. Bhan, Secretary, DBT: Biotechnology and Shaping our Agricultural Future
- Dr. S.K. Chopra, Principal Advisor & Special Secretary, Ministry of New and Renewable Energy: Renewable Energy
- Dr. Viloo M. Patell, Founder & Managing Director, Avesthagen (presented by Dr. A.R. Chaudhary): Public-Private Partnership in Biotechnology and Shaping our Agricultural Future
- Dr. V. Balaji, Head, Knowledge Management and Sharing, ICRISAT: Information and Communication Technology
- Dr. K. Palanisami, Director, CARD, TNAU: More Income and Crop per Drop of Water
- Ms. Chitra Jayanty, Naandi Foundation: Making Hunger History: Public-Private Partnership
- A Special Function for Commemoration of the 60<sup>th</sup> Anniversary of India's Independence was held on August 6, 2007 at New Delhi.

Smt. Pratibha Devisingh Patil, Hon'ble President of India was the Chief Guest at the occasion and delivered the Presidential Address on *Agriculture and Food Security*, which happened to be her first public address after assuming the high office of the President. Dr. Jacques Diouf, Director General, FAO and a distinguished Foreign Fellow of NAAS, was the guest of honour and delivered a special address on "Agriculture Cannot Wait"

- A consultation to commemorate International Day of Non-Violence (Mahatma Gandhi's Birth Anniversary) on *Where Hunger Rules, Peace Cannot Prevail – A Road Map for a Hunger Free, Nutrition Secure India* was held on October 3, 2007 at New Delhi; Convener: Prof. M. S. Swaminathan, President, NAAS & Member of Parliament (Rajya Sabha), Govt. of India.
- A Brainstorming Discussion on *Sustainable Energy for Rural India – Issues & Options* (Convener: Dr. Anwar Alam, Vice-Chancellor, SKUAST-K, Srinagar) was held on October 25, 2007 at SKUAS&T-K, Srinagar, J&K.

## Lectures

- On the occasion of New Year Get-together of NAAS Fellows, Prof. M. S. Swaminathan delivered the Presidential Address on *Science and the Agrarian Crisis*.
- A Special Lecture on "*Risks in Crop Production Induced by Water and Nitrogen Interactions*" was delivered by Dr. Jerry Hatfield, Laboratory Director, USDA-ARS National Soil Tilth Laboratory, Ames, Iowa and President, American Society of Agronomy, USA on March 15, 2007 at IARI Auditorium, New Delhi.

## 2008

- Brainstorming Session on the *State of Indian Agriculture* (Convener: Dr. P.K. Aggarwal, ICAR-National Professor, IARI, New Delhi and Secretary, NAAS) was held on January 7, 2008 at NAAS, New Delhi.
- Brainstorming Session on *High Value Agriculture in India: Prospects and Policies* (Convener: Dr. S.P. Ghosh, Foreign Secretary, NAAS, New Delhi) was held on April 28, 2008 at NAAS, New Delhi.
- Foundation Day Function and Annual General Body Meeting, New Delhi, was held on June 4-5, 2008
- Scientific Presentations by Fellowship: *Quality Protein Maize for Nutritional Security: Rapid Development of Short Duration Hybrids through Molecular Marker Assisted Breeding* - Dr. H.S. Gupta; *Bluetongue virus and its impact on animal health and production* - Dr. Gaya Prasad; *Trends in Crop Monitoring from Space* - Dr. V.K. Dadhwal; *Insecticide - Microflora Interactions in Agriculture* - Dr. Venkateswarlu Kadiyala; *Cryogenic Technology for Food Processing* - Dr. K.K. Singh; *Global Food Crisis: Causes, Implications and Outlook* - Dr. Ramesh Chand; *Genetic improvement of crop plants through biotechnological approaches* - Dr. Vidya Shrikant Gupta.
- Scientific Presentations by Associates: *Optimization of irrigation and nitrogen requirement for improving productivity and input use efficiency of Bt cotton using simulation modeling approach* - Dr. K.K. Bandyopadhyay; *Opportunities and Challenges for Trade of Livestock Products of India* - Dr. Anjani Kumar; *Development and Evaluation of Conservation Agriculture Based Resource Conserving Technologies in Different Cropping Systems* - Dr. M.L. Jat; *Development and application of genomic tools for legume improvement* - Dr. Rajeev K. Varshney.
- Foundation Day Lecture 2008 on *Rejuvenating Agriculture: The Challenges Ahead*, delivered by Dr. Montek Singh Ahluwalia, Deputy Chairman, Planning Commission, Govt. of India.
- *Implications of WTO, PVP&FR Act and Bio-diversity Acts* (Convener: Dr. Ajit Varma, Director and Vice Chairman, Amity Science Technology Foundation, Amity Institute of Microbial Sciences, Amity University, Uttar Pradesh, Noida) was held on October 17, 2008 at Amity University, Noida

- *Quarantine including internal quarantine strategies in view of onslaught of diseases and insect pests* (Conveners: Dr. S. K. Sharma, Director/ Dr. R.K. Khetarpal, Head, Plant Quarantine Division, NBPGR, New Delhi) was held on November 4, 2008 at NAAS, New Delhi
- *Agricultural Sustainability through Microbial Biotechnology: Novel and Innovative Concepts* (Convener: Dr. D. K. Arora, Director, NBAIM, Mau, U.P.) held on November 11, 2008 at NAAS, New Delhi
- *Global Food Crisis and Implications for India* (Convener: Dr. Ramesh Chand, National Professor, NCAP, New Delhi) was held on November 17, 2008 at NAAS, New Delhi
- *Antibiotics in Manure and Soil – Grave Threat to Human and Animal Health* (Convener: Dr. N. S. Pasricha, former Director, Potash Research Institute of India) was held on November 18, 2008 at NAAS, New Delhi
- *Implementing a Holistic and Output-Oriented Biotechnology in India* (Convener: Dr. K. V. Prabhu, Head/Co-convener: Dr. B.M. Prasanna, National Fellow, Division of Genetics, IARI, New Delhi) was held on December 23, 2008 at NAAS, New Delhi

## 2009

- 4<sup>th</sup> World Congress on Conservation Agriculture; Chair: Dr. Mangala Rai, Co-Chair: Dr. Mahmoud Solh. The theme of the Congress was *Innovations for improving efficiency, equity and environment*.

Indian Council of Agricultural Research and National Academy of Agricultural Sciences jointly organized the 4th World Congress on Conservation Agriculture, during February 4-7, 2009 in New Delhi. The congress was inaugurated by Shri Sharad Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food & Public Distribution, Government of India. The congress was attended by more than 900 delegates from 60 countries representing scientific community, policy advisors, farmers' organizations, corporate leaders, donor organizations, media and non-governmental organizations from different parts of the world.

- Foundation Day Function and Annual General Body Meeting at New Delhi, was held on June 4-5, 2009

Address by Sh. Sharad Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food & Public Distribution at the release of the NAAS Publication on State of Indian Agriculture.

Scientific Presentations by Fellowship: *Molecular Breeding for Maize Improvement in India* - Dr. B.M. Prasanna; *Genetic improvement of forage crops: achievements and prospects* - Dr. Ajoy Kumar Roy; *Plant secondary metabolism in medicinal and aromatic plants: Understanding the basics and the opportunities ahead* - Dr. (Mrs.) Neelam S. Sangwan; *New research agenda to revive sorghum economy* - Dr. N. Seetharaman; *A brief account of plant genetic research studies* - Prof. S.K. Sen; *Germplasm characterization and linkage studies in rice and coffee: a few significant achievements using DNA marker technologies* - Dr. Ramesh K. Aggarwal; *Functional genomics of a plant growth promoting rhizobacterium, Azospirillum brasilense for abiotic stress tolerance* - Dr. A.K. Tripathi; *Highlight of significant contributions and their perspective on future lines of research and development* - Dr. Shyam Singh; *Effective Botanical Formulation and some Isolated Compounds against Insect Pests* - Dr. S. Ignacimuthu; *Sustainable cotton pest Management strategies for India* - Dr. K. R. Kranthi; *Multifarious Applications of yeast and thermophilic mould phytases*, Prof. T. Satyanarayana; *Strategies for Augmenting Reproductive Efficiency in Poultry production* - Dr. Jag Mohan; *Molecular identification, characterization and gene banking of fishes* - Dr. W.S. Lakra; *Integrated Farming System for Livelihood Security in Eastern Himalaya, India* - Dr. B.P. Bhatt; *A New approach in soil quality evaluation* - Dr. A.N. Ganeshamurthy; *Oilseeds Production in India: A Constraint Analysis and Suggested Road Map* - Dr. D.M. Hegde; *Mapping of Plant Resources of North East India, a Mega-diversity Hotspot* - Dr. M.L. Khan; *Integrated Natural Resource Management in the Himalaya* - Dr. K.G. Saxena; *Incomplete Block Designs in Agricultural Research* - Dr. V.K. Gupta; *New Institutional Economics and Agricultural Development Policy* - Dr. Suresh Pal.

Foundation Day Lecture on *Higher Education and XI Plan – Approach and Strategy*, delivered by Dr. Sukhadeo Thorat, Chairman, University Grant Commission.

Presidential Address on *Agriculture – Fast Forward* delivered by Dr. Mangala Rai, President, NAAS, Secretary, DARE & Director General, ICAR.

- IX Agricultural Science Congress

The IX Agricultural Science Congress; Convener: Dr. Anwar Alam, Vice-Chancellor, SKUAST-K was jointly organized by Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir and National Academy of Agricultural Sciences (NAAS) at Srinagar from June 22-24, 2009. The theme of the Congress was *Technological and Institutional Innovations for Enhancing Agricultural Income*. Shri N.N. Vohra, HE, the Governor Jammu & Kashmir (Chancellor SKUAST-K) was the Chief Guest on the inaugural function and Jenab Omar Abdullah, Hon'ble Chief Minister (Pro-Chancellor, SKUAST-K).

## Brainstorming Sessions

- *Allele mining and Bio-prospecting in Genetic Resources* (Convener: Dr. S.K. Sharma, Director, NBPGRI, New Delhi) was held on January 30, 2009 at NAAS, New Delhi.
- *Agrochemicals Management: Issues and Strategies* (Convener: Dr. Balraj S. Parmar, former Joint Director (Research) and Emeritus Scientist, Indian Agricultural Research Institute, New Delhi) was held on April 17, 2009 at NAAS, New Delhi.
- *Crop Response and Nutrient Ratio* (Convener: Dr. Rajendra Prasad, Ex ICAR National Professor and INSA Honorary Scientist) was held on May 28-29, 2009 at NAAS, New Delhi.
- *Vaccines and Diagnostics* (Convener: Dr. A. K. Srivastava, Director and Vice-Chancellor, National Dairy Research Institute, Karnal) was held on July 10-11, 2009 at NDRI, Karnal.
- *New Generation Biofuels* (Convener: Dr. P. K. Singh, Emeritus Scientist (CSIR), Department of Botany, BHU, Varanasi and former V.C., CSA University of Agriculture and Technology, Kanpur; Co-Conveners: Dr. Dolly Wattal Dhar, Professor, Department of Microbiology, and Dr. Sunil Pabbi, Principal Scientist, Centre for Conservation and Utilization of Blue Green Algae, IARI, New Delhi) was held on August 28, 2009 at NAAS, New Delhi.
- *National Action Plan on Climate Change and Food Security* (Convener: Dr. P. K. Aggarwal, ICAR National Professor, IARI, New Delhi) was held on September 29, 2009 at NAAS, New Delhi.
- *Agricultural Waste Management* (Convener: Dr. N. S. L. Srivastava, Joint Director, Sardar Patel Renewable Energy Research Institute, Vallabh Vidyanagar, Gujarat) was held on October 23-24, 2009 at NAAS, New Delhi.
- *Increased Food Production and Resource Conservation* (Convener: Dr. Richard Joseph, Former Deputy Director and Head, Department of Food Microbiology, CFTRI, Mysore) was held on November 27, 2009 at NAAS, New Delhi.

## Lectures

- *Collaboration and Partnership: The Future of Higher Education* by Dr. E. Gordon Gee, President, Ohio State University on August 13, 2009 at NAAS, New Delhi.
- *Reconstructing Indian Population History* by Dr. Lalji Singh, Director, Centre for Cellular and Molecular Biology, Hyderabad on September 25, 2009 at NAAS, New Delhi.

## 2010

- Foundation Day Function and Annual General Body Meeting at New Delhi, was held on June 4-5, 2010.

Scientific Presentations by Fellowship: *Biochemical and molecular studies on forage crop improvement* - Dr. Amaresh Chandra; *Quality seeds for increasing agricultural productivity* - Dr. Malavika Dadlani; *Cloning, characterization and genetic manipulation of lignin biosynthetic pathway genes* - Dr. Kavi Kishor; *Bioprospecting genes, enzymes and processes from Himalayan*

*flora for plant adaptation and metabolic engineering* - Dr. Sanjay Kumar; *Developing and applying genomic resources for SAT legume improvement* - Dr. Rajeev K. Varshney; *Technologies for producing table grapes for export* - Dr. S.D. Shikhamany; *Bio-active compound mining through chemo- and bioprospecting* - Dr. C. Devakumar; *Improving plant productivity and health in medicinal and aromatic plants – Microbial way* - Dr. Alok Kalra; *Living with cyanobacteria* - Dr. A.K. Rai; *Towards sustainable soil physical environment* - Dr. S.K. Chaudhari; *Recent developments in soil science* - Dr. D.K. Pal; *Nitrogen cycling: ecology and biodiversity in agro-ecosystems* - Dr. Ashok K. Patra; *Agro-technology development and large-scale cultivation of medicinal and aromatic crops in Deccan Plateau* - Dr. B.R. Rajeswara Rao; *Rhizosphere micro-organisms alleviate abiotic stresses in plants* - Dr. B. Venkateswarlu; *Livestock production in island ecosystem and disaster mitigation* - Dr. B.R. Rai; *Urinary purine derivatives as an index for the estimation of rumen microbial protein production* - Dr. A.K. Verma; *Most significant contributions in research & development* - Dr. Surendra Singh; *Development of convenience food from fish and shellfish* - Dr. Srinivasa Gopal; *Source of growth in Indian agriculture: implications for research and policy* - Dr. Pratap Singh Birthal; *Bioinspired nanotechnology and its uses in medicine and agriculture* - Dr. K.M. Paknikar.

Presidential Address on *Towards Developing an Innovative Model for Transformation of Agriculture in India* delivered by Dr. Mangala Rai, President, NAAS.

Foundation Day Lecture on *Space-An Innovative Tool for Agriculture*, delivered by Dr. K. Kasturirangan, Member, Planning Commission.

## Brainstorming Sessions

- *Protected Agriculture in North-West Himalaya* (Convener: Dr. Anwar Alam, Vice-Chancellor, SKUAST-K, Srinagar) was held on June 12, 2010 at Srinagar.
- *Exploring Untapped Potential of Acid Soils of India* (Convener: Dr. C.L. Acharya, former Director Extension Education, CSKHPKV, Palampur) was held on July 22-23, 2010 at NAAS, New Delhi.
- *Soil Micronutrients and Human Health* (Convener: Dr. A.N. Ganeshamurthy, Principal Scientist, IIHR, Bangalore) was held on September 7-8, 2010 at IIHR, Bangalore.
- *Livelihood Opportunities for Smallholders: Challenges and Opportunities* (Convener: Dr. P.K. Joshi, Director, NAARM, Hyderabad) was held on September 7-8, 2010 at NAARM, Hyderabad.
- *Prioritization and Value Addition of Nutritionally Important Crops* (Convener: Dr. G.A. Ravishankar, Head, Plant Cell Biotechnology Department, CFTRI, Mysore) was held on September 18, 2010 at NAAS, New Delhi.
- *Making IPM Effective in India* (Convener: Dr. B.L. Jalali, former Director (Research), CCS HAU, Hisar) was held on September 29, 2010 at NAAS, New Delhi.
- *Carrying Capacity of Indian Agriculture* (Convener: Dr. C.R. Bhatia, former Secretary, DBT) was held on October 28, 2010 at NAAS, New Delhi.
- *Drought Preparedness and Mitigation* (Convener: Dr. K.D. Sharma, Technical Expert (Water Management), National Rainfed Area Authority, New Delhi) was held on November 26, 2010 at NAAS, New Delhi.

## Lectures

- Dr. Kenneth Quinn, former US Ambassador to the Kingdom of Cambodia and President, The World Food Prize delivered a lecture titled *Norman Borlaug, The World Food Prize: Inspiring the Struggle Against Hunger into the 22 Century* on February 24, 2010.

## 2011

- X Agricultural Science Congress

The X Agricultural Science Congress; Convener: Dr. W.S. Lakra, Director, CIFE and Co-convener: Dr. J.K. Jena, Director, NBFGR was jointly organized by the National Bureau of Fish Genetic Resources, Lucknow in collaboration with the Indian Institute of Sugarcane Research, the



Central Institute for Subtropical Horticulture, Lucknow and National Academy of Agricultural Sciences (NAAS) at Lucknow from February 10-12, 2011. The theme of the Congress was *Soil, Plant and Animal Health for Enhanced and Sustained Agricultural Productivity*.

The Congress was inaugurated on February 10, 2011 by His Excellency Shri B. L. Joshi, Governor of Uttar Pradesh and Shri Harish Rawat, Hon'ble Minister of State for Agriculture & Food Processing Industries, Government of India presided the Inaugural Function.

- Foundation Day Function and Annual General Body Meeting at New Delhi, was held on June 4-5, 2011

Scientific Presentations by Fellowship: *Application of Molecular Markers for Genetic Dissection of Grain Quality Traits and Their Improvement Using Marker-Assisted Selection in Bread Wheat* - Dr. H.S. Balyan; *Molecular Approaches: A New Paradigm in Basmati Breeding* - Dr. A.K. Singh; *Ascending the Hierarchy of Needs* - Dr. S.P. Tiwari; *Role of DNA Helicases in Abiotic Stress Tolerance* - Dr. Narendra Tuteja; *Genetic Improvement of Pearl Millet for Drought-Prone Environments of Arid Zone* - Dr. O.P. Yadav; *Plant – Microbe Association in Tissue Cultures* - Dr. Pious Thomas; *Tropospheric Ozone A Threat to Food Production in India* - Dr. Madhoolika Agrawal; *Soil Fertility Evaluation and Balanced Fertilization to Improve Soil Health, Nutrient Use Efficiencies and Farm Profits* - Dr. B.S. Dwivedi; *On- and Off-farm Resource Management Options for Enhancing Agricultural Productivity* - Dr. P.K. Ghosh; *Rain Water-harvesting in High Rainfall Plateau Region- A New Approach* - Dr. R.C. Srivastava; *Taming the Abiotic Stresses.....* - Dr. K.P.R. Vittal; *Utilizing Chemistry for Agricultural Waste and Pesticide Management* - Dr. Madhuban Gopal; *Perspectives of Molecular Detection of Seed-borne Pathogens* - Dr. H.S. Prakash; *Prospecting Extreme Environments for Microbial Diversity and Genes for Abiotic Stress Tolerance* - Dr. A.K. Saxena; *Exploring Structure and Biotechnological Applications of Glucans from Lactic Acid Bacteria Isolated from Microbial Diversity Hot Spot Assam* - Dr. Arun Goyal; *New Genes and Microbes Conferring Climate Resilience for Sustainable Agriculture* - Prof. Bhavanath Jha; *Technology Upgradation of Indigenous Dairy Products* - Dr. G.R. Patil; *Characterization of Genome Diversity of Indian Zebu Cattle (Bos Indicus) Utilizing Neutral and Functional Markers* - Dr. R.C. Sobti; *Storing Grain for Increased Food Security and Safety* - Dr. D.S. Jayas; *Post Harvest Technologies for Assuring Food and Nutritional Security* - Dr. R.T. Patil; *On Some Robust Estimation of Heritability* - Dr. V.K. Bhatia; *Experiments with Mixtures Methodology in Agricultural Research* - Dr. Rajender Parsad

Presidential Address on *The Hungry Child Cannot Wait* was delivered by Prof. R.B. Singh.

Foundation Day Lecture on *Agriculture - 12<sup>th</sup> Five Year Plan Priorities* delivered by Prof. Abhijit Sen, Member, Planning Commission.

- NAAS - ttz-Bremerhaven Interaction; was held on June 7, 2011 at New Delhi.
- Meeting on *Roadmap of Indian Agriculture* held on July 1, 2011.
- Meeting on *Water in Agriculture* held on May 31, 2011.

## Brainstorming Sessions

- *Integration of Millets in Fortified Foods* (Convener: Dr. A.K. Srivastava, Director & Vice-Chancellor, NDRI, Karnal) was held on May 13, 2011 at New Delhi.
- *Bio-safety Assurance for GM Foods in India* (Convener: Dr. Manju Sharma, Former Secretary DBT, GOI; Co-convener: Dr. P. Ananda Kumar, Director, NRCPB, New Delhi) was held on June 22, 2011.
- *Biopesticides - Quality Assurance* (Convener: Dr. A.N. Mukhopadhyay, Former Vice-chancellor, AAU; Co-convener: Dr. C.S. Nautiyal, Director, NBRI, Lucknow) was held on June 24, 2011.
- *Fish Stock Certification and Ecolabelling* (Convener: Dr. T.K. Srinivasa Gopal, Director, CIFT, Cochin) was held on August 27, 2011.
- *Sustaining Agricultural Productivity through Integrated Soil Management* (Convener: Dr. A. Subba Rao, Director, IISS, Bhopal) was held on October 10, 2011.

- *Livestock Infertility and its Management* (Convener: Dr. B.S. Prakash, Head, Division of Dairy Cattle Physiology, NDRI, Karnal) was held on October 15, 2011.
- *Value Added Fertilizers for SSNM* (Convener: Dr. Rajendra Prasad, Former ICAR National Fellow) was held on October 17, 2011.
- *Fighting Child Malnutrition* (Convener: Dr. V. Prakash, Former Director, CFTRI) was held on November 13, 2011.

## 2012

- Foundation Day Function and Annual General Body Meeting at New Delhi, was held on June 4-5, 2012.

Scientific Presentations by Fellowship: *Breeding Rapeseed-Mustard Varieties/Hybrids for Diverse Indian Agro Climatic Conditions and Extending Crop to New Niches* - Dr. J.S. Chauhan; *GM Rice Developed with Transgenes for Nutrition Improvement, Biotic and Abiotic Stress Tolerance* - Dr. (Ms.) Karabi Datta; *Cotton Improvement Through Introgressive Breeding - Cytogenetical and Molecular Approaches* - Dr. S.S. Mehetre; *RNAi-mediated Control of Fungal Pathogens and Insect Pests, and Improvement of Fruit Quality in Tomato* - Dr. M.V. Rajam; *Linking Crop Improvement Programmes with Seed Production for Increasing Crop Productivity: Madhya Pradesh Experience* - Dr. S.K. Rao; *Improvement and Management of Tropical Fruits in Odisha* - Dr. D.P. Ray; *Developing Climate-resilient Agriculture through Natural Resources Management* - Dr. G. Kar; *Technological Options in Oilseeds Brassica* - Dr. Arvind Kumar; *Approaches to Higher Agricultural Water Productivity* - Dr. Ashwani Kumar; *Effect of Air Pollution on Plants and Pathogens, and the Biocontrol of Plant Diseases* - Dr. M.R. Khan; *Innovative Approaches in Application of Biocontrol Agents for Management of Plant Diseases* - Prof. S.R. Niranjana; *Understanding Cyanobacterial Responses to Abiotic Stresses using Genomic and Proteomic Approaches* - Dr. L.C. Rai; *Value Addition in Dairy Processing through Biotechnological Applications* - Dr. V.K. Batish; *Significant Research Accomplishments and Future Line of Research for Sheep Husbandry* - Dr. S.M.K. Naqvi; *Harnessing Synergies To Conserve Fish Genetic Resources* - Dr. A. Gopalakrishnan; *Nondestructive Evaluation of Quality of Mango and Their Juice* - Dr. S.N.Jha; *Precision Irrigation* - Dr. K.N. Tiwari; *Some Applications of Statistical Modelling Techniques in Agriculture* - Dr. Prajneshu

Presidential Address on *Millennium Development Goals: Promises to Keep* was delivered by Prof. R.B. Singh

Foundation Day Lecture on *Challenges of Sustainable Foodgrain Supply* delivered by Prof. V.S. Vyas, Member, Economic Advisory Council to the Prime Minister

- An interface meeting of the Professional Societies of Agricultural Sciences (PAAS) with NAAS on *Harnessing Multifunctionality of Agriculture - A Dialogue* (Convener: Dr. I.P. Abrol, Co-Convener: Dr. H. Pathak) was organized on September 10, 2012

## Brainstorming Sessions

- *Peri-Urban Agriculture (including Horticulture, Floriculture, Livestock, Fisheries and Fodder)* (Convener: Dr. H.P. Singh, DDG (Hort.), ICAR, New Delhi) was held on April 14, 2012
- *Crop Residue Management in the Context of Conservation Agriculture* (Convener: Dr. Himanshu Pathak, Senior Scientist, Division of Environmental Sciences, IARI, New Delhi) was held on April 16, 2012
- *Climate-resilient Agriculture* (Convener: Dr. A.K. Singh, DDG (NRM), ICAR, New Delhi) was held on April 25, 2012
- *Water Use Potential of Flood Affected and Drought Prone Areas of Eastern Region* (Convener: Dr. B.P. Bhatt at ICAR Research Complex for Eastern Region, Patna) was held on May 14, 2012
- *Livelihood Security of Marginal and Sub-marginal farmers* (Convener: Dr. S.P. Ghosh, Former DDG, ICAR) was held on June 18, 2012
- *Genetic Improvement of Cereal Crops through Nif Genes and C<sub>4</sub> Pathway* (Convener: Dr. S.K. Datta, DDG (CS), ICAR, New Delhi) was held on October 30, 2012

- *Mastitis Management in Dairy Animals* (Convener: Dr. A.K. Srivastava, Director & Vice Chancellor, NDRI, Karnal) was held on October 31, 2012

## Lectures

- *Adding Value to Soybeans - Enhancing Functional Traits* by Dr. Jagdish Kumar, Principal Soybean Breeder & Leader, Soyfood Program, Hendrick Seeds, Canada on January 31, 2012
- *Global Status of Commercialized Bio-tech/GM Crops* by Dr. Clive James, Chair, International Service for the Acquisition of Agri-biotech Applications was jointly organized by NAAS and ICAR on February 18, 2012

Academy's Participation in the *Meeting of Experts on Agro Products and Food Security of BRICS Countries* held on August 27, 2012 in New Delhi.

## 2013

- XI Agricultural Science Congress on *Agricultural Education: Shaping India's Future*

XI Agricultural Science Congress (XI ASC) under the aegis of National Academy of Agricultural Sciences, in collaboration with Indian Council of Agricultural Research (ICAR), was organized at Orissa University of Agriculture and Technology, Bhubaneswar from February 7-9, 2013. The theme of the Congress was Agricultural Education – Shaping India's Future. The Congress was inaugurated on February 7, 2013 by His Excellency S.J. M.C. Bhandare, Governor of Odisha and S.J. Debi Prasad Mishra, Hon'ble Minister Agriculture, Fisheries and Animal Resources Development, Government of Odisha was the Guest of Honour at the Inaugural Function.

The Hon'ble Chief Minister of Odisha, S.J. Naveen Patnaik, chaired a Special Session on 'Agricultural Research, Education and Extension for Nutritional Security' on February 8, 2013. Prof. R.B. Singh, President NAAS, Prof. Abhijit Sen, Member Planning Commission, Dr. Kul Gautam, Advisor, South Asia Food and Nutrition Security Initiative, World Bank, and Dr. Mahtab Bamji, Honorary Scientist, INSA addressed the Session.

## Special Lectures

- Lecture by Dr. Ramesh Chand, Director, NAIP, Delhi on *Role and Affects of Agricultural Subsidies in India* on February 1, 2013.
- Lecture by Prof. Peter H. Revan, President Emeritus, Missouri Botanical Garden, USA on *Prospects of GM Crops for Comprehensive Food and Environmental Security* on February 4, 2013.
- Foundation Day Celebrations and Annual General Body Meeting was held on June 4-5, 2013 at New Delhi.
- Scientific Presentations by Fellowship: On June 4-5, 2013, Dr. Lalji Singh and Dr. P.L. Gautam, Vice-Presidents of the Academy, chaired the scientific sessions in which 18 newly elected Fellows made brief presentations highlighting their accomplishments.

*Regulatory Networks in Nutrient and Immune Response in Plant* - Dr. Subhra Chakraborty; *Technological Interventions for Rabi Sorghum Production and Utilization* - Dr. J.V. Patil; *Crop Genomics towards Deciphering the Complex Molecular Mechanisms Governing Abiotic and Biotic Stresses* - Dr. Manoj Prasad; *Genetic Improvement of Pulses* - Dr. J.S. Sandhu; *Biotechnology for Potato and Jute Improvements* - Dr. Debabrata Sarkar; *Combating Parasitic Diseases Through Improved Diagnostics and Immunity* - Dr. K.M.L. Pathak; *Development of Complete Animal Health Solutions* - Dr. R.K. Singh; *Research in Support of Aquatic Germplasm Conservation and Aquaculture Policies* - Dr. A.G. Ponniah; *Agroforestry for Diversification of Land Use and Mitigation of Climate Change Effects* - Dr. S.K. Dhyani; *Agro-physiological Interventions for Crop Improvement and Resource Conservation* - Dr. Ashok Kumar; *Pine Oleoresin-coated Slow Release Urea* - Dr. S. Kundu; *Land Use Hydrology, Climate Change and Water Productivity Enhancement* - Dr. Alok K. Sikka; *Improved Soil and Water Management Strategies for Sustainable Agriculture* - Dr. Ravender Singh; *Crop Protection for Livelihood*

*Security of Farmers* - Dr. C. Chattopadhyay; *Cell Wall as A target for Biological Control of Fungal Plant Diseases* - Prof. A.R. Podile; *Constitutive and Induced Resistance to Insects: Potential and Limitations* - Dr. H.C. Sharma; *Improving Water Management from Source to Sink* - Dr. T.B.S. Rajput; *Prospects and Paradoxes of Ensuring Food Security in India* - Dr. Anjani Kumar.

- Presidential Address on *Climate-smart Agriculture towards an Ever-Green Economy* was delivered by Prof. R.B. Singh.
- Foundation Day Lecture on *Landscape of Higher Education in India* delivered by Prof. Ved Prakash, Chairman, University Grants Commission. Prof. R.K. Pachauri, Director General, TERI was the Guest of Honour at Foundation Day Lecture.
- The first Dr. A.B. Joshi Memorial Lecture on *The Challenging Agriculture in the Changing Times* was delivered by Dr. Mangala Rai, Agriculture Advisor to Chief Minister of Bihar and former Secretary, DARE & Director General, Indian Council of Agriculture Research on June 4, 2013.

## Brainstorming Sessions

- *Improving Productivity of Rice Fallows* (Convener: Dr. Masood Ali, Ex-Director, IIPR) was held on April 20, 2013 at New Delhi.
- *Nanotechnology in Agriculture: Scope and its Current Relevance* (Convener: Dr. J.C. Tarafdar, ICAR National Fellow, CAZRI, Jodhpur) was held on April 23, 2013 at New Delhi.
- *Sanitary & Phytosanitary (SPS) Measures in Fisheries* (Convener: Dr. T.K. Srinivasa Gopal, Director, CIFT, Cochin) was held on June 27, 2013 at New Delhi
- *Role of Endophytes in Agricultural Productivity* (Convener: Dr. D.J. Bagyaraj, NASI Sr. Scientist Platinum Jubilee Fellow and Chairman, Centre for Natural Biological Resources & Community Development (CNBRCD), Bangalore) was held on July 5, 2013 at New Delhi.
- *Bioinformatics in Agriculture: Way forward* (Convener: Dr. D.P. Singh, Senior Scientist at NBAIM, Mau) was held on July 12, 2013 at New Delhi.
- *Role of Millets in Nutritional Security* (Convener: Dr. Mahtab S. Bamji, INSA Honorary Scientist, Hyderabad) was held on October 19, 2013 at New Delhi.
- *Efficient Utilization of Phosphorus* (Convener: Dr. A. Subba Rao, Director, IISS, Bhopal) was held on November 8, 2013 at New Delhi.
- *Choosing leaders in agri-research and methods of scientists' recruitment and Talent Search in Agricultural Teaching, Research and Extension* (Convener: Dr. C.D. Mayee, Former Chairman, ASRB) was held on November 11, 2013 at New Delhi.
- *Our Policies, priorities, development claims and ground reality - a relook and time for major corrections* (Convener: Prof. Panjab Singh, President, Foundation for Advancement of Agriculture and Rural Development (FAARD), Varanasi and Former Secretary, DARE & DG, ICAR) was held on December 16, 2013 at New Delhi.
- *Bio-drainage: An Eco-friendly Tool for Combating Water logging* (Convener: Dr. S.K. Chaudhari, Head, Soil & Crop Management Division, CSSRI, Karnal) was held on December 19, 2013 at New Delhi.
- *Bio-Fuels to Power Indian Agriculture* (Convener: Dr. B.S. Pathak, Former Director, School of Energy Studies in Agriculture, PAU and Co-conveners: Prof. Anwar Alam, Secretary, NAAS and Prof. A.K. Jain, Dean, Central University of Punjab) was held on December 23, 2013 at New Delhi.

## 2014

- Round Table on *GM Crops for Nutritional Security* under the Chairmanship of Prof. M.S. Swamianthan, Founder Chairman and Chief Mentor, MSSRF held on February 12, 2014.
- Foundation Day Celebrations and Annual General Body Meeting held on June 4-5, 2014 at New Delhi.

- Scientific Presentations by Fellowship: On June 4, 2014, Dr. P.L. Gautam, Vice-President of the Academy, chaired the scientific sessions in which 17 newly elected Fellows made brief presentations highlighting their accomplishments.

*Genes and Genomics for Crop Improvement* - Prof. (Ms.) Paramjit Khurana; *Antiquity and functional diversity of L-myo-inositol 1-phosphate synthase (MIPS)* - Dr. A.N. Lahiri Majumder; *Management and Utilization of Plant Genetic Resources in the North-Western Himalayan Region of India* - Dr. J.C. Rana; *Development and Use of Microsatellite Markers for Crop Improvement* - Dr. P.C. Sharma; *Breeding for Quality and Disease Resistance in Vegetable Crops* - Dr. Pritam Kalia; *Micronutrients in Livestock Production and Reproduction* - Dr. C.S. Prasad; *Closing the Efficiency Gap in Resource Use for Responsive Animal Nutrition* - Dr. Kusumakar Sharma; *Preventive Health Care in Aquaculture* - Prof. I.S. Bright Singh; *Integrated Farming Systems for Livelihood Security of Small and Marginal Farmers: Addressing the Knowledge Gap* - Dr. U.K. Behera; *Carbon Sequestration and Soil Conservation in Arable high lands* - Dr. Ranjan Bhattacharyya; *Farming System Management for Improving Livelihood of small farm holders* - Dr. B. Gangwar; *Some Novel Visions and Resolutions in Adopting Frontier Analytical Tools and Developing Methodologies: A Saga of Building A Community-Friendly Food Safety System* - Dr. Kaushik Banerjee; *Microbial Bioconversion of Plant Material to Value Added Products* - Dr. R.C. Kuhad; *Trichoderma virens: Genetics and genomics* - Dr. P.K. Mukherjee; *Rainwater Conservation and Reuse Structure for Climate Resilient Rainfed Agriculture in Eastern India* - Prof. S.N. Panda; *Food Process Engineering - Research Contributions* - Dr. K.S.M.S. Raghavarao; *Nutraceuticals against Chronic Disorders; Molecular Interplay during Physiological Regulation/Pathogenicity* - Dr. (Ms.) Shylaja M. Dharmesh

- Presidential Address on *Family Farms: Farm, Feed & Flourish* was delivered by Dr. S. Ayyappan.
- Foundation Day Lecture on *Doing Science in India* by Bharat Ratna Professor C.N.R. Rao, National Research Professor, Linus Pauling Research Professor and Honorary President, Jawaharlal Nehru Centre for Advanced Scientific Research, Bengaluru.
- NAAS-IFPRI Meeting on *Developing PME Indicators and Mechanisms in NARS* (Convener: Dr. Mruthyunjaya) held on July 12, 2014.
- National Workshop on *Energy in Agriculture* (Convener: Prof. Anwar Alam and Dr. Pitam Chandra) held on September 15-16, 2014.
- National Workshop on *Water in Agriculture* (Convener: Dr. B.P. Bhatt and Dr. Himanshu Pathak) held on October 7-8, 2014 at Barapani.

## Brainstorming Sessions

- Carbon Economy in Indian Agriculture* (Convener: Dr. A. Subba Rao, Director, Indian Institute of Soil Sciences, Bhopal) held on February 1, 2014 in New Delhi.
- MOOC Opportunities for Capacity Building in Indian Agriculture: Exploring Options and Challenges* (Convener: Dr. C. Devakumar, Former ADG (Education), ICAR) held on March 5, 2014.
- Preparedness for Monsoon 2014* (Convener: Dr. A.K. Sikka, DDG (NRM), ICAR) held on June 7, 2014.
- Monitoring and Evaluation of Agricultural Research, Education and Extension for Development [AREE4D]* (Convener: Dr. P.G. Chengappa, ICAR National Professor, ISEC, Bengaluru) held on June 28, 2014 at Bengaluru.
- Hydroponic Fodder Production in India* (Convener: Dr. H.S. Gupta, Director, IARI and Prof. M.P. Yadav, Former VC, SVPUA&T) held on July 5, 2014.
- Breeding Policy for Bovines in India* (Convener: Dr. M.L. Madan, Former VC, DUVASU and Prof. M.P. Yadav, Former VC, SVPUA&T) held on July 12, 2014.
- Linking Smallholder Farmers and Markets :Towards Inclusive Growth in Agriculture Sector* (Convener: Dr. Anjani Kumar, Research Fellow, IFPRI) held on July 26, 2014.

- Brainstorming Session on *Reservoir Fisheries Development in India: Policy & Management Options* (Convener: Dr. W.S. Lakra) held on September 19, 2014.
- Brainstorming Session on *Sustaining Soybean Production and Productivity in India: A Resource Domains Initiatives* (Convener: Dr. S.M. Virmani) held on November 28, 2014.
- An interface meeting of the Professional Association of Agricultural Sciences on *Developing NAAS-PAAS Linkages* (Conveners: Prof. Anupam Varma and Dr. I.P. Abrol) held on December 2, 2014 at New Delhi.
- Brainstorming Session on *Good Aquaculture Practice (GAP) Certification of Aquaculture in India – Criteria and Implementation Plan* (Convener: Dr. Iddya Karunasagar) held on December 29-30, 2014.
- Brainstorming Session on *Rating of Agricultural Universities and Institutions* (Convener: Prof. R.B. Singh, Immediate Past President) held on December 4, 2014 at New Delhi.

## **Silver Jubilee Events**

### **National Symposia**

- *Mechanization of Small Farms – Review and Roadmap for 25 years* (Convener: Dr. Anwar Alam) held on July 18, 2014 at Bhopal.
- *Nutritionally Sensitive and Environmentally Sustainable Agriculture for India's Food and Nutrition Security: Challenges and Opportunities* (Convener: Dr. Mahtab S. Bamji) held on August 23, 2014 at Hyderabad.
- *Indian Fisheries and Aquaculture: 25 Years of Achievements and Way Forward* (Convener: Dr. W.S. Lakra) held on October 21-22, 2014 at Mumbai.
- *Enhancing and Sustaining Agriculture Productivity for Food and Nutrition Security* (Convener: Dr. Ajay Parida) held on November 22, 2014 at Chennai.
- *Strategic Approaches for Horticultural Research, Education and Development – Way Forward* (Convener: Dr. H.P. Singh and Co-convener: Dr. Pritam Kalia) held on December 26-27, 2014 at New Delhi.
- *25 Years of Research on Insect Resistance to Toxins - The Way Forward* (Convener: Dr. K.R. Kranthi) held on December 27, 2014 at Nagpur.
- *Managing Natural Resources for Posterity: 25 Years of Achievements and Way Forward* (Convener: Dr. Biswapati Mandal) held on December 30, 2014 at Kolkata.
- *Technology-Policy Integration for Pushing Livestock Sector Growth & Productivity* (Convener: Dr. K.M. Bujarbaruah) held on January 12-13, 2015 at Guwahati.

### **Collaborative Programme**

- Workshop on *Soybean for Household Food and Nutrition Security* held on March 21-22, 2014 in collaboration with Indian Council of Agricultural Research (ICAR) and Trust for Advancement of Agricultural Sciences (TAAS).

## **2015**

- XII Agricultural Science Congress on *Sustainable Livelihood Security for Smallholder Farmers*  
XII Agricultural Science Congress (XII ASC-2015) under the aegis of NAAS in collaboration with Indian Council of Agricultural Research (ICAR) was organised at National Dairy Research Institute, Karnal, Haryana during February 3-6, 2015. The theme of the XII ASC was "Sustainable Livelihood Security for Smallholder Farmers", with an objective of promoting a vibrant platform for discussing and exchanging views on contemporary topics in Indian Agriculture like the Crop and Vegetable Production, Animal Production Systems, Fisheries Technologies and related Social Science issues. The Congress was attended by over 1700 participants representing the Faculty & Students from 42 SAUs and 9 Traditional Universities, 32 ICAR Institutes, 600 Farmers, KVKs, ZPDs, NGOs, the World Bank, banking institutions

and policy makers from State and Central departments. The international representation included ILRI, CIMMYT, Michigan State University (USA), IFPRI, BISA, Polish Academy of Sciences.

The Congress was inaugurated on February 3, 2015 by the Chief Guest Hon'ble Governor of Punjab and Haryana, Prof. Kaptan Singh Solanki. Mr. Kevin Gallagher, FAO representative in India. Dr. David Bergvinson, Director General, ICRISAT, Hyderabad, Dr. Jimmy Smith, Director General, International Livestock Research Institute, Nairobi, Kenya; Dr. J. Voegelé, Senior Director, World Bank, Washington, USA, Dr. Sanjaya Rajaram; World Food Prize winner and Former Director, CIMMYT Global wheat programme; Dr. R.S. Paroda, Past President NAAS, Dr. R.B. Singh, Immediate Past President, NAAS, were Guests of honour. Dr. S. Ayyappan, President NAAS, Secretary DARE & Director General, ICAR, presided over the inaugural function. Dr. A.K. Srivastava, Convener of Congress, Director & Vice-Chancellor, NDRI extended a hearty and floral welcome to the chief guest, all dignitaries, distinguished participants and delegates, and gave an overview of the XII ASC.

- The second Dr. A.B. Joshi Memorial Lecture on Zero Hunger India: The Challenge was delivered by Prof. R.B. Singh, Chancellor, Central Agricultural University, Imphal on February 5, 2015.

### Special Lecture

- *Science of Cow Mega-bodies (Mega-antibodies) for Better Human Health* by Dr. Azad Kumar Kaushik, University of Guelph, Ontario, Canada on January 22, 2015.

### Silver Jubilee Events

#### Youth Convention

- Essay Competition on *Farming as My Profession* was conducted among the Post-graduate students of SAUs, CAUs, and ICAR Deemed Universities during April-May 2015.
- Elocution Competition among the students of SAUs, CAUs, and ICAR Deemed Universities was held on June 2, 2015.

Silver Jubilee Panel Discussion on *25 Years of Achievements in Agricultural Sciences and Way Forward for 2030* held on June 3, 2015 under the chairmanship of Prof. M.S. Swaminathan.

Inter Academy meeting was held on June 3, 2015 under the chairmanship of Dr. S. Ayyappan and Prof. Anupam Varma as the Convener.

### Lectures

- Sixty years of adventure in agricultural science* by Prof. M.S. Swaminathan, Founder President, NAAS& Chairman, MSSRF.
- Demand-driven innovation in agriculture: Creating economic opportunity for smallholder farmers and nutritional security for consumers* by Dr. David Bergvinson, DG, ICRISAT.
- Innovations in adaptation to climate change in dry-land agriculture* by Dr. K.H.M. Siddique, Hackett Professor & Director, The UWA Institute of Agriculture, Australia.

NAAS Associates Panel Discussion on *Views of Young Scientists on Research Challenges in the Changing Climate Scenario* held on June 4, 2015 under the chairmanship of Prof. Anupam Varma.

- Scientific Presentations by Newly Elected Fellows: *Genetics, Genomics and Breeding for Drought Tolerance in Rice* by Dr. Arvind Kumar; *Understanding Plant Viral Infections and Developing Tools for their Management* by Dr. Shelly Praveen; *Wheat Improvement for Changing Climatic Situations* by Dr. G.P. Singh; *Hybrid Rice : A Step Towards Achieving Food Security* by Dr. B.C. Viraktamath; *Genetic Enhancement in Indian Mustard* by Dr. D.K. Yadava; *Breeding of Gourds for Yield and Quality: Present Status and Future Strategies* by Dr. T.K. Behera; *Genetic Improvement of Rose: Strategies for Early Selection* by Prof. G.R. Rout; *Genetic*

*Improvement of Vegetables Using Conventional and Biotechnological Tools* by Dr. Major Singh; *Development, Improvement and Conservation of Chicken Germplasm and its Impact on Poultry Production* by Dr. R.N. Chatterjee; *Reproductive Technologies for Production of Quality Farm Animals* by Dr. M.S. Chauhan; *Development of Embryo Transfer Technology in Buffalo* by Prof. A.K. Misra; *Ensuring Milk Quality through Development of Tests, Aptamers and Imprinted Polymers* by Dr. Y.S. Rajput; *Species and Systems Diversification in Freshwater Aquaculture: The Answer to the Sustainable Aquaculture Development* by Dr. J.K. Jena; *Development of appropriate processing and packaging technologies for convenient fish products* by Dr. C.N. Ravishankar; *Conservation Irrigation for Higher Input Water Productivity in Irrigated Plains of India* by Dr. S.S. Kukal; *Carbon Sequestration Potential Under Different Cropping Systems* by Dr. M.C. Manna; *Abiotic stress management, nutrient dynamics, carbon sequestration and greenhouse gas emissions in rice based cropping system* by Dr. A.K. Nayak; *Microorganisms in Sustainable Development* by Dr. P.W. Ramteke; *Improving Nutrient and Water Use Efficiency for Sustainable Crop Production* by Dr. H.S. Thind; *Understanding Insect Plant Interactions for Durable Resistance* by Dr. J.S. Bentur; *Development of Environment Friendly Agrochemicals Formulations for Efficient Pest Management* by Dr. Jitendra Kumar; *Bioinoculants: A Strategic Value Added Input for Better Crop Health and Nematode Disease Management in Medicinal and Aromatic Plants* by Dr. Rakesh Pandey; *Cryogenics in Food Processing and Preservation* by Dr. T.K. Goswami; *Radiation Processing of Agricultural Commodities in India - Past, Present & Future* by Dr. A.K. Sharma; *Evidence Based Strategies to Tackle Micronutrient Deficiencies* by Dr. K. Madhavan Nair.

- Foundation Day Lecture on *Structure of Indian Agriculture-Growth and Policy Epochs* by Prof. Y.K. Alagh, Chancellor, Central University Gujarat.
- Workshop on *State of Indian Agriculture: Soil* (Convener: Dr. Himanshu Pathak) held on August 21, 2015 at New Delhi.
- *Meeting on Strategy for Future of GM Crops in India* (Convener: Dr. K.V. Prabhu) held under the Chairmanship of Prof. M.S. Swaminathan on September 29, 2015 at New Delhi.
- Scientific discourse to commemorate the *Golden Jubilee of Indian Green Revolution* was organized jointly with ICAR and IARI on November 27, 2015.

## Brainstorming Sessions

- *Role of Social Scientists in NARES* (Convener: Dr. Mruthyunjaya) held on May 23, 2015 at New Delhi.
- *Issues and Challenges in Shifting Cultivation and its Relevance in the Present Context* (Conveners: Dr. K.M. Bujarbaruah and Dr. U.C. Sharma) held on August 17, 2015 at New Delhi.
- *Integration of Medicinal and Aromatic Crop Cultivation and Value Chain Management for Small Farmers* (Convener: Dr. A.K. Tripathi and Dr. E.V.S. Prakasa Rao, Co-Convener) held on August 18, 2015 at New Delhi.
- *Augmenting Forage Resources in Rural India: Policy Issues and Strategies* (Convener: Dr. P.K. Ghosh) held on September 8, 2015 in New Delhi.
- *Practical and Affordable Approaches for Precision Farming Equipment and Machinery* (Convener: Dr. K.K. Singh, Co-conveners: Dr. S.R. Verma & Dr. G.S. Manes) held on September 30, 2015.
- *Organic Farming in India: Policy Issues and Strategies* (Convener: Dr. B.S. Dwivedi, Co-conveners: Dr. P.K. Chhonkar and Dr. R.K. Pathak) held on October 17, 2015 at New Delhi.

## 2016

- Foundation Day Celebrations and Annual General Body Meeting held on June 4-5, 2016 at New Delhi.

Scientific Presentations by Fellowship: On June 4, 2016, Prof. Anupam Varma, Vice-President of the Academy, chaired the scientific sessions in which 27 newly elected Fellows made brief presentations highlighting their accomplishments.



*Application of Dehydration-responsive Nuclear Proteome of Rice: Turning Protein Repertoire into Insights* by Dr. Niranjan Chakraborty; *Enhancing Plant Carotenoids by Genetic Manipulation of the Biosynthetic Pathway* by Dr. M.K. Dhar; *Translational Genomics for Improvement of Grain Legume Chickpea* by Dr. Mukesh Jain; *Genetics and Breeding for Tolerance to Spot Blotch Heat Stress and Associated Traits in Bread Wheat* by Dr. A.K. Joshi; *From "Meta-OMICS" to "Muta-OMICS": Towards Raising Crop Plants for Dry and Saline Lands* by Dr. Ashwani Pareek; *Secondary Plant Product Biosynthesis: Complex Pathway Elucidation and Engineering* by Dr. P.K. Trivedi; *Biotechnology for Potato Improvement* by Dr. S.K. Chakrabarti; *Genetic Improvement and Genomics of Mango (Mangifera indica L.)* by Dr. A.K. Singh; *Managing Potato Lateblight through Forecasting and Disease Resistance* by Dr. B.P. Singh; *Innovations in Feeding System for Improved Livestock Productivity* by Dr. N.K.S. Gowda; *Biodiesel Industry Waste: Opportunities for Bioenergy and Bioplastics* by Dr. V.C. Kalia; *Development of Molecular Tools for Diagnosis and Characterization of Viral Pathogens* by Dr. (Ms) Minakshi Prasad; *Development of Assisted Reproductive Technologies (ART) for Production of Quality Dairy Animals* by Dr. S.K. Singla; *Bioremediation of Aquatic Contaminants using Molecular Tools* by Dr. K.K. Krishnani; *Molecular Tools for Freshwater Fish Health Management* by Dr. P.K. Sahoo; *Ecosystem Restoration of Fallow Shifting Agricultural Lands in Northeast India: Role of Soil Microbial Biomass along Altitudinal and Successional Gradients* by Dr. A. Arunachalam; *Improving Water and Nutrient Use Efficiency of Different Crops and Cropping Systems under Diverse Soil and Agro-climatic Regions of India* by Dr. K.K. Bandyopadhyay; *Climate Change, Farming and Conservation Agriculture: Quest for a Resource Efficient Future* by Dr. M.L. Jat; *Sustainable Management of Salty Soil and Water* by Dr. D.K. Sharma; *Challenges and Opportunities of Plant Virus Diagnostics in India* by Dr. V.K. Baranwal; *Efficient Transformation of Filamentous Fungi, Early Detection of Phytopathogens and Induced Immunity in Plants* by Dr. Bishwanath Chakraborty; *Sustainable Production of Bioethanol from Lignocellulosic Biomass* by Dr. C. Ganesh Kumar; *Successful Management of Sugarcane Diseases through Host Resistance, Novel Strategies and Molecular Diagnostics* by Dr. R. Viswanathan; *Improved Agricultural Water Management using Information Technology* by Dr. N.S. Raghuwanshi; *Development of Post Harvest Equipment for Value Addition of Selected Spices* by Dr. R. Viswanathan; *Food based Approaches for Ensuring Nutrition Security: An Interface between Agriculture and Nutrition* by Prof. (Ms) Jamuna Prakash; *Advanced Statistical and Computational Methods for Genomics and Bioinformatics Research* by Dr. A.R. Rao

- Presidential Address on *AgriInnovation: Peasant to People* was delivered by Dr. S. Ayyappan.
- Foundation Day Lecture on *Second Green Revolution in India* by Dr. V.K. Saraswat, Member (Science), NITI Aayog, Government of India.

## Workshop

- A Strategy Workshop on '*Towards achieving self-sufficiency of pulses in India*' (Conveners: Dr. M.C. Saxena and Dr. N.P. Singh) organized on April 7-8, 2016.
- A Workshop on '*Strategy for Transformation of Indian Agriculture and Improving Farmers Welfare*' (Conveners: Dr. Suresh Pal, Dr. P.K. Joshi and Dr. Anjani Kumar) organized on June 3, 2016.
- One day National Consultation Meet on National Consultation on System of Crop Intensification (SCI)/System of Rice Intensification (SRI) (Convener: Dr. B.C. Barah) organized on September 10, 2016 at NAAS, New Delhi in collaboration with the National Consortium on SRI (NCS) and National Bank for Agriculture and Rural Development (NABARD).
- Consultation Meet (Convener: Dr. J.C. Katyal) organized on September 13, 2016.

## Brainstorming Sessions

- Brainstorming Session on *Mentoring Scheme* (Conveners: Dr. S.N. Puri, Dr. H.S. Gupta, Dr. C. Devakumar) held on March 7, 2016.
- Brainstorming Session on *Abiotic Stress Management with Focus on Drought, Flood and Hailstorm* (Convener: Dr. P.S. Minhas) organized on May 23, 2016.

- Brainstorming Session on *Strengthening Agricultural Extension Research and Education* (Conveners: Dr. Dr. A.K. Singh, DDG (Ag. Extn.), ICAR and Dr. C. Ramasamy) organised on July 09, 2016.

## 2017

- The XIII Agricultural Science Congress (XIII ASC) 2017 was held under the aegis of NAAS in collaboration with the University of Agricultural Sciences, Bengaluru, Karnataka, (UASB) during February 21-24, 2017.

The theme of the Congress was "Climate Smart Agriculture" keeping in tune with the global climate change and the need for developing adaptation and mitigation strategies for achieving sustainable agriculture in the country. The Congress was attended by over 1500 participants representing the faculty and students from various SAUs in Karnataka and other parts of the country, traditional universities, ICAR Institutes, representatives from central and state governments, farmers, NGOs, representatives of industry including IT sector and financial institutions.

The Congress was inaugurated on February 21, 2017 by the Chief Guest Hon'ble Governor of Karnataka, and Chancellor of the University, Sri Vajubhai Vala Ji, with a special "Water the Earth Ceremony" organized on this occasion. Sri Krishna Byregowda, Hon'ble Minister for Agriculture, Government of Karnataka and Pro-chancellor of the University, Dr. T. Mohapatra, Secretary, DARE and DG, ICAR, Dr. Ramesh Chand, Member, NITI Aayog, Government of India, and Dr. S. Ayyappa, Immediate Past President, NAAS were guests of honour. Prof. Panjab Singh, President, NAAS presided over the function. Dr. H. Shivanna, Vice-Chancellor, UASB graced the function as Convener of XIII ASC.

Sri D.V. Sadananda Gowda, Hon'ble Minister for Statistics and Programme Implementation, Government of India, presided over the valedictory function on February 24, 2017. Two Hon'ble MLAs from Karnataka State Assembly, Sri S.R. Vishwanath and Sri Y.A. Narayana Swami were guests of honour. The international representations included University of Kassel, Germany, University of Massachusetts, Boston, USA; The World Bank, Washington, USA, and ICRISAT, Hyderabad, India.

- The 24<sup>th</sup> Annual General Body Meeting (AGM) of the Academy was held on June 05, 2017 at A.P. Shinde Symposium Hall, NASC Complex, New Delhi under the Chairmanship of Prof. Panjab Singh, the President of the Academy. It was attended by 195 esteemed Fellowship including two Past Presidents, Prof. V.L. Chopra and Prof. R.B. Singh, EC members, New Fellows and Associates.
- Foundation Day lecture 'Transforming Indian Agriculture: Some Reflections, delivered by Dr. Arvind Subramaniam, Chief Economic Adviser, Department of Economic Affairs, Ministry of Finance, Government of India.
- Presidential address on Reforms in Agricultural Research and Development was delivered by Prof. Panjab Singh, President, NAAS

Scientific Presentations by Fellowship: The presentations made by 27 newly elected Fellows highlighting their accomplishments are as follows:

*Crop Improvement for Sustainable Livelihood Security* by Dr. R.R. Hanchinal; *Plant Aroma Farming* by Dr. A.K. Shasany; *Genomics and Wide Hybridization: A Blend for Crop Improvement* by Dr. Kuldeep Singh; *Innovations in Pulses Breeding: Driver for Sustainable Agriculture* by Dr. N.P. Singh; *Developing Climate Resilient Groundnut Cultivars and Strategies for Enhancing Use of Germplasm in Crop Improvement* by Dr. H.D. Upadhyaya; *Post-harvest Value Chain in Horticulture for Livelihood Security and Entrepreneurship Development* by Dr. R.K. Pal; *Contributions in Vegetable Improvement* by Dr. Bijendra Singh; *Promising Technologies for Fruit Production and Post-harvest Management* by Dr. R.R. Sharma; *Genomics: Role in Improvement of Performance in Livestock and Poultry* by Dr. T.K. Bhattacharya; *Functional Efficacy of Indigenous Probiotic Strains of Indian Gut Origin* by Dr. (Ms.) Sunita Grover; *Amalgamation of Repro Genomics with ARTs for Better Animal Production and Health* by Dr. (Mrs.) G. Taru Sharma;

*Epidemiology and Development of Diagnostics and Prophylactics for Important Livestock Diseases including Zoonoses* by Dr. V. Balamurugan; *Research Contribution to Aquatic Animal Health* by Dr. A.S. Sahul Hameed; *Mangrove and Coral Ecosystem Management from Island Fisheries Perspective* by Dr. S. Dam Roy; *Carbon Dynamics and Greenhouse Gas Emission in Rice under Present and Anticipated Climate Change Conditions* by Dr. Pratap Bhattacharyya; *DNRA: A Forgotten Pathway of Nitrogen Cycling in Terrestrial Ecosystems* by Dr. C.B. Pandey; *Agronomic Biofortification of Zinc in Cereals and Pulses* by Dr. Y.S. Shivay; *Bio-flow of Micronutrients in Soil- Plant-Animal / Human Continuum* by Dr. A.K. Shukla, *Micro-organisms as Green Options for the Biovalorization of Agriresidues and Biofertilization of Crops* by Dr. Lata; *Phenes to Genes for Pathogenicity and Defence* by Dr. P.K. Chakrabarty; *Biology of Interactions between Geminiviruses and their Hosts* by Dr. Supriya Chakraborty; *Food Safety, Environmental Fate of Contaminants and their Mitigation* by Dr. Irani Mukherjee; *Interventions to Enhance Water Use Efficiency in Agriculture* by Dr. Arjamadutta Sarangi; *Application of Biotechnology for Utilizing (ABoUt) Fish & Poultry Processing Wastes : Effect of Recovered Lipids and Hydrolysates* by Dr. Narayan Bhaskar; *Some Innovative Approaches for Small Area Estimation of Agricultural and Socio-economic Parameters* by Dr. Hukum Chandra; *Chromosomes and novel genes for biotic stress resistance and yield for stable rice production* by Dr. Kshirod K. Jena.

#### ● **Press Conference:**

In order to put forward the view points of NAAS Fellowship on GM Mustard, effectively and for their wider dissemination, a Press Conference was held in the afternoon of 5th June, 2017 in NAAS Secretariat. There were more than twenty journalists representing Press and Electronic Media. For the information to press, the resolution adopted by NAAS Fellowship in their AGM strongly recommending the release of GM Mustard, was circulated.

### **Brainstorming Sessions**

- Strategy Workshop on *Vegetable Oil Economy and Production Problems in India* (Convener: Dr. C.D. Mayee)
- Expert's meeting on Policy Brief on *Soils* (Convener: Dr. C.L. Acharya and Prof. Anupam Varma)
- A Brainstorming Session (BSS) on *Mitigating Land Degradation Due to Water Erosion* (Convener: Dr. V.N. Sharda)
- Expert's Consultation to finalize Policy Brief on *Innovative and Viable Solution to rice residue Burning in Rice-Wheat cropping System through Concurrent use of Super Straw Management System-fitted Combines and Turbo happy Seeder*. (Conveners: Prof. Anupam Varma/ Dr. Yadvinder Singh)
- Strategy Workshop on *Conservation Policies for Hilsa and Mahseer* (Convener: Dr. K.K. Vass)
- Strategy Workshop on *Accelerating Seed Delivery Systems* (Convener: Dr. K.V. Prabhu)

### **2018**

- The 25<sup>th</sup> Annual General Body Meeting (AGM) of the Academy was held on June 05, 2018 at A.P. Shinde Symposium Hall, NASC Complex, New Delhi under the Chairmanship of Prof. Panjab Singh, the President of the Academy. It was attended by 221 esteemed Fellowship including two Past Presidents, Prof. V.L. Chopra and Prof. R.B. Singh, EC members, New Fellows and Associates.
- Foundation Day lecture 'The Future of Food and Farming: Ideas for a Changing World', delivered by Mr Erik Solheim, Executive Director, United Nations Environment.
- Presidential address on Agriculture: The Driver of Inclusive Growth was delivered by Prof. Panjab Singh, President, NAAS
- Scientific Presentations by Fellowship: The presentations made by 30 newly elected Fellows including 2 Pravasi Fellows and 1 Foreign Fellow highlighting their accomplishments are as follows:

*Strengthening Food and Nutrition Policy Systems in the Developing World* by Dr. Suresh Chandra Babu; *Recent Advances in Breeding for Salt Tolerance in Rice* by Dr. Rakesh Kumar Singh; *Plant Genetic Resources – from Conservation to Innovation* by Dr. Andreas Graner; *Phosphorylation-dephosphorylation based Switch by Regulates K<sup>+</sup> deficiency Signaling in Plants* by Dr. Girdhar Kumar Pandey; *A Journey in Creating Variations for Rice Improvement* by Dr. Sharat Kumar Pradhan; *Development of Wheat Varieties with High Water Use Efficiency and Heat Tolerance to Combat the Effects of Climate Change in Central India* by Dr. Sakuru Venkata Sai Prasad; *Development of Short Duration, Photo-thermoinsensitive High Yielding Pulses Varieties for Diversification of Cropping System for Sustainable Development* by Dr. Brij Bhuwan Singh; *Creation and Utilization of Useful Genetic Variation for Wheat Improvement* by Dr. Vinod; *Abiotic Stress Signalling Pathway for Improvement of Climate Resilience of Crops* by Dr. Chinnusamy Viswanathan; *Genetic Improvement of Cucurbitaceous Vegetables* by Dr. Sudhakar Pandey; *Breeding for Triple Disease Resistance in Tomato (Solanum lycopersicum L.)* by Dr. Avverahally Thammanna Sadashiva; *Genetic Improvement of Mango and Grape: Biotechnological Interventions and Future Strategies* by Dr. Sanjay Kumar Singh; *Towards Innovation in Development of Biomaterials in Bone and Soft Tissue Engineering: Recent Advances & Future Scope* by Dr. Samit Kumar Nandi; *Innovations in Development of Methods for Assessment of Chemical Quality of Milk* by Dr. Rajan Sharma; *Innovative Processes for Shelf Stable and Functional Dairy Foods* by Dr. Ram Ran Bijoy Singh; *Nutritional Strategies to Improve Animal Production and Health* by Dr. Putan Singh; *Marine Bioactive Molecules and Development of High Value Products for Health Management* by Dr. Kajal Chakraborty; *Control of Pathogenic Vibrios in Shrimp Aquaculture using Anti-infectives from Marine Bacteria* by Dr. Joseph Selvin; *Integrated Remediation of Pesticide Contaminated Soil for Sustainable Development* by Dr. Purushothaman Chirakkuzhyil Abhilash; *Novel Approaches for Managing Pollutant Elements and Micronutrients in Soil-Plant-Human Continuum* by Dr. Siba Prasad Datta; *Significant Contributions and Perspectives on Future Research in Soil Science* by Dr. R. Dinesh; *Efficient Input Management under Intensive Cropping Systems for Higher Resource Use Efficiency* by Dr. Vinod Kumar Singh; *Microbial Degradation, Biovalorization, Detoxification and Risk Assessment of Natural and Organic Pollutants in the Environment* by Prof. Indu Shekhar Thakur; *Technological Interventions for Enhancing Sustainable Agricultural Productivity* by Dr. Dharam Pal Abrol; *Tackling the Global Tyranny of Wheat Rusts-Indian Success Story, Challenges and Preparedness* by Dr. Subhash Chander Bhardwaj; *Some Plant Based Products as Botanical Pesticides against Aflatoxin Synthesis and Storage Insect Pests* by Dr. Nawal Kishore Dubey; *Ecological Chemistry of Insect-Plant Interactions* by Dr. Pagadala Damodaram Kamala Jayanthi; *Application of Chemical Engineering Principles for Food Processing and Biotechnology* by Dr. Navin Kumar Rastogi; *Innovative Technologies for Doubling Farmers' Income* by Prof. Virendra Kumar Tewari; *Experimental Designs in the Presence of Neighbour Effects* by Dr. Seema Jaggi; *Time Series Modelling and Forecasting in Agriculture* by Dr. Ranjit Kumar Paul.

- NAAS organized 5<sup>th</sup> Meeting of Global Technology Watch Group- Sustainable Agriculture (GTWG-SA) Validation Workshop of TIFAC. The GTWG – SA Validation Workshop organized under the aegis of Technology Information, Forecasting and Assessment Council (TIFAC) was organised jointly by National Academy of Agricultural Sciences (NAAS), New Delhi on April 5, 2018.

## **Brainstorming Sessions/ Strategy Workshop**

- Strategic Workshop on *Harnessing Full Potential of A1 and A2 Milk in India* (Convener: Dr. A. K. Srivastava) held on May 19, 2018.
- Strategic Workshop on *Rumen Microbiome and Amelioration of Methane Production* (Convener: Prof. D.N. Kamra) held on June 25, 2018.
- Strategy Workshop on *Renewable Energy: A New Paradigm for Growth in Agriculture* (Convener: Dr. O.P. Yadav) held on September 25, 2018
- *Save the Harvest: Experts' Meet* (Convener: Prof. Anupam Varma) held on September 26, 2018
- *Development and Adoption of Novel Fertilizer Materials* (Convener: Dr. (Ms) Chandrika Varadachari) held on October 5, 2018

## 2019

- The XIV Agricultural Science Congress (XIV ASC) 2019 was held under the aegis of NAAS in collaboration with the Indian Agricultural Research Institute, New Delhi during February 20-23, 2019.

The theme of the Congress was “Innovations for Agricultural Transformation”. The Congress was attended by over 1500 participants representing the faculty and students from various SAU's and other parts of the country, traditional universities, ICAR Institutes, representatives from central and state governments, farmers, NGO's, representatives of industry including IT sector and financial institutions. This Congress provided an intellectually rich multi stakeholder platform for discussing and critically analyzed veritable disruptive innovations for transforming agriculture and food systems to reshape India. It showcased agriculture not only as the main source of employment and livelihood security for nearly 50 per cent of India's population, bulging to be the largest in the world by 2025, but also as a business opportunity, service provider, industry, and ecosystem protector. Reflecting on the journey from the green revolution to the gene revolution, the Congress emphasized the need for innovations to drive congruent acceleration of productivity, profitability, sustainability, equity and inclusivity.

During four-day Congress, 32 technical sessions were organised covering 10 broad theme areas viz. Plant Sciences (Field Crops); Plant Sciences (Horticultural Crops); Natural Resource Management; Plant Protection; Food Science and Value Addition; Animal Sciences Livestock, Dairy and Poultry; Fisheries; Engineering & IT; Social Sciences and Agricultural Education. In these technical sessions involving different theme areas, a large number of eminent invited speakers presented their research. In the Congress four panel discussions on the topics Agriculture 2030: Meeting SDGs; Pathways and Investment Priorities; Regulation of GMOs and Genome-edited Products and Inclusive Growth in Agriculture were held in which very senior level experts involving scientists, policy makers, development departments and farmer groups actively participated and presented their views.

- The 26<sup>th</sup> Annual General Body Meeting (AGM) of the Academy was held on June 05, 2019 at A.P. Shinde Symposium Hall, NASC Complex, New Delhi under the Chairmanship of Prof. Panjab Singh, the President of the Academy. It was attended by 212 esteemed Fellowship including EC members, New Fellows and Associates.
- Foundation Day Lecture on ‘Can India's Success in Agriculture Benefit Africa?’ was delivered by Dr. Peter Carberry, Director General, International Centre for Research in Semi-Arid Tropics.
- Presidential Address on ‘Feeding 1.7 billion’ was delivered by Prof. Panjab Singh, President of the Academy.
- Scientific Presentations by Fellowship: The presentations made by 30 newly elected Fellows including 2 Foreign Fellows highlighting their accomplishments are as follows:

*Development of High Yielding, Disease Resistant and Nutritive Varieties of Wheat for High Productive Environments of the Country* by Dr. Ravish Chatrath; *Next-generation Molecular Breeding for a Food Sufficient Future* by Dr. Swarup Kumar Parida; *Co 0238 – A Wonder Variety of Sugarcane and its Impact in Sub-tropical India* by Dr. Bakshi Ram; *Creation of Variability and its Utilization in Oilseed Brassica Improvement* by Dr. Kunwar Harendra Singh; *Multi-trait Improvement in Rice through Marker Assisted Breeding* by Dr. Raman Meenakshi Sundaram; *Metabolic Engineering and Bioprocessing for Value Addition to Agriculture* by Dr. Sudesh Kumar Yadav; *Breeding for Economized F1 Hybrid Seed Production in Chilli* by Dr. (Ms) Kambham Madhavi Reddy; *RNA Interference- Mediated Crop Improvement* by Dr. Debasis Pattanayak; *Development of Bacterial Wilt Resistant Varieties/hybrids and Breeding Lines of Tomato and Brinjal* by Dr. Arun Kumar Singh; *Global Bluetongue Virus Epidemiology and Control* by Dr. (Ms) Sushila Maan; *Emerging Zoonotic Viral Infections* by Dr. Devendra Tarachand Mourya; *Molecular Pathogenesis and Development of Diagnostics for Infectious Diseases with Particular Reference to Control and Management of Paratuberculosis (Johne's disease) in Animals* by Dr. Bhupendra Nath Tripathi; *Manipulation of Rumen Microbes to Produce Conjugated*

*Linoleic Acid Enriched Designer Milk* by Dr. Amrish Kumar Tyagi; *Carp Disease Diagnosis and its Therapeutic Development* by Dr. Basanta Kumar Das; *Present Use and Future Scope of Nano Technology in Aquaculture* by Dr. Priyabrat Swain; *Sustainable Intensification and No-till Farming Effect in Rice and Maize Fallows on Food and Environmental Security in North East India* by Dr. Anup Das; *Conservation Agriculture for Higher Productivity, Resourceuse Efficiency and Sustainability in Cereals Systems in the Indo-Gangetic Plains of India* by Dr. Tapas Kumar Das; *Vulnerability of Agriculture Communities to Climate Change - Western Himalaya, India* by Dr. Pawan Kumar Joshi; *Managing Soils for Enhancing Carbon Sequestration and Soil Quality: A New Insight* by Dr. Tapan Jyoti Purakayastha; *Role of Algae and Aquatic Bioresources for Sustainable Development* by Dr. Dinabandhu Sahoo; *Advances in Wheat Pathology Research- Conventional to Molecular Approaches* by Dr. (Ms) Rashmi Aggarwal; *New Paradigms of Host Plant Resistance to Insects and Sustainable Pest Management* by Dr. Mukesh Kumar Dhillon; *Use of Enzyme and Microbial Cells for Removal of Antinutrients/ Toxicants from Food and Agro By-product Utilization* by Dr. Sunil Kumar Khare; *Environmental Fate of Pesticides and their Mitigation* by Dr. (Ms) Neera Singh; *Improving Bioavailability of Food Bioactives and Nutrients through Novel Food Delivery Systems* by Dr. C. Anandharamakrishnan; *Improved Hand Tools and Machines for Hill and Tribal Farmers* by Dr. Krishna Pratap Singh; *Estimation of Balanced GDP through Reconciliation in SUT* by Dr. Akhilesh Chandra Kulshreshtha; *Mainstreaming Autonomous Strategies for Addressing Land Degradation: Bottom-up Approaches in Enhancing UNCCD Policy on Environmental Sustainability in India* by Dr. Ranjay Kumar Singh; *Improving Rice Productivity in Less Favorable Areas and Resilience to Climate Change* by Dr. Abdelbagi M. Ismail; *Developments in Food Sterilization from Appert to Pascal* by Dr. Hosahalli Ramaswamy.

## Brainstorming Sessions/ Strategy Workshop

- NAAS Experts Meet on *Uniform Policy for Fish Disease Diagnosis and Quarantine* was held on January 29, 2019 in order to develop a uniform policy on fish disease diagnosis and quarantine for the country to strengthen disease management in aquaculture. The meet included experts from ICAR Institutes under Fisheries and Animal Sciences Divisions, besides eminent scientists from SAUs, State Universities, State Governments, Officials of DAHD&F and Executive Committee members of NAAS.
- A Brain Storming Session on *Vertical Farming (VF)* was organized by the Academy on April 11, 2019 under the Chairmanship of Prof. Panjab Singh, President, NAAS. The session was convened by Prof. Brahma Singh, former, OSD (Hort.), Rashtrapati Bhawan, New Delhi with Dr. T. Janakiram, ADG (Hort.), ICAR, New Delhi, as Co-convenor. A number of experts/scientists/planners, both from public and private sector, attended the session. After detailed deliberation, the global status of available expertise on different facets of VF of vegetables, ornamental horticulture, micro greens, mushrooms, plant-nurseries, hydroponic-fodder, poultry, fisheries, orchids and herbs was presented. It is also highlighted the great potential of this technology, especially for the urban and peri-urban areas,
- One-day Brain Storming Session on *Loan Waiving versus Income Support Schemes: Challenges and the Way Forward* on June 24, 2019 was organized to deliberate on the efficacy of loan waivers in detail and explore the other alternative options to deal with agrarian distress efficiently and effectively under the Convenership of Dr. P. K. Joshi and Dr. Anjani Kumar. The efficacy of farm loan waivers, advantages and challenges of income support schemes and farmers' perspective on agricultural subsidies, loan waiving and income support. Several policy options and strategies were proposed to support farmers and ensure sustainable and inclusive agricultural growth in India.
- A Brain Storming Session on *Enhancing Science Culture in Agricultural Research Institutions* was organized at the Academy on June 25, 2019. The workshop was convened by Dr. N.H. Rao to address recent concerns about aligning the science culture in public agricultural research institutions towards research of higher quality, relevance and impact.
- The National Academy of Agricultural Sciences constituted a Core Group for preparing the National Soil and Land Use Policy at the behest of Department of Agriculture, Cooperation

and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India. The Core Group had four regional consultation meetings with agricultural scientists from NARES, representatives from line departments and progressive farmers at Bengaluru, Kolkata, Bhopal and New Delhi. The draft report prepared by the Core Group was uploaded at the website of NAAS and discussed at the Experts' group meeting convened under Chairmanship of President, NAAS on April 13, 2019 at New Delhi, in the wake of an enhanced recognition of the fragility of natural resources and their significance in overall well-being of the mankind, public interest in restoration and maintenance of these finite resources in the recent past.

- A Brain Storming Session was organised on *Zero Budget Natural Farming-Myth or Reality* on August, 21 2019 under the Convenership of Dr. H.S. Gupta. About 70 experts representing scientists across disciplines and organisations, policy makers, industrialists (fertilizer, chemicals and pesticide, seeds), Govt. Departments, NGOs, Farmers and others participated. After the meeting, the Academy is of the considered opinion that there is no scope for an incremental value gained by the farmer or the consumer through ZBNF that represents one of the many such practices followed in India prior to the 1960s when no more than 60 million tons of food grains were produced, making ZBNF a technology that lacks rationale or acceptability as a production technology. Therefore, it is recommended that the Government of India should not needlessly invest capital, efforts, time and human resources towards promoting the ZBNF on the grounds of technical infeasibility for India to explore this unproven and unscientifically proposed technology.
- A Brain Storming Session on *Tropical Wilt Race-4 Affecting Banana Cultivation* was organized on September 25, 2019 to understand the etiology and devise suitable management strategies against the virulent strain of Fusarium wilt of banana. The session was Convened by Dr. Rashmi Aggarwal with Dr. S. Uma and Dr. R.K. Jain as Co-conveners.
- A Brain Storming Session on *Payment for Ecosystem Services in Agriculture* was organized on October 31, 2019 by Dr. P.S. Birthal as Convener and Dr. Saudamini Das, NABARD Chair Professor, Institute of Economic Growth, New Delhi as Co-convener.
- A Brain Storming Session on *Food Borne Zoonotic Diseases* was organized on November 21, 2019 by Dr. A.K. Srivastava, Vice President, NAAS as Convener.
- A Brain Storming Session on *Livestock Improvement through Artificial Insemination* was organized on December 6, 2019. The Session was Convened by Dr. A.K. Srivastava, Vice President, NAAS.
- A Brain Storming Session on *Big data Analytics in Agriculture* was organized by National Academy of Agricultural Sciences on December 18, 2019.

## 2020

- Foundation Day Programme: On the occasion of its Foundation Day on June 5, 2020, the National Academy of Agricultural Sciences (NAAS) organized a virtual panel discussion on *Covid 19 Pandemic: Impact and New Normal in Agriculture*. The deliberations were on discussing the consequences of the Covid-19 crisis on agriculture and the technological and policy solutions for sustaining post-pandemic agricultural growth. The panel discussion was convened by Dr. P.K. Joshi and Dr. P.S. Birthal. It was co-chaired by Dr. Trilochan Mohapatra, President NAAS and Dr. Mangala Rai, former President, NAAS.
- Scientific Presentations by Fellowship: The presentations made by 29 newly elected Fellows including 2 Pravasi Fellows and 2 Foreign Fellows highlighting their accomplishments online during June 22-25, 2020 and on July 21, 2020 are as follows:

*Frontiers in Soybean Trait Discovery and Genetic Improvement for Food Security and Health* by Dr. Henry T. Nguyen; *Crop Physiology, Modelling and Systems Research* by Dr. P. Carberry; *India's Agricultural Policy – Shifting Focus from Food to Nutrition Security* by Dr. Prabhu L. Pingali; *Advancing Thermal and Non-thermal Technologies for Food Processing* by Dr. R.K. Singh; *Conventional and Molecular Breeding in Crop Plants for Food and Nutritional Security*

by Dr. Pawan Kumar Agrawal; *Genetic Improvement of Sugarcane (Saccharum spp.)* by Dr. Govindakurup Hemaprabha; *Ensuring Food and Feed Security through Wheat and Barley Improvement in Northern Hills Zone* by Dr. Lakshmi Kant; *Genetic Improvement of Wheat and Barley for North-Western Himalayan Region of India* by Dr. Dharam Pal; *GM Diagnostics: Meeting a Challenge* by Dr. (Mrs) Gurinderjit Randhawa; *Introgression of Novel Genes in Developing Improved Multiple Disease Resistant Indian Wheat Cultivars and Genetic Stocks* by Dr. Murugasamy Sivasamy; *Exploring Novel Genes in Cucurbits for Enhancing Vegetable Productivity* by Dr. Dangar Ram Bhardwaj; *Significant Achievement in Improvement of Cucumber and Gourds through Conventional and Molecular Approaches* by Dr. Anilabha Das Munshi; *Conventional and Genomic Crop Improvement Approaches in Spices* by Dr. D. Parasath; *Enteric Methane Estimation and Amelioration* by Dr. Raghavendra Bhatta; *Development of Biosensors for Monitoring Food Safety & Quality Assurance in Dairy Industry* by Dr. Naresh Kumar; *Discovery of a Novel Genus and Species of Anaerobic Rumen Fungi* by Dr. Anil Kumar Puniya; *Sensitive Advanced Approaches for Diagnosis of Surra in Animals* by Dr. Pinaki Prasad Sengupta; *Proteomics Applications in Fisheries and Aquaculture* by Dr. Bimal Prasanna Mohanty; *Development of Farm Level Diagnostics and Novel Oral Vaccines for Aquaculture* by Dr. Kalkuli M. Shankar; *Accelerating Forest Biodiversity – Agriculture Interface Research for Natural Resource Management* by Dr. Saroj Kanta Barik; *Designing Novel Inter-cropping Systems for Managing Weeds in Rainfed Cotton* by Dr. Desouza Blaise; *Engineered Biochar – A Smart and Sustainable Solution to Biomass Burning, Soil Management, Food Security, Water Purification and Climate Change Mitigation* by Dr. Dinesh Mohan; *Giving Waste a Second Chance : Its Prospects and Concerns* by Dr. Rajeev Pratap Singh; *Regaining the Agricultural Potential of Sodic Soils through Agronomic and Soil Manipulation Measures* by Dr. Yash Pal Singh; *Modulation and Demodulation of Photosynthesis with Robust Nanotools: Marking One Decade of Application in Agricultural Crops* by Dr. Arunava Goswami; *Dry Root Rot of Chickpea: the Pathogen, Mechanisms of Plant Defense and Avenues for Crop Protection* by Dr. Muthappa Senthil-Kumar; *Beneficial Microbes for Sustainable Agriculture* by Dr. Mahendrakar Sreenivasa Rao; *Understanding Microbial Interactions, Microalgal Bio-harvesting and Microbial Systems Biology for Sustainable Agriculture* by Dr. Pratyosh Shukla; *Sustainable Water Resources Management in India* by Dr. Madan Kumar Jha; *Precision Irrigation for Higher Productivity and Resource Conservation* by Dr. (Ms) Neelam Patel; *Economics Tools and Systems Approaches for Impactful Interventions for Transforming Agri-food Systems and Farm Livelihoods* by Dr. Shalander Kumar; *Computer Intensive Statistical Techniques and Data Mining Tools for Agricultural Research and Development* by Dr. Anil Rai; *Designing Robust Frontline Extension Mechanisms for Enhancing Outreach and Empowering Stakeholders* by Dr. Ashok Kumar Singh.

- The 27<sup>th</sup> Annual General Body Meeting (AGM) of the Academy was convened virtually on August 13, 2020 under the Chairmanship of Dr. Trilochan Mohapatra, President of the Academy. The AGM was graced by Past Presidents, Past Vice Presidents, office bearers and more than 200 fellows and associates of the Academy. By virtue of the authority vested, the President NAAS, admitted 29 Fellows, 2 Foreign Fellows, 3 Pravasi Fellows and 11 Associateships. Dr. T. Mohapatra, President of the Academy delivered the Presidential address on *Catalyzing Enhanced Contribution of Agriculture to National Economy: Refining the Engagement of NAAS*.

## **Brainstorming Sessions/ Strategy Workshops/ Experts' Meet**

- Experts' Meet on *Seed Policy* (Convener: Dr. D.K. Yadava) was organized on February 3, 2020.
- Experts' Meet on *Pesticide Management Bill-2017* (Convener: Dr. B.S. Parmar) held on February 4, 2020.
- Roundtable Discussion on *Regulatory Framework and Guidelines for Risk Assessment of Genome Edited Organisms* (Convener: Dr. N.K. Singh) was organized on February 6, 2020.



- Experts' Meet on *Direct Benefit Transfer under Nutrient-based Subsidy Regime* (Convener: Dr. B.S. Dwivedi) was organized on March 11, 2020.
- Panel Discussion on *COVID 19: Impacts and New Normal in Agriculture* (Conveners: Dr. P.K. Joshi and Dr. P.S. Birthal) held on June 5, 2020.
- A Brain Storming Session on *Potential of Non-bovine Milk* (Convener: Dr. M.S. Chauhan) was organized June 29, 2020.
- A Brain Storming Session on *Strategies for Enhancing Soil Organic Carbon for Food Security and Climate Action* (Conveners: Dr. Ch Srinivasa Rao and Dr. A.K. Singh) was organized on August 21, 2020.
- A Brain Storming Session on *Anti Microbial Resistance* (Convener: Dr. A.K. Srivastava) was organized on August 29, 2020.
- A Brain Storming Session on *Revision of BD Act, Rules and Guidelines* (Convener: Dr. Kuldeep Singh) was organized on September 1, 2020.
- A Brain Storming Session on *Sugarcane based Ethanol Production for Sustainable fuel Ethanol Blending Programme* (Convener: Dr. Bakshi Ram) was organized on September 18, 2020.
- A Brain Storming Session on *One World One Health* (Convener: Dr. A.K. Srivastava) was organized on September 19, 2020.
- A Brain Storming Session on *Food, Agriculture and Income Policy for the Five Trillion Economy* (Convener: Dr. Suresh Pal) was organized on October 14, 2020.
- A Brain Storming Session on *Transforming Higher Agricultural Education in India* (Convener: Prof. R.B. Singh) was organized on October 20, 2020.
- A Brain Storming Session on *Innovations in Potato Seed Production and Its Adoption* (Convener: Dr. S.K. Chakrabarty) was organized on October 27, 2020.
- A Brain Storming Session on *Wastewater Utilisation in Urban and Peri-Urban Agriculture* (Convener: Dr. J.C. Dagar) was organized on November 17, 2020.
- A Brain Storming Session on *Need for Breeding Tomatoes Suitable for Processing in India* (Convener: Dr. A.T. Sadashiva) was organized on November 24, 2020.
- A Brain Storming Session on *Recent Agricultural Market Reforms* was jointly organized by National Academy of Agricultural Sciences and ICAR-National Institute of Agricultural Economics and Policy Research on December 18, 2020. The main objective of the Brain Storming Session was to discuss the initiatives taken by the Government of India to boost agricultural sector in the present post Covid 19 situation.
- A Brain Storming Session on *Emergency Preparedness for Prevention of Transboundary Infectious Diseases in Indian Livestock and Poultry* (Convener: Dr. Parimal Roy) was organized on December 19, 2020.

## 8.2 Programmes for 2021

The Academy organizes Brainstorming Sessions (BSS) each year on thematic areas of national importance related to Indian agriculture. For the year 2021, the Council has approved the following new programmes:

1. Strategy Workshop on Potential of Transgenic Poultry for Biopharming
2. Strategy Workshop on Waste-to-Wealth: Use of Food Industry Waste as Animal Feed
3. Brain Storming Session on Gender and Nutrition Based Extension in Agriculture
4. Brain Storming Session on WTO and Indian Agriculture
5. Brain Storming Session on Contract Farming for Commercial Agriculture
6. Strategy Workshop on Sericulture for Enhancing Farmers' Income
7. Strategy Workshop on Entrepreneurship for Quality Fodder Production
8. Strategy Workshop on Drudgery Free Agriculture
9. Strategy Workshop on Quality Planting Material for Promoting Agricultural Diversification
10. Policy Brief on Road Map to Rehabilitate 26 million ha Degraded Lands by 2030
11. Strategy Workshop on Impact of Covid 19 on Animal Health and Dairy Industry

## 9. PUBLICATIONS

Publications brought out by the Academy since its inception upto 2020:

### 1992

Proceedings of the First Agricultural Science Congress held at New Delhi. Contents include Global Climate and Agriculture, Rio Agenda; Priorities of Agriculture Research; and Capital Requirement for Modernization of Agriculture

### 1994

Abstracts proceedings of the Second Asia-Pacific Conference on Agricultural Biotechnology

### 1995

Abstracts proceedings of at the Second Agricultural Science Congress

Abstracts proceedings of the National Workshop on Animal Research and Development

Proceedings of the Second Agricultural Science Congress held at Andhra Pradesh Agricultural University, Hyderabad. Contents include National Water Policy, On-Farm Employment, Vector Biology and other topics in the field of crop production and crop improvement

Policy Paper 1: Agricultural Scientist's Perceptions on National Water Policy

### 1996

Abstract proceedings of the Symposium on Biochemical Basis of Host-plant Resistance to Insect

Felicitation Volume on Occasion of Dr. M.S. Swaminathan's 70th Birthday

Proceedings of the National Symposium on Biochemical Bases of Host-Plant Resistance to Insects

Uncommon Opportunities for Achieving Sustainable Food and Nutrition Security - An Agenda for Science and Public policy

Conference Proceedings of Science Academies Summit

Abstract of Poster Sessions of 2<sup>nd</sup> International Crop Science Congress

Summary of Invited Papers of 2<sup>nd</sup> International Crop Science Congress

Sustaining Green Revolution New Paradigms: A Keynote Address delivered by Dr. R.S. Paroda during 2<sup>nd</sup> ICSC

Souvenir: the 2<sup>nd</sup> International Crop Science Congress

### 1997

Highlights of the 2<sup>nd</sup> International Crop Science Congress

Invited and Contributed Papers (Two volumes) of Third Agricultural Science Congress held at PAU Ludhiana

Policies and Priorities of Agricultural Research and Education in India : Presidential address of Dr. R.S. Paroda at the Third Agricultural Science Congress

Policy Paper 2: Fertiliser Policy Issue 2000-2025 - Agricultural Scientists' Perceptions

### 1998

Proceedings of the Round Table Conference on National Water Policy Agricultural Scientists' Perceptions

Policy Paper 3: Harnessing and Management of Water Resources for Enhancing Agricultural Production in Eastern Region

Policy Paper 4: Conservation, Management and Use of Agro-Biodiversity

Proceedings of National Symposium on Plant Nutrient Needs, Supply Efficiency and Policy Issues: 2000 - 2025

Proceedings of the 2<sup>nd</sup> International Crop Science Congress

Post-Congress Proceedings with recommendations of the Third Agricultural Science Congress held at Ludhiana

## **1999**

Action Plan on Conservation, Management and Use of Agro-Biodiversity  
Policy Paper 5: Sustainable Agricultural Export  
Policy Paper 6: Re-orienting Land Grant System of Agricultural Education  
Proceedings of the National Seminar on Harnessing and Managing Water Resources for Enhancement of Agricultural Production in Eastern Region  
Proceedings of Fourth Agricultural Science Congress on Sustainable Agricultural Export  
Fourth Agricultural Science Congress - Highlights  
Presidential address: Change We Must but Change is Difficult by Dr. R.S. Paroda

## **2000**

Pre-workshop Proceedings on Management of Genetic Resources of Livestock

## **2001**

Policy Paper 7: Diversification of Agriculture for Human Nutrition  
Policy Paper 8: Sustainable Fisheries and Aquaculture for Nutritional Security  
Policy Paper 9: Strategies for Agricultural Research in the North East  
Policy Paper 10: Globalization of Agriculture: R & D in India  
Policy Paper 11: Empowerment of Women in Agriculture  
Policy Paper 12: Sanitary and Phytosanitary Agreement of the World Trade Organization – Advantage India  
Policy Paper 13: Hitech Horticulture in India  
Policy Paper 14: Conservation and Management of Genetic Resources of Livestock  
Policy Paper 15: Prioritization of Agricultural Research  
88<sup>th</sup> Session of the Indian Science Congress 2001 - Highlights and Recommendations  
88<sup>th</sup> Session of the Indian Science Congress 2001 - Summary Proceedings  
Souvenir on the occasion of the 88<sup>th</sup> Session of the Indian Science Congress  
Highlights of Fifth Agricultural Science Congress on Sustainable Development of Mountain Agriculture

## **2002**

Technical Paper framing Rules for Operationalizing the Protection of Plant Varieties and Farmers' Rights Act: Recommendations of a Scientists Group  
Highlights of Sixth Agricultural Science Congress on Multi-enterprise Systems for Viable Agriculture  
Policy Paper 16: Agriculture-Industry Interface: Value Added Farm Products  
Policy Paper 17: Scientists' Views on Good Governance of An Agricultural Research Organization  
Policy Paper 18: Agricultural Policy: Redesigning R & D to Achieve It's Objectives  
Proceedings of the 88<sup>th</sup> Session of the Indian Science Congress: Towards Food Secure India

## **2003**

Policy Paper 19: Intellectual Property Rights in Agriculture  
Policy Paper 20: Dichotomy Between Grain Surplus and Widespread Endemic Hunger  
Policy Paper 21: Priorities of Research and Human Resource Development in Fisheries Biotechnology  
Policy Paper 22: Seaweed Cultivation and Utilization

Policy Paper 23: Export Potential of Dairy Products

Policy Paper 24: Biosafety of Transgenic Rice

## **2004**

Policy Paper 25: Stakeholders' Perceptions On Employment Oriented Agricultural Education

Policy Paper 26: Peri-Urban Vegetable Cultivation in the NCR Delhi

Policy Paper 27: Disaster Management in Agriculture

Policy Paper 28: Impact of Inter River Basin Linkages on Fisheries

Policy Paper 29: Transgenic Crops and Biosafety Issues Related to Their Commercialization In India

## **2005**

Proceedings of the Workshop on Biosafety of Transgenic Rice

Keynote Address by Dr. Mangala Rai at Seventh Agricultural Science Congress

Inaugural Address by Shri Sharad Chandraji Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food & Public Distribution at Seventh Agricultural Science Congress

Presidential Address by Prof. M. S. Swaminathan at Seventh Agricultural Science Congress: Revamping and Refocusing Research and Fostering New Partnerships for Agricultural Research

Policy Paper 30: Organic Farming: Approaches and Possibilities in the Context of Indian Agriculture

Policy Paper 31: Redefining Agricultural Education and Extension System in Changed Scenario

Policy Paper 32: Emerging Issues in Water Management - The Question of Ownership

Policy Paper 33: Policy Options for Efficient Nitrogen Use

Highlights of the Seventh Agricultural Science Congress on Entrepreneurship Development in Agriculture

NAAS Brochure

NAAS Folder with Summary of Policy Papers 1-30

Report on Visit of NAAS Delegation to CAAS

Presidential Address on Science and Technology for Bharat Nirman at 12<sup>th</sup> Annual General Body Meeting:

## **2006**

2006-07: Year of Agricultural Renewal by Professor M.S. Swaminathan, President of the Academy.

Presidential Address by Prof. M.S. Swaminathan at Foundation Day on Restoring Farmers' Faith in Farming

Policy Paper 34: Guidelines for Improving the Quality of Indian Journals & Professional Societies in Agriculture and Allied Sciences

Policy Paper 35: Low and Declining Crop Response to Fertilizers

Policy Paper 36: Belowground Biodiversity in Relation to Cropping Systems

Policy Paper 37: Employment Opportunities in Farm and Non-Farm Sectors Through Technological Interventions with Emphasis on Primary Value Addition

Policy Paper 38: WTO and Indian Agriculture: Implications for Policy and R&D.

Highlights & Recommendations on Ten Years After Beijing Conference: Gender, Science and Agriculture

Special Issue on 'Converting Deserts Into Oasis', having seven articles from eminent experts on the theme of the symposium organized by the Academy on November 19-21, 2006 to commemorate the UN International Year of Desert and Desertification.

## 2007

Presidential Address on '*Science and the Agrarian Crisis*' by Prof. M. S. Swaminathan delivered at New Year Get-together function of the Academy

Citations - Recipients of Academy's Awards for the biennium 2005-06

Presidential Address on *Restoring Farmers' Faith in Farming* delivered by Prof. M. S. Swaminathan at Foundation Day

Policy Paper 39: Innovations in Rural Institutions: Driver for Agricultural Prosperity

Book on *Agriculture Cannot Wait: New Horizons in Indian Agriculture* - A synthesis and compilation of 39 Policy Papers/Highlights brought out by the Academy during the last 15 years.

Book on *Search for New Genes*, based on the National Symposium organized to mark the birth centenary of Late Dr. B.P. Pal containing eighteen invited contributions from eminent scientists of the country and Inaugural Address by the President of India Dr. A.P.J. Abdul Kalam on *Impact of Gene Science in Agriculture*.

## 2008

Presidential Address on '*Agriculture and Biotech Culture*' delivered by Dr. Mangala Rai at Foundation Day

Science, Technology, and Trade for Peace and Prosperity - Proceedings of 2<sup>nd</sup> International Rice Conference

Book entitled 'Converting Deserts into Oasis'

Proceedings of Symposium on Farmer-led Innovations for Sustainable Agriculture

Policy Paper 40: High Value Agriculture in India: Prospects and Policies

Policy Paper 41: Sustainable Energy for Rural India

## 2009

State of Indian Agriculture

Address by Sh. Sharad Pawar, Hon'ble Union Minister of Agriculture, Consumer Affairs, Food & Public Distribution at the release of the NAAS Publication on State of Indian Agriculture on June 4, 2009

Presidential Address on '*Agriculture – Fast Forward*' delivered by Dr. Mangala Rai at Foundation Day

Policy Paper 42: Crop Response and Nutrient Ratio

## 2010

Presidential Address on '*Towards Developing an Innovative Model for Transformation of Agriculture in India*' delivered by Dr. Mangala Rai at Foundation Day

Degraded and Wastelands of India – Status and Spatial Distribution, a joint publication by NAAS and ICAR

Conservation Agriculture – Innovations for Improving Efficiency, Equity and Environment – Selected Papers of 4<sup>th</sup> World Congress on Conservation Agriculture

State of Indian Agriculture – Indo-Gangetic Plains

Policy Paper 43: Antibiotics in Manure and Soil – A Grave Threat to Human and Animal Health

Policy Paper 44: Plant Quarantine including Internal Quarantine Strategies in View of Onslaught of Diseases and Insect Pests

Policy Paper 45: Agrochemicals Management: Issues and Strategies

Policy Paper 46: Veterinary Vaccines and Diagnostics

Policy Paper 47: Protected Agriculture in North-West Himalaya

Policy Paper 48: Exploring Untapped Potential of Acid Soils of India

Policy Paper 49: Agricultural Waste Management

## 2011

Presidential Address on 'Millennium Development Goals - Promises to Keep' delivered by Prof. R.B. Singh at Foundation Day

Policy Paper 50: Drought Preparedness and Mitigation

Policy Paper 51: Carrying Capacity of Indian Agriculture

## 2012

Presidential Address on 'The Hungry Child Cannot Wait' delivered by Prof. R.B. Singh at Foundation Day

Policy Paper 52: Biosafety Assurance for GM food Crops in India

Policy Paper 53: Ecolabelling and Certification in Capture Fisheries and Aquaculture

Policy Paper 54: Integration of Millets in Fortified Foods

Policy Paper 55: Fighting Child Malnutrition

Policy Paper 56: Sustaining Agricultural Productivity through Integrated Soil Management

Policy Paper 57: Value Added Fertilizers and Site Specific Nutrient Management (SSNM)

Policy Paper 58: Management of Crop Residues in the Context of Conservation Agriculture

## 2013

Proceedings of the X Agricultural Science Congress on the theme *Soil, Plant and Animal Health for Enhanced and Sustained Agricultural Productivity*.

Presidential Address on 'Agricultural Education: Shaping India's Future' delivered by Prof. R.B. Singh at XI Agricultural Science Congress at Bhubaneswar.

Presidential Address on 'Climate Smart Agriculture towards an Ever-Green Economy' delivered by Prof. R.B. Singh at Foundation Day

Dr. A.B. Joshi Memorial Lecture on 'The Challenging Agriculture in the Changing Times' on 4<sup>th</sup> June 2013 by Dr. Mangala Rai, Chief Advisor to the Hon'ble Chief Minister of Bihar and former Secretary DARE and DG, ICAR

Policy Paper 59: Livestock Infertility and its Management

Policy Paper 60: Water Use Potential of Flood-affected and Drought-prone Areas of Eastern India

Policy Paper 61: Mastitis Management in Dairy Animals

Policy Paper 62: Biopesticides – Quality Assurance

Policy Paper 63: Nanotechnology in Agriculture: Scope and Current Relevance

Policy Paper 64: Improving Productivity of Rice Fallows

Policy Paper 65: Climate Resilient Agriculture in India

Policy Paper 66: Role of Millets in Nutritional Security of India

Policy Paper 67: Urban and Peri-urban Agriculture

## 2014

*A Roadmap to Transform Agricultural Education to Reshape India's Future* - an outcome of deliberations at XI Agriculture Science Congress

Proceedings of the XI Agricultural Science Congress on the theme *Transform Agricultural Education to Reshape India's Future*.

Presidential Address on 'Family Farms: Farm, Feed & Flourish' delivered by Dr. S. Ayyappan at Foundation Day

*Transforming Agriculture to Reshape India's Future* – a compendium of previous Presidential Addresses delivered on NAAS Foundation Day

Report of NAAS Committee on *Agricultural Credit and Insurance*

Policy Paper 68: Efficient Utilization of Phosphorus

Policy Paper 69: Carbon Economy in Indian Agriculture

Policy Paper 70: MOOC for Capacity Building in Indian Agriculture: Opportunities and Challenges

Policy Paper 71: Role of Root Endophytes in Agricultural Productivity

Policy Paper 72: Bioinformatics in Agriculture: Way Forward

Agricultural News, a compendium based on newspaper clippings brought out from 1995 to 2014 on bi-monthly basis.

## 2015

Policy Paper 73: Monitoring and Evaluation of Agricultural Research, Education and Extension for Development [AREE4D]

Policy Paper 74: Biodrainage: An Eco-friendly Tool for Combating Waterlogging

Policy Paper 75: Linking Farmers with Markets for Inclusive Growth in Indian Agriculture

Policy Paper 76: Bio-fuels to Power Indian Agriculture

Policy Paper 77: Aquaculture Certification in India: Criteria and Implementation Plan

Status/Strategy Paper I: Role of Social Scientists in National Agricultural Research System (NARS)

State of Indian Agriculture – Water

State of Indian Agriculture – Energy

State of Indian Agriculture – Soil

Dr. A.B. Joshi Memorial Lecture on 'Zero Hunger India: The Challenge' on 5<sup>th</sup> February 2015 by Prof. R.B. Singh, Chancellor, Central Agricultural University, Imphal

Down the Memory Lane (25 Years of NAAS)

100 Years of Agricultural Sciences in India

Panel Discussion on *Views of Young Scientists on Research Challenges in the Changing Climate Scenario*

Presidential Address on '*Response for Resilience: Happy Agriculture*' delivered by Dr. S. Ayyappan at Foundation Day

Foundation Day Lecture on *Structure of Indian Agriculture-Growth and Policy Epochs* by Prof. Y.K. Alagh

## 2016

Policy Paper 78: Reservoir Fisheries Development in India: Management and Policy Option

Policy Paper 79: Integration of Medicinal and aromatic Crop Cultivation and Value Chain Management of Small Farmers

Policy Paper 80: Augmenting Forage Resources in Rural India: Policy Issues and Strategies

Policy Paper 81: Climate Resilient Livestock Production

Policy Paper 82: Breeding Policy for Cattle and Buffalo in India

Policy Paper 83: Issues and Challenges in Shifting Cultivation and its Relevance in Present Context

Policy Paper 84: Practical and Affordable Approaches for Precision in Farm Equipment and Machinery

## 2017

Policy Paper 85: Hydroponic Fodder Production in India

Policy Paper 86: Mismatch between Policies and Development Priorities in Agriculture

Policy Paper 87: Abiotic Stress Management with Focus on Drought, Food and Hailstorm

Policy Paper 88 : Mitigating Land Degradation Due to Water Erosion

Strategy paper-4 Sustaining Soybean Productivity and Production in India

Strategy paper-5 Strengthening Agricultural Extension Research and Education- The Way Forward



Strategy paper-6 Strategy on Utilization of Glauconite Mineral as Source of Potassium

Status/Strategy Paper II: Towards Pulses Self-Sufficiency in India

Status/Strategy Paper III: Strategy for transformation of Indian Agriculture for Doubling Farm Income and Improving Farmers Welfare

Policy Brief no 2: Innovative Viable Solutions to rice residue Burning in Rice-Wheat cropping Systems through Concurrent Use of Super Straw Management System-fitted Combines and Turbo Happy Seeder

Presidential Address on 'Reforms in Agricultural Research and Development' delivered by Prof. Panjab Singh at Foundation Day

## 2018

### **Status/Strategy Papers**

Strategy Paper 7: Vegetable Oil Economy and Production Problems in India

Strategy Paper 8: Conservation Policies for Hilsa and Mahseer

Strategy Paper 9: Accelerating Seed Delivery Systems

### **Policy Briefs**

Policy Brief 3: Soil Health: New policy Initiatives for Farmers Welfare.

## 2019

### **Policy Paper**

Policy Paper 89: Vertical Farming

Policy Paper 90: Zero Budget Natural Farming - Myth or Reality

Policy Paper 91: Loan Waiving versus Income Support Schemes: Challenges and Way Forward

Policy Paper 92: Tropical Wilt Race-4 Affecting Banana Cultivation

### **Status/Strategy Papers**

Strategy Paper 10: Renewable Energy: A New Paradigm for Growth in Agriculture

Strategy Paper 11: Rumen Microbiome an Amelioration of Methane Production

Strategy Paper 12: Harnessing Full Potential of A1 and A2 Milk in India: An Update

Strategy Paper 13: Development and Adoption of Novel Fertilizer Materials

### **Policy Briefs**

Policy Brief 4: Uniform Policy for Fish Disease Diagnosis and Quarantine

Policy Brief 5: Saving the Harvest: Reducing the Food Loss and Waste

Presidential Address on 'Feeding 1.7 Billion' delivered by Prof. Panjab Singh at Foundation Day

Foundation Day Lecture on 'Can India's Success in Agriculture Benefit Africa?' by Dr. Peter Carberry

## 2020

*Agricultural Transformation – The Road to New India* by Prof. R.B. Singh

### **Policy Paper**

Policy Paper 93: Enhancing Science Culture in Agricultural Research Institutions

Policy Paper 94: Payment for Ecosystem Services in Agriculture

Policy Paper 95: Food-borne Zoonotic Diseases

Policy Paper 96: Livestock Improvement through Artificial Insemination

### **Policy Brief**

Policy Brief 7: Regulatory Framework for Genome Edited Plants: Accelerating the Pace and Precision of Plant Breeding -2019

Policy Brief 8: Covid-19 Pandemic: Impact and New Normal in Agriculture

Policy Brief 9: Direct Benefit Transfer of Fertilizer Subsidy: Policy Perspectives

Policy Brief 10: Harmonization of Seed Regulations for Sustainable Food Security in India

## **Periodicals of the Academy**

NAAS News (quarterly), a document informing about the events and happenings in the Academy besides views of Fellows and articles on policy issues. So far 74 issues have been brought out since 2001.

NAAS Year Planner-2021

NAAS Year Book-2021: The Academy has been bringing out the Year Book, a compilation of Fellowship profiles and guidelines of the Academy every year since 1994.

## **'AGRICULTURAL RESEARCH', the Official Journal of NAAS**

In 2012, the Academy launched its Official Journal '*Agricultural Research*', in collaboration with Springer India (Pvt.) Ltd. The goal of the journal is to publish articles on the new and emerging areas and concepts to promote agricultural research globally. It is a unique journal covering all the disciplines of agricultural sciences. The journal is published quarterly and includes original research papers, critical reviews and opinion articles, covering both applied and basic research.

The Journal publishes articles in all the disciplines of agricultural sciences, like genetic resources, genetics and breeding, biotechnology, physiology, biochemistry, management of biotic and abiotic stresses, and nutrition of field crops, horticultural crops, livestock and fishes; agricultural meteorology, environmental sciences, forestry and agro forestry, agronomy, soils and soil management, microbiology, water management, agricultural engineering and technology, agricultural policy, agricultural economics, food nutrition, agricultural statistics, and extension research; impact of climate change and the emerging technologies on agriculture, and the role of agricultural research and innovation for development. The journal encourages contribution of articles from all parts of the world. The online version is published in colour and the print version in black and white. There is no page charge for publication of articles in '*Agricultural Research*'. The journal can be accessed on the homepage of '*Agricultural Research*' at [http:// www.springerlink.com](http://www.springerlink.com)

The online version of the journal can be accessed free of charge by the Fellows and Associates of the Academy, using the '**token access code**' provided by the Academy. A limited number of copies of the print version are printed.

## **Subscription information**

All correspondences regarding individual and society subscriptions and advertisements should be addressed to: [indianjournals.service@springer.com](mailto:indianjournals.service@springer.com) or [iseditor.india@springer.com](mailto:iseditor.india@springer.com)

Subscribers outside India may contact the Customer Care at the following e-mail addresses:

### **North and South America:**

[Journals-ny@springer.com](mailto:Journals-ny@springer.com)

### **Outside North and South America:**

[subscriptions@springer.com](mailto:subscriptions@springer.com)

## GUIDELINES FOR ELECTION OF FELLOWS

### I. ELECTION OF FELLOWS

#### A. Basic Criteria

The main objective of the Academy is to recognize and support excellence in agricultural science, research, technologies and innovations. The outstanding achievements and sustained significant contributions to agricultural sciences are the determining criteria for electing Fellows in different subject matter areas.

#### B. Number of Fellowships in Different Areas\*

Nominations of candidates from the Fellows of the Academy are grouped into following eight scientific areas (sections):

- I. Crop Sciences**, covering Genetics and Plant Breeding, Plant Genetic Resources, Plant Biotechnology, Plant Physiology & Biochemistry and Seed Technology - 6 Fellowships
- II. Horticultural Sciences**, covering Fruit Science, Vegetable Science, Ornamental Horticulture & Landscape Gardening, Plantation Crops and Spices, Medicinal and Aromatic Crops - 3 Fellowships
- III. Animal Sciences**, covering Animal Genetics & Breeding, Animal Nutrition, Animal Physiology, Animal Biochemistry and Biotechnology, Animal Production, Animal Health, Animal Products Technology, Dairy Sciences and Poultry Sciences - 4 Fellowships
- IV. Fisheries Sciences**, covering Fish Genetics & Breeding, Fish Nutrition, Fish Pathology, Fish Biotechnology, Fish Biosystematics, Fish Processing & Technology, Fisheries Resource Management and Aquaculture - 2 Fellowships
- V. Natural Resource Management Sciences**, covering Agricultural Meteorology, Agronomy, Environmental Science, Forestry & Agroforestry, Soil Sciences, Water Management and Agricultural Physics - 5 Fellowships
- VI. Plant Protection Sciences**, covering Agricultural Chemicals, Agricultural Entomology, Plant Pathology, Nematology, Microbiology and Organic Chemistry - 4 Fellowships
- VII. Agricultural Engineering and Technology**, covering Farm Machinery & Power, Soil and Water Engineering, Agricultural Process Engineering, Food Science & Nutrition, Food Technology, Textile Chemistry and Computer Application in Agriculture - 2 Fellowships
- VIII. Social Sciences**, covering Agricultural Economics, Agricultural Statistics, Extension Education, Bioinformatics, and Home Science - 3 Fellowships
- Foreign Fellows** - 2 Fellowships
- Pravasi Fellows** - 3 Fellowships

**Total = 34 Fellowships**

The number of new Fellows inducted in a year should not exceed the number mentioned against each.

### C. Procedure for Screening

#### Level 1: Subject Matter Level Screening

- (i) The Executive Council shall appoint 8 Sectional Committees. The number of members in each Committee shall not exceed ten including the Convener who, as far as possible, represents the subject area in the Executive Council. While identifying the members of the Sectional Committees, care should be taken that they represent the spectrum of scientific disciplines of the concerned Committee. The tenure of the Convener and the

\* As approved in the Executive Council meeting on 4.6.2014 and AGM on 5.6.2014

members will be for a maximum period of 3 years, 1/3<sup>rd</sup> members will retire every year. There will be a 3 years' cooling period for the retiring Sectional Committee members.

- (ii) The Conveners shall seek opinion of the Fellows pertaining to the concerned Section at least one month in advance. The Fellows will give opinion on a 3 - point scale.
- (iii) Candidates shall be ranked, specifically highlighting their total contribution in their discipline. Special features, such as number and quality of publications, products/ varieties released / patents obtained and position in professional societies, chairing scientific meetings, Honours/Awards will be given due consideration. Contribution and leadership as Science Manager shall also be given due weightage.

The Sectional Committees shall meet for two days. On the first day, these committees will be addressed by the President.

As a convention, if a close relative, such as father, mother, wife, husband, son, daughter, daughter-in-law, son-in-law, brother and sister of a member of a Sectional Committee is being considered for Fellowship, the concerned member will withdraw from the Sectional Committee.

### **Level 2: Joint Conveners' Group Level Screening**

- (i) The recommendations of different Sectional Committees shall be discussed by the Conveners together under the Chairmanship of the Vice-President of the Council.
- (ii) The Joint Conveners' Group shall consider modification of recommendations, if any, and forward suggestions to the Executive Council for consideration.

### **Level 3: Executive Council Level Screening**

The Executive Council shall meet under the Chairmanship of the President of the Academy to review the recommendations of the Joint Conveners' Group to be presented by the Vice President/ Secretary. The Council shall scrutinize this list and remove any disparities in the recommendations after seeking clarification from the Vice President/Secretary/ Conveners' of the Sectional Committees. The Council will make its final recommendation for voting by the eligible Fellows of the Academy. The list shall not exceed 34 in any one year for election of Fellows [National Fellows: 29; Foreign Fellows: 2 and Pravasi Fellows: 3].

**Executive Council can recommend, disqualify, or reconsider a Fellow on valid grounds.**

### **Level 4: Approval of Final List of Fellows:**

The voting for final approval shall be by the entire Fellowship.

## **D. General**

- (i) In addition to the existing norms that one Fellow can nominate two candidates in a year, a restriction is made that a Fellow can Second 3 candidates in a year.
- (ii) Nominations for election of Fellows shall remain valid for three years. After expiry of the three-year term, there shall be one-year cooling period before a person can be renominated. Part B & C of the nomination form shall be updated by the candidate in the prescribed proforma every year.
- (iii) Criteria for evaluation of candidates' contributions etc. will be laid down by the Executive Council. The latest of such criteria/weightage laid down by the Executive Council will be applicable for award of Fellowships.

## **II. FOREIGN FELLOWS**

- (i) Every nominee shall be proposed and seconded in the prescribed form by the Fellows of the Academy.
- (ii) The nomination shall be valid for three years, but a person can be re-nominated after a gap of one year.

- (iii) The nominee should be a foreign citizen. NRI/PIO/OCI will not be considered for the Foreign Fellowship.
- (iv) The nominee should be an internationally recognized leader in the area of his specialization.
- (v) He/she should be a Fellow/Member of the National Academy of own country. Alternatively, he or she should be a Foreign Fellow / Associate of a foreign country academy. Further, NAAS may consider nominees who are of eminent standing.
- (vi) The nominee should have close connection with Indian scientists and should be aware of the progress of Indian science, its accomplishments and aspirations. The advantages and gains to the Academy and to the scientists of India by the election of a Foreign Fellow may also be kept in view.
- (vii) A maximum of two nominees may be identified by the Executive Council for election as Foreign Fellow.
- (viii) The names of the candidates shall be circulated to all the Fellows for election as for the other Fellows of the Academy.

### **III. PRAVASI FELLOWS**

- (i) Every nominee shall be proposed and seconded in the prescribed form by the Fellows of the Academy.
- (ii) The nomination shall be valid for three years, but a person can be re-nominated after a gap of one year.
- (iii) Persons of Indian origin (PIO) or Overseas Citizens of India (OCI), holding foreign passport (residing within or outside territorial limits of India), who are eminent for their knowledge and contributions to agricultural science, and have contributed or can contribute to the progress of science in India, and persons holding Indian passport (residing outside the territorial limits of India) having done their work in foreign or international organizations shall be eligible for the Pravasi Fellowship of the Academy.
- (iv) In any year, the number of Pravasi Fellows elected shall not exceed three.
- (v) The process of election of Pravasi Fellows will be same as for the national Fellows of the Academy.
- (vi) The names of the candidates shall be circulated to all the Fellows for election as for the other Fellows of the Academy.

### **III. CORPORATE FELLOWS/MEMBERSHIP**

Corporate Fellowship shall be conferred on the basis of guidelines (Annexure I-A) drawn by the Executive Council on corporate bodies which provide support to the programmes and finances of the Academy to carry out its objectives.

The Executive Council in its meeting held on June 4, 2002 approved launching of another category of Corporate Membership. Guidelines for such category were approved by the Executive Council on August 9, 2002 (Annexure I-B).

### **IV. INSTITUTIONAL MEMBERSHIP**

Institutional Membership shall be conferred on the institutions having established reputation and clean record and have demonstrably involved or propose to involve itself in activities related to the objectives of the Academy and carrying out activities in conformity with the requirement of preserving human, ecological and environmental health and willing to make a contribution of Rs. 10 lakhs towards the NAAS Corpus Fund for supporting its activities. The guidelines for Institutional Membership as framed by the Executive Council and approved by the General Body on 5.6.2015 are at Annexure I-C.

# GUIDELINES FOR AWARD OF CORPORATE FELLOWSHIP<sup>5</sup>

## Corporate Fellowship

### I. Eligibility Criteria

1. Corporate body should be willing to make a substantial contribution (at least Rs. 1 crore) towards the Corpus Fund or for supporting activities of the Academy needing sustained long-term support.
2. The Corporate body should be demonstrably involved or propose to involve itself in activities related to the objectives of the Academy.

or

The activities of the Corporate body should be in conformity with the requirements of preserving human, ecological & environmental health.

3. The Corporate body should have established reputation and clean record.
4. The financial contribution will be on mutually acceptable terms and conditions in line with the objectives of the Academy and in conformity with the prevailing National Agricultural Policy.

### II. Mechanism

The proposal for Award of Corporate Fellowship shall be considered by a Committee constituted by the Executive Council. After endorsement of the Executive Council, the proposal will be subject to the approval of the Fellows by ballot as per procedures prescribed for election of Academy Fellows.

### III. Entitlements

- The Academy will institute an Award in the name of the Corporate House. The finances for the purpose will be drawn from the interest accrued on the donation amount.
- Will be provided with an opportunity to participate in all scientific activities organized by the Academy.
- Can propose activities to be organized by the Academy on mutually agreed areas consistent with Academy's objectives; such proposals will be considered by the Academy as per its normal procedures.
- Will be given a set of publications of the Academy free of cost. Additional sets will be available at 50% discount of the listed price.
- Can attend as observers the Annual General Meeting subject to the terms and condition of clauses (I) of the Rules relating to rights and privileges of Fellows.
- Will not use the name of the Academy for promoting any commercial or promotional activity of its products.

<sup>5</sup> As approved in the Executive Council meeting held on 9 Aug, 2002.

## **GUIDELINES FOR AWARD OF CORPORATE MEMBERSHIP<sup>5</sup>**

### **Corporate Membership**

#### **I. Eligibility Criteria**

1. Corporate body should be willing to make a contribution of at least Rs. 25 lakhs and above towards the Corpus Fund or for supporting activities of the Academy needing sustained long-term support.
2. The Corporate body should be demonstrably involved or propose to involve itself in activities related to the objectives of the Academy.

or

The activities of the Corporate body should be in conformity with the requirements of preserving human, ecological & environmental health.

3. The Corporate body should have established reputation and clean record.
4. The financial contribution will be on mutually acceptable terms and conditions in line with the objectives of the Academy and in conformity with the prevailing National Agricultural Policy.

#### **II. Mechanism**

The proposal for Award of Corporate Membership shall be considered by a Committee constituted by the Executive Council. After endorsement of the Executive Council concerned donor will be intimated.

#### **III. Entitlements**

- Will be provided with an opportunity to participate in all scientific activities organized by the Academy.
- Can propose activities to be organized by the Academy on mutually agreed areas consistent with Academy's objectives; such proposals will be considered by the Academy as per its normal procedures.
- Will be given a set of publications of the Academy free of cost. Additional sets will be available at 50% discount of the listed price.
- Can attend as observers the Annual General Meeting subject to the terms and condition of clauses (I) of the Rules relating to rights and privileges of Fellows.
- Will not use the name of the Academy for promoting any commercial or promotional activity of its products.

---

<sup>5</sup> As approved in the Executive Council meeting held on 9 Aug, 2002.

## GUIDELINES FOR AWARD OF INSTITUTIONAL MEMBERSHIP<sup>§</sup>

### I. Eligibility Criteria

1. The institution should be willing to make a contribution of **Rs. 10 lakhs** towards the NAAS Corpus Fund or for supporting activities of the Academy needing sustained long-term support.
2. The Institution should be demonstrably involved or propose to involve itself in activities related to the objectives of the Academy.

or

The activities of the Institution should be in conformity with the requirements of preserving human, ecological & environmental health.

3. The Institution should have established reputation and clean record.
4. The financial contribution will be on mutually acceptable terms and conditions in line with the objectives of the Academy and in conformity with the prevailing National Agricultural Policy.

### II. Mechanism\*

CG Institutions/ SAUs/ CAUs who wish to become NAAS Institutional member need not submit the formal proposal and endorsement from the Executive Council as all of them fulfill the eligibility criteria prescribed by the Academy for award of NAAS Institutional Membership. However, the proposals of the NGOs, Societies, Private Institutions for NAAS Institutional Membership may first be examined by the committee and based on the recommendation of the committee, the proposals may be considered for approval by the EC.

### III. Entitlements

- Will be provided with an opportunity to participate in all scientific activities organized by the Academy.
- Can propose activities to be organized by the Academy on mutually agreed areas consistent with Academy's objectives; such proposals will be considered by the Academy as per its normal procedures.
- Will be given a set of publications of the Academy free of cost. Additional sets will be available at 50% discount of the listed price.
- Will be provided 20% concession on use of Academy's Conference facilities for full day.
- Can attend the Annual General Meeting as observers but they shall not be entitled to vote.

<sup>§</sup> As approved in the Executive Council meeting held on 20 Sept, 2014.

\* Mechanism for award of Institutional membership amended in EC Meeting on 17.9.2016



## GUIDELINES FOR SELECTION OF ASSOCIATES OF THE ACADEMY\*

- Associateship Scheme is open to serving Young Scientists, upto age of 40 years, working in agriculture related disciplines in Research/Academic Systems in India.
- A total of 12 Associates can be selected in a year<sup>#</sup>. The Nominations for Associateship of the Academy are grouped into following eight scientific areas (sections):

Section	No. of Associateship
Crop Sciences	2
Horticultural Sciences	1
Animal Sciences	2
Fisheries Sciences	1
Natural Resource Management Sciences	2
Plant Protection Sciences	2
Agricultural Engineering and Technology	1
Social Science	1

- The identification of the Associates will be done by Sectional Committees, reviewed by the Conveners' Group and approved by Executive Council. However, there will be no voting.
- The criteria for election will be academic excellence based on scientific contributions as reflected by publications, products, processes and technologies etc.
- The Associates will have the following privileges:
  - (a) To be present in all General Body Meetings
  - (b) To have personal access to the library of the Academy
  - (c) To take out books, plates, drawings, manuscripts, etc. from the library, subject to such regulations as may be prescribed by the Academy
  - (d) To offer papers and communications to be read before the meetings of the Academy.
  - (e) To get all NAAS publications.
  - (f) To attend the Foundation Day programme by meeting the expenditure on their own. However, Academy will meet one-time travel expenses and hospitality for attending Foundation Day programme and Annual General Body meeting at the conferment of the Associateship.

\* Approved in the Executive Council meeting held on 27 Nov, 2013

<sup>#</sup> As approved in the Executive Council meeting on 4.6.2019 and AGM on 5.6.2019

# GUIDELINES FOR ACADEMY AWARDS<sup>£</sup>

## 1. General

The Academy has instituted various categories of Awards for recognizing the meritorious and distinguished scientists of its Fellowship and other eminent persons.

### 1.1 Inviting Applications / Nominations for the Awards

The Fellows of the Academy would be requested to suggest names of suitable candidates for various awards except Dr. A.B. Joshi Memorial Lecture Award\*. Each Fellow may nominate one person in his/her discipline for each award in the prescribed proforma which will be sent to them by the Academy. Dr. A.B. Joshi Memorial Lecture Awardee shall be identified by the Executive Council and no application shall be required.

Once the nominations are received from the Fellows, a Scrutinizing Committee constituted for the purpose should short-list maximum upto 10 candidates for each award. If required, the Committee may also nominate persons *suo moto* for the awards.

The candidates short-listed by the Committee should be invited by the Academy to submit their applications on prescribed proforma. The applications should be forwarded by any one of the following officials.

Fellows of NAAS/Previous Awardees; DG/DDGs/ADGs of ICAR; Secretaries of Scientific Departments (Science & Technology, Biotechnology, Earth Sciences, Space, Atomic Energy); Presidents of Science Academies; Directors/Joint Directors of ICAR Research Institutes/NRCs/Project Directorates; Directors of Institutions of CSIR / ICMR; Vice Chancellors/ Directors/Deans of SAUs/ CAU; Chairman UGC / ASRB / BARC; Principal Scientific Advisors, GOI; Presidents of all Professional Societies in the field of Agriculture; Heads of CGIAR Centres; Chairman of NGOs engaged in R & D in Agriculture.

For Young Scientist Award, the application may be forwarded, besides the above persons, by the concerned Head of the Department/Institute/ University as the case may be.

### 1.2 Schedule

- |   |   |
|---|---|
| a) Issue of letters notifying the Award   | 1 January (of the year preceding to the year in which the Awards are to be presented) |
| b) Receipt of nominations                 | Latest by 31 March  |
| c) Consideration by the Judging Committee | Latest by end of September  |
| d) Consideration by the Executive Council | Latest by end of December   |

### 1.3 Giving larger publicity of the awards in the media

The Academy shall give wider publicity for these awards through NAAS and ICAR website, website of ICAR institutes and SAUs, ICAR Newsletters, Indian Journal of Agricultural Sciences, Current Science and one national leading newspaper. The announcement of the Awards should be sent to all the ICAR Institutes, Universities and other relevant organizations requesting them to nominate the promising candidates for the awards.

- 1.4** TA/DA for receiving the Award shall be paid to the awardee by the Academy. The awards shall be given at the Inaugural Session of Agricultural Science Congress.

<sup>£</sup> As approved in the Executive Council meeting held on 2 June 2015 & AGM on 5 June 2015.

## 2. Memorial Awards\*

**2.1** These awards named after eminent persons who are deceased, are known for their distinguished services to the cause of Indian Agricultural Research, Education and Transfer of Technology. The Awardee's contribution should have been recognized nationally/internationally and supported by significant publications. The Awardee shall be a distinguished scientist above 55 years in age. The period of assessing the contributions shall be life time upto the year of nomination. The six Memorial Awards are :

- i. Dr. B.P. Pal Memorial Award for Excellence in Agricultural Sciences:** This award is the apex award of the Academy. It is given for singular outstanding overall contribution to agriculture. The awardee can be from any science relevant to agriculture. The award consists of a scroll, a silver plaque of value not exceeding Rs. 1,00,000/-.
- ii. Dr. K. Ramiah Award:** For outstanding contributions in Agricultural Research in Plant Production.
- iii. Dr. K.C. Mehta Award:** For outstanding contributions in Plant Protection.
- iv. Dr. M.S. Randhawa Award:** For outstanding contributions in Agricultural Administration, Transfer of Technology and Social Sciences.
- v. Dr. N.S. Randhawa Award:** For outstanding contributions in Natural Resources Conservation and Management, and Environment Sciences.
- vi. Dr. P. Bhattacharya Award:** For outstanding contributions in Animal Sciences/Animal Production Systems & Fisheries.
- vii. Dr. A.B. Joshi Lecture Award:** For distinguished scientists/educationist who has made outstanding contribution in any branch of agricultural sciences.

**2.2** The awards from Sl. No. (ii) to (vii) consist of a citation and a silver plaque, the value of which shall not exceed Rs. 50,000/-.

**2.3** The number of Memorial Awards will be reviewed periodically after every five years or any time as decided by the Executive Council.

**2.4** The Judging Committee will be chaired by the President and will consist of four other Fellows to be nominated by the Executive Council. It would be constituted anew each time the awards are to be finalized. Its members will themselves be neither candidate for the awards nor related to the nominees.

**2.5** Selection will be made on the basis of nominations received alongwith the relevant information on outstanding contributions of each nominee.

## 3. Endowment Awards\*

**3.1** The Endowment awards shall be based on specific financial endowments made to the Academy either to perpetuate the memory of a distinguished agricultural scientist(s) / persons whose contributions / services to the cause of agricultural sciences / Indian agriculture made a distinct mark and should reflect the stature and dignity of the Academy, and the person concerned should be acceptable to the Academy as decided by its Executive Council. The Endowment Awards shall be treated at par with Memorial Awards for the purpose of selection of awardees including age, and carries a citation and silver plaque the value of which shall not exceed Rs. 50,000/-.

**3.2** Endowments may be made towards promotion of specific activities in the realm of the Academy's functions. For instituting the Award a minimum donation of Rs. 20 lakhs from the donor as Corpus will be essential. The Award will be given once in two years at the Agricultural Science Congress and treated at par with any of the Memorial Awards for the purpose of regulations. The Judging Committee for Endowment Awards shall be the same as for Memorial Awards. The three Endowment Awards are:

<sup>#</sup> (i) Plant Improvement, (ii) Plant Protection, (iii) NRM, (iv) Animal Sciences and Fisheries, (v) Agricultural Engineering & Technology, and (vi) Social Sciences

\* Once a nominee receive a memorial or Endowment Award of any category, he/she will not be eligible for an Endowment or Memorial Award for a minimum period of five years i.e. an Endowment Awardee will not be eligible for a Memorial Award (and vice-versa) for the period stated above. (as decided in the 115<sup>th</sup> Executive Council held on 26.12.2020)

- (i) **Dr. L.C. Sikka Endowment Award:** The award will be given to an outstanding scientist for contributions towards ensuring food and nutritional security. The awardee can be from any branch of science relevant to agriculture.
- (ii) **Dr. (Ms.) Prem Dureja Endowment Award:** The award will be given to an outstanding woman scientist for her contribution towards overall contribution to agriculture.
- (iii) **Dr. N.G.P. Rao Endowment Award:** The award will be given to an outstanding scientist for contributions in the area of crop sciences.

## 4. Recognition Awards

- 4.1** These awards are for distinguished contributions to the advancement of knowledge/ technologies in the relevant scientific disciplines of the particular area of agricultural sciences for which the award has been instituted. The research contributions should be based on work carried out in India as evidenced by publications in scientific journals of repute and products and technologies developed. The period of assessing the contributions shall be upto the year of nomination. The awards shall be made to distinguished scientists in the age group of 35-55 years. There will be six awards one each for the broader sections<sup>#</sup> identified by the Academy.
- 4.2** Each award consists of a citation and a silver plaque, the value of which shall not exceed Rs. 30,000/-.
- 4.3** The Judging Committee shall be from the Fellowship and consist of:
  - (a) Chairman, to be nominated by the President of Academy.
  - (b) Convener of the concerned Sectional Committee.
  - (c) Two Members of the concerned Sectional Committee or Fellows of the concerned section to be nominated by the President.
  - (d) One Member from a different section to be nominated by the President.
  - (e) The Judging Committee would be constituted anew each time the awards are to be finalized.
  - (f) The Judging Committee Members will themselves be neither candidates for the award nor related to the nominees.

## 5. Young Scientists' Awards<sup>\$</sup>

- 5.1 The primary objective of this category of awards is to encourage young scientists of promise and creativity through their contributions to agricultural sciences after obtaining Ph.D. degrees.
  - 5.2 Scientists below the age of 35 years are eligible for this award.
  - 5.3 There will be six awards for the sections<sup>#</sup> identified by the Academy.
  - 5.4 The Judging Committee will comprise of all the members of the concerned Sectional Committee, the Convener being the Chairman.
  - 5.5 Selection will be made on the basis of nominations received in the prescribed proforma.
  - 5.6 Each award will consist of a citation, and a gold-plated silver medal, the value of which shall not exceed Rs. 25,000/-.
- Fellows serving the Executive Council shall not be eligible for any of the Academy Awards during the period of his/her tenure.

\* As decided in the 115<sup>th</sup> Executive Council held on 26.12.2020

\$ From 2021 onwards, the Young Scientists' Awards will be given every year

# (i) Plant Improvement, (ii) Plant Protection, (iii) NRM, (iv) Animal Sciences and Fisheries, (v) Agricultural Engineering & Technology, and (vi) Social Sciences

## **GUIDELINES FOR ORGANIZING THE BRAINSTORMING SESSIONS (BSS)\***

### **Scientific / Technical**

1. The Convener may prepare a background paper and submit it to the NAAS Secretariat for circulation / putting up on the website of the Academy, inviting comments / suggestions of the Fellows/Associates.
2. The brainstorming must then internalize these inputs in framing a document with focus on content and outcome.
3. (a) The Convener(s) will submit a two-page Executive Summary of the BSS within 7 days for inclusion in the NAAS News.  
(b) He/she shall prepare the draft Policy Paper and submit it to the Academy invariably within a maximum period of three month. A few key issues may be flagged at the end for drawing the attention of the policy planners.
4. A list of the stakeholders to whom the Policy Paper would be useful and required to be sent by the Academy shall be enclosed alongwith the Policy Paper.
5. The output of all the Brainstorming Sessions may be published in to Policy Papers / Status and Strategy Paper / Synthesis Papers / Research Notes / Recommendations Papers depending upon the contents of each write-up and Each Policy / Strategy / Status Paper may be sent immediately after its printing for better impact without waiting for its formal release.
6. A generic list of Central / State Government Organizations / Institutions / Departments, Chief Secretaries, Agricultural Production Commissioner, Principal Secretaries / Secretaries of Agriculture, Horticulture, Animal Husbandry, Dairying, Fisheries, Additional Secretary Policy, Gol, etc. may be developed for sending the Policy Papers to them, apart from the list of other stakeholders so as to have a wider outreach of Policy Papers.

### **Administrative**

7. The maximum number of participants may not exceed 30.
8. The final list of the participants shall be approved by the President.
9. The Brainstorming Session shall be for one day duration only.
10. The Brainstorming Sessions, if necessary, may also be organized outside NAAS Secretariat as per the convenience of the Convener.
11. There shall not be any poster session.
12. The President and in his/her absence, any other Office Bearer of the Academy shall chair the session.

### **Financial**

13. Total budget to be provided by the Academy for organising the BSS may not ordinarily exceed Rs. 2.00 lakh of which not more than 50% would be used on TA/DA.
14. Preference may be given to the participants who are generally self-supporting, however, taking due care of the conflict of interest.
15. For those invitees not having any travel assistance the Academy shall provide financial support for their participation.

\* As approved in the Executive Council meeting held on 29 Nov, 2014, 19 Sept, 2015, 17 Sept, 2016 and 13 Sept 2019

16. Travel support for air journey(s) shall be limited to the lowest economy class fare, as applicable, (Apex fare/discounted fare/senior citizen discounted fare) of any Airlines. The participants are expected to arrange their tickets soon after the invitation. They can also avail the Secretariat's help, if needed.
17. For journey(s) by rail, actual expenditure shall be limited to AC II Tier.
18. Expenditure on road journey between places connected by rail shall be limited to AC II Tier fare.

## GUIDELINES FOR USING ACADEMY FACILITIES

1. Facilities would be available only for science-oriented activities.
2. The user should take prior permission/booking for use from Executive Director before issuing notices to participants of the meeting.
3. Bookings would be made for use from 9.00 a.m. to 5.00 p.m. on working days only. In case of requirement prior to or beyond working hours, intimation has to be given at the time of booking; charges on pro-rata basis will be levied for the period extended beyond 2 hrs.
4. Preference will be given to Fellows in case of competing demands.
5. Use of Academy equipment like computer, fax, telephone would be on payment basis at rates to be fixed from time to time; priority would be given to Academy work. Requirement of audio-visual equipment should be intimated at the time of booking/seeking permission.
6. In case of any breakage or damage of the equipment during the use, cost of repair/ replacement would be reimbursed to the Academy.
7. No outsider will be authorized to handle Academy property/equipment.
8. Posters/Banners/Publicity material will be displayed only at the specified places provided for the purpose.
9. The rates for using Academy's facilities are as follows:

S. No	Facilities/Area	Sitting Capacity	ICAR Inst./ SAU (Rs.)	Central Govt./State Govt. Semi-Govt./ Autonomous/ PSU/ National Societies (Rs.)	International Organizations/ NGO/Private (Rs.)
1.	Lecture Hall	145	19000	31500	37500*
2.	Committee Room I	50	12500	19000	22000*
3.	Committee Room II	46	9500	16000	19000*
4.	Committee Room III	35	7500	12500	15000*
5.	Atrium* (Exhibition/ General purpose/ serving food etc.)		6500	6500	6500
6.	Dining Hall**	40	2500	2500	2500

\* Institutional members will be provided a concession of 20% in hiring charges

\*\* Subject to availability; these facilities are available free of cost for those who book NAAS conference facilities

\*\*\* GST @ 18% is applicable

10. CG Institutions, who are Institutional Members of the Academy and organize half a day meeting for 4 hours (9.00 a.m. to 1.00 p.m. and 2.00 p.m. to 6.00 p.m.) shall be charged 50% hiring charges for conference facilities used.
11. The payment of hiring charges will be made in advance through crossed local cheque / Demand Draft drawn in favour of **National Academy of Agricultural Sciences** payable at **New Delhi**, failing which the booking will be treated as cancelled.
12. **Rules for Cancellation:** -
  - (i) With 15 days advance notice before the date of the meeting/programme, are entitled to full refund.
  - (ii) Between 7-15 days advance notice: 50% of the amount paid shall be refunded.
  - (iii) No amount shall be refunded if less than 7 days notice of cancellation is given.
13. Guesthouse facilities are also available in the Campus, which are under ICAR control. Organizers are requested to approach the Under Secretary (E&M) ICAR [Telefax: 011-25848029] or Caretaker, NASC International Guest House, [Tel: 011-25843145] for booking of Guest House which will be allotted by them on first-come-first served basis.
14. The organizers shall make their own arrangement for lunches/transport themselves.
15. The Organizers are advised to use the signage, catering services from the contractors approved by the ICAR in the campus. M/s Venus Conferences & Exhibitions (P) Ltd., Tel: 32910182, 9999979293, 9810281072 (Mr. Tejinder Batra); and M/s Professional Catering Services Pvt. Ltd., Tel: 9810147093 (Mr. Chandan Singh) are the approved contractors at present for providing the above two services in the campus.

## TA/DA RULES OF THE ACADEMY<sup>#</sup>

### I. TA for attending AGM:

- (a) Fellows shall be entitled to travel assistance to the extent of AC 2-Tier train fare. Fellows may also explore possibility of purchasing apex fare / discounted fare / senior citizens discounted fare tickets of economy class of any Airlines restricted to AC 2-Tier train fare.
- (b) Fellows with the age of 65 and above may travel by apex / discounted Economy fare of any Airlines subject to booking of their air travel well in advance as the meeting is a part of the calendar events.

### II. TA for attending Executive Council meeting and other programmes organized by the Academy:

- (i) **Journey by Air** - Limited to cheapest discounted Economy Class fare (apex fare / discounted fare / senior citizens discounted fare tickets) of any Airlines.
- (ii) **Journey by Train** - Actual expenditure limited to AC 2-Tier
- (iii) **Journey by Road**
  - (a) For Local journeys within Delhi and NCR Region, the rates of road mileage fixed by the Govt. of NCT of Delhi, Transport Department from time to time may be adopted by the Academy. In case of local journeys within Delhi and NCR Region by a 'Radio Taxi', actual charges against the submission of receipt may be allowed.
  - (b) Considering the convenience and time of the invited scientists, residing in a nearby places, even connected by rail, he/she may avail journey by a taxi/own car and road mileage at the rate fixed by the Govt. of NCT of Delhi, Transport Department may be allowed.

#### (iv) Daily Allowance

As per rates prescribed in Govt. of India Rules

*Note: The Organisers/Conveners of Academy programmes may be informed that entitlement for T.A. for such programmes will be limited to the provisions mentioned above. A copy of these rules may be sent to the Organisers/Conveners at the time of approving the programme, with a request that they in-turn may send it to the invited speakers/resource persons. with a request that they in-turn may send it to the invited speakers/resource persons.*

<sup>#</sup> As approved in the Executive Council meeting held on 30 Nov, 2009 and 28 Nov, 2011.



## AGRICULTURAL SCIENCE CONGRESSES

ASC	Venue	Dates	Theme of the Congress	Inaugurated by
1 <sup>st</sup>	IARI, New Delhi	12-14 Nov 1992	Global Climate & Agriculture, Rio-Agenda, Capital Requirement for Modernization of Agriculture	Shri P.V. Narasimha Rao, Hon'ble Prime Minister of India
2 <sup>nd</sup>	APAU, Hyderabad	19-21 Jan 1995	National Water Policy, Vector Biology, On-farm - Off-farm Employment	Shri S. Krishna Kumar, Hon'ble Minister of State for Non-Conventional Energy Sources and Minister of State for Agriculture, Govt of India.
3 <sup>d</sup>	PAU, Ludhiana	12-15 Mar 1997	Sustainable Management of Intensive Agriculture; Implications of Biotechnology Use in Agriculture; Indian Agriculture -Next 50 Years - Role of S&T	Prof. M.S. Swaminathan
4 <sup>th</sup>	RAU, Jaipur	21-24 Feb 1999	Sustainable Agricultural Exports	Shri Anshuman Singh H.E. the Governor of Rajasthan
5 <sup>th</sup>	AAU, Guwahati	4-7 Apr 2001	Sustainable Development of Mountain Agriculture	Lt. Gen. (Retd) S.K. Sinha, H.E. the Government of Assam
6 <sup>th</sup>	IIS, Bhopal	13-15 Feb 2003	Multi-enterprize Farming Systems for Viable Agriculture	Shri Digvijay Singh, Hon'ble Chief Minister of Madhya Pradesh
7 <sup>th</sup>	MPKV, Pune	16-18 Feb 2005	Entrepreneurship Development in Agriculture	Shri Sharad Pawar, Union Minister of Agriculture, Consumer Affairs, Food and Public Distribution
8 <sup>th</sup>	TNAU, Coimbatore	15-17 Feb 2007	Science for Food, Livelihood Security and Rural Prosperity	Shri Surjit Singh Barnala, H.E. the Governor of Tamil Nadu
9 <sup>th</sup>	SKUAS&T-K, Srinagar	22-24 June 2009	Technological and Institutional Innovations for Enhancing Agricultural Income	Shri N.N. Vohra, H.E. the Governor of Jammu & Kashmir
10 <sup>th</sup>	NBFGR, Lucknow	10-12 Feb 2011	Soil, Plant and Animal Health for Enhanced and Sustained Agricultural Productivity	Shri B.L. Joshi, H.E. the Governor of Uttar Pradesh (Shri Harish Rawat, Hon'ble Minister of State for Agriculture & Food Processing Industries, Government of India presided the Inaugural Function)
11 <sup>th</sup>	OUAT, Bhubaneswar	7-9 Feb 2013	Agricultural Education - Shaping India's Future	Sj M.C. Bhandare, H.E. the Governor of Odisha (Sj. Naveen Patnaik, Hon'ble Chief Minister of Odisha chaired a Special Session)
12 <sup>th</sup>	NDRI, Karnal	3-5 Feb 2015	Sustainable Livelihood Security for Smallholder Farmers	Prof. Kaptan Singh Solanki, H.E. the Governor of Punjab & Haryana. Shri Manohar Lal Khattar, Hon'ble Chief Minister of Haryana was the Chief Guest of the Valedictory Session
13 <sup>th</sup>	UAS, Bengaluru	21-24 Feb 2017	Climate-smart Agriculture	The Congress was inaugurated by the Chief Guest Hon'ble Governor of Karnataka, and Chancellor of the University, Sri Vajubhaiwala Ji, with a special "Water the Earth Ceremony." Sri D.V. Sadananda Gowda, Hon'ble Minister for Statistics and Programme Implementation, Government of India, presided over the valedictory function
14 <sup>th</sup>	IARI, New Delhi	20-23 Feb 2019	Innovation for Agricultural Transformation	The Congress was inaugurated by the Chief Guest Shri Radha Mohan Singh, Hon'ble Minister of Agriculture & Farmers Welfare, Government of India.
15 <sup>th</sup>	BHU, Varanasi	13-16 Nov 2021	Energy and Agriculture : Challenges in 21st Century	

Important points to be incorporated in Year book

- If the last date of submitting the application happens to holiday it will be considered on next working day

# CALENDAR 2022

January 2022						
S	M	T	W	T	F	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

February 2022						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28					

March 2022						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

April 2022						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

May 2022						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

June 2022						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

July 2022						
S	M	T	W	T	F	S
31					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

August 2022						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

September 2022						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

October 2022						
S	M	T	W	T	F	S
30	31					1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

November 2022						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

December 2022						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

## NAAS DOCUMENTS ON POLICY ISSUES\*

61. Mastitis Management in Dairy Animals	- 2013
62. Biopesticides – Quality Assurance	- 2014
63. Nanotechnology in Agriculture: Scope and Current Relevance	- 2014
64. Improving Productivity of Rice Fallows	- 2014
65. Climate Resilient Agriculture in India	- 2014
66. Role of Millets in Nutritional Security of India	- 2014
67. Urban and Peri-urban Agriculture	- 2014
68. Efficient Utilization of Phosphorus	- 2014
69. Carbon Economy in Indian Agriculture	- 2014
70. MOOC for Capacity Building in Indian Agriculture: Opportunities and Challenges	- 2014
71. Role of Root Endophytes in Agricultural Productivity	- 2014
72. Bioinformatics in Agriculture: Way Forward	- 2014
73. Monitoring and Evaluation of Agricultural Research, Education and Extension for Development [AREE4D]	- 2015
74. Biodrainage: An Eco-friendly Tool for Combating Waterlogging	- 2015
75. Linking Farmers with Markets for Inclusive Growth in Indian Agriculture	- 2015
76. Bio-fuels to Power Indian Agriculture	- 2015
77. Aquaculture Certification in India: Criteria and Implementation Plan	- 2015
78. Reservoir Fisheries Development in India: Management and Policy Options	- 2016
79. Integration of Medicinal and Aromatic Crop Cultivation and Value Chain Management for Small Farmers	- 2016
80. Augmenting Forage Resources in Rural India: Policy Issues and Strategies	- 2016
81. Climate Resilient Livestock Production	- 2016
82. Breeding Policy for Cattle and Buffalo in India	- 2016
83. Issues and Challenges in Shifting Cultivation and its Relevance in the Present Context	- 2016
84. Practical and Affordable Approaches for Precision in Farm Equipment and Machinery	- 2016
85. Hydroponic Fodder Production in India	- 2017
86. Mismatch between Policies and Development Priorities in Agriculture	- 2017
87. Abiotic Stress Management with Focus on Drought, Food and Hailstorm	- 2017
88. Mitigation Land Degradation due to water Erosion	- 2017
89. Vertical Farming	- 2019
90. Zero Budget Natural Farming - Myth or Reality	- 2019
91. Loan Waiving versus Income Support Schemes: Challenges and Way Forward	- 2019
92. Tropical Wilt Race-4 Affecting Banana Cultivation	- 2019
93. Enhancing Science Culture in Agricultural Research Institutions	- 2020
94. Payment for Ecosystem Services in Agriculture	- 2020
95. Food-borne Zoonotic Diseases	- 2020
96. Livestock Improvement through Artificial Insemination	- 2020

## STATUS / STRATEGY PAPERS

1. Role of Social Scientists in National Agricultural Research System (NARS)	- 2015
2. Towards Pulses Self-sufficiency in India	- 2016
3. Strategy for Transformation of Indian Agriculture for Improving Farmers Welfare	- 2016
4. Sustaining Soybean Productivity and Production in India	- 2017
5. Strengthening Agricultural Extension Research and Education - The Way Forward	- 2017
6. Strategy on Utilization of Glaucanite Mineral as Source of Potassium	- 2017
7. Vegetable Oil Economy and Production Problems in India	- 2017
8. Conservation Policies for Hilsa and Mahseer	- 2018
9. Accelerating Seed Delivery Systems for Priming Indian Farm Productivity Enhancement: A Strategic View Point	- 2018
10. Renewable Energy: A New Paradigm for Growth in Agriculture	- 2018
11. Rumen Microbiome an Amelioration of Methane Production	- 2019
12. Harnessing Full Potential of A1 and A2 Milk in India: An Update	- 2019
13. Development and Adoption of Novel Fertilizer Materials	- 2019

## POLICY BRIEF

1. To Accelerate Utilization of GE Technology for Food & Nutrition Security and Improving Farmers' Income	- 2016
2. Innovative Viable Solution to Rice Residue Burning in Rice-Wheat Cropping System through Concurrent Use of Super Straw Management System-fitted Combines and Turbo Happy Seeder	- 2017
3. Soil Health: New Policy Initiatives for Farmers Welfare	- 2018
4. Uniform Policy for Fish Disease Diagnosis and Quarantine	- 2019
5. Saving the Harvest: Reducing the Food Loss and Waste	- 2019
6. Better Management of Pesticides in India: Policy Perspectives	- 2019
7. Regulatory Framework for Genome Edited Plants: Accelerating the Pace and Precision of Plant Breeding	- 2020
8. Covid-19 Pandemic: Impact and New Normal in Agriculture	- 2020
9. Direct Benefit Transfer of Fertilizer Subsidy: Policy Perspectives	- 2020
10. Harmonization of Seed Regulations for Sustainable Food Security in India	- 2020

## NAAS DOCUMENTS ON POLICY ISSUES\*

1. Agricultural Scientist's Perceptions on National Water Policy	- 1995
2. Fertilizer Policy Issues (2000-2025)	- 1997
3. Harnessing and Management of Water Resources for Enhancing Agricultural Production in the Eastern Region	- 1998
4. Conservation, Management and use of Agro-biodiversity	- 1998
5. Sustainable Agricultural Export	- 1999
6. Reorienting Land Grant System of Agricultural Education in India	- 1999
7. Diversification of Agriculture for Human Nutrition	- 2001
8. Sustainable Fisheries and Aquaculture for Nutritional Security	- 2001
9. Strategies for Agricultural Research in the North-East	- 2001
10. Globalization of Agriculture: R & D in India	- 2001
11. Empowerment of Women in Agriculture	- 2001
12. Sanitary and Phytosanitary Agreement of the World Trade Organization – Advantage India	- 2001
13. Hi-Tech Horticulture in India	- 2001
14. Conservation and Management of Genetic Resources of Livestock	- 2001
15. Prioritization of Agricultural Research	- 2001
16. Agriculture-Industry Interface: Value Added Farm Products	- 2002
17. Scientists' Views on Good Governance of An Agricultural Research Organization	- 2002
18. Agricultural Policy: Redesigning R & D to Achieve It's Objectives	- 2002
19. Intellectual Property Rights in Agriculture	- 2003
20. Dichotomy Between Grain Surplus and Widespread Endemic Hunger	- 2003
21. Priorities of Research and Human Resource Development in Fisheries Biotechnology	- 2003
22. Seaweed Cultivation and Utilization	- 2003
23. Export Potential of Dairy Products	- 2003
24. Biosafety of Transgenic Rice	- 2003
25. Stakeholders' Perceptions On Employment Oriented Agricultural Education	- 2004
26. Peri-Urban Vegetable Cultivation in the NCR Delhi	- 2004
27. Disaster Management in Agriculture	- 2004
28. Impact of Inter River Basin Linkages on Fisheries	- 2004
29. Transgenic Crops and Biosafety Issues Related to Their Commercialization In India	- 2004
30. Organic Farming: Approaches and Possibilities in the Context of Indian Agriculture	- 2005
31. Redefining Agricultural Education and Extension System in Changed Scenario	- 2005
32. Emerging Issues in Water Management – The Question of Ownership	- 2005
33. Policy Options for Efficient Nitrogen Use	- 2005
34. Guidelines for Improving the Quality of Indian Journals & Professional Societies in Agriculture and Allied Sciences	- 2006
35. Low and Declining Crop Response to Fertilizers	- 2006
36. Belowground Biodiversity in Relation to Cropping Systems	- 2006
37. Employment Opportunities in Farm and Non-Farm Sectors Through Technological Interventions with Emphasis on Primary Value Addition	- 2006
38. WTO and Indian Agriculture: Implications for Policy and R&D	- 2006
39. Innovations in Rural Institutions: Driver for Agricultural Prosperity	- 2007
40. High Value Agriculture in India: Prospects and Policies	- 2008
41. Sustainable Energy for Rural India	- 2008
42. Crop Response and Nutrient Ratio	- 2009
43. Antibiotics in Manure and Soil – A Grave Threat to Human and Animal Health	- 2010
44. Plant Quarantine including Internal Quarantine Strategies in View of Onslaught of Diseases and Insect Pests	- 2010
45. Agrochemicals Management: Issues and Strategies	- 2010
46. Veterinary Vaccines and Diagnostics	- 2010
47. Protected Agriculture in North-West Himalayas	- 2010
48. Exploring Untapped Potential of Acid Soils of India	- 2010
49. Agricultural Waste Management	- 2010
50. Drought Preparedness and Mitigation	- 2011
51. Carrying Capacity of Indian Agriculture	- 2011
52. Biosafety Assurance for GM food Crops in India	- 2011
53. Ecolabelling and Certification in Capture Fisheries and Aquaculture	- 2012
54. Integration of Millets in Fortified Foods	- 2012
55. Fighting Child Malnutrition	- 2012
56. Sustaining Agricultural Productivity through Integrated Soil Management	- 2012
57. Value Added Fertilizers and Site Specific Nutrient Management (SSNM)	- 2012
58. Management of Crop Residues in the Context of Conservation Agriculture	- 2012
59. Livestock Infertility and its Management	- 2013
60. Water Use Potential of Flood-affected and Drought-prone Areas of Eastern India	- 2013

\*For details visit web site: <http://www.naasindia.org>