

INDIAN NATIONAL SCIENCE ACADEMY
BAHADUR SHAH ZAFAR MARG, NEW DELHI - 110002

Minutes of the Anniversary General Meeting of the Indian National Science Academy held on 27-29 December, 2017 at Indian Institute of Science Education and Research, Pune.

The following Fellows were present:

Professor Ajay K Sood, President, INSA
Professor Kankan Bhattacharyya, Vice-President (Science Promotion)
Professor NR Jagannathan, Vice-President (Resource Management)
Professor SC Lakhota, Vice-President (Informatics and Publications)
Professor LS Shashidhara, Vice-President (Science & Society)
Professor Anurag Sharma, Vice-President (Fellowship Affairs)
Dr Chandrima Shaha, Vice-President (International Affairs)
Dr TK Adhya
Professor Faizan Ahmad
Professor S Ananthkrishnan
Professor Hemalatha Balaram
Professor Shalabh Bhatnagar
Professor Renee Maria Borges
Professor Asit Kumar Chakraborti
Dr SL Chaplot
Dr Debasis Chattopadhyay
Professor Debajyoti Choudhury
Dr Pijush K Das
Professor Shankar Prasad Das
Professor Asis Datta
Professor S Dattagupta
Dr MG Deo
Professor Subhasish Dey
Dr Madhu Dikshit
Professor SR Gadre
Dr Amit Ghosh
Professor Aswini Ghosh
Professor BG Ghosh
Professor Subrata Ghosh
Professor Rohini M Godbole
Professor Srubabati Goswami
Dr Kailash Chand Gupta
Professor H Ila
Professor Maneesha Shreedhar Inamdar
Professor Chanda Jayant Jog
Professor H Junjappa
Dr AK Kamra
Professor AS Kolaskar
Professor Gopal Krishna
Dr Anil Kumar

Professor KC Malhotra
Professor Nibir Mandal
Dr SK Mishra
Professor Gadadhar Misra
Professor Parthasarathi Mitra
Professor JN Moorthy
Professor Govindasamy Mugesh
Professor Pradeep P Mujumdar
Dr R Nagaraj
Professor Mallayan Palaniandavar
Professor Dulal Panda
Dr GP Pandey
Dr MK Pandit
Professor AJ Parameswaran
Professor G Parthasarathy
Dr DK Paul
Dr VK Pillai
Professor MR Pillai
Professor Appa Rao Podile
Professor PD Prasada Rao
Dr SS Rai
Dr Dhruv Raina
Professor ES Raja Gopal
Dr BC Ranu
Dr SD Rindani
Professor Probir Roy
Dr PV Sane
Professor Kaustuv Sanyal
Professor MK Sanyal
Professor N Sathyamurthy
Dr Ranjan Sen
Professor PK Seth
Professor Shobhona Sharma
Professor D Siddavattam
Dr S Sivaram
Professor S Subramanian
Dr BN Suresh
Dr Qudsia Tahseen
Professor PN Takkar
Professor RS Tripathi
Dr KC Upadhyaya
Dr DK Upreti
Professor YD Vankar
Professor K Veluthambi

FOREIGN FELLOW

Professor Philip Kumar Maini
Professor Peter Smith

During the Anniversary Meeting (27-29 December 2017) the following three mini Symposia, three award lectures, two special lectures besides the anniversary address by President, INSA were organized:

27-28 December 2017

Symposia:

- ***Policy for Science and Science for Policy vis-a-vis role of Science Academies*** (Chair: Professor S Sivaram, FNA)

The following lectures were delivered during the above mini symposia:

Science for Policy and Policy for Science by Professor VK Paul, FNA; ***Science & Technology Education Policy for 21st Century India: Lessons from History*** by Professor LS Shashidhara, FNA and ***Science and Public Policy : The Role of the Science Academies in the Post – Truth Era*** by Professor S Sivaram, FNA..

- ***Science in IISER Pune*** (Chair: Professor JB Udgaonkar, FNA)

The following lectures were delivered during the above mini symposia:

Membrane Fission: Diverse Players, Convergent Mechanisms by Dr Thomas Pucadyil; ***Chemical origins of life*** by Dr Sudha Rajamani; ***Gap-Plasmons: Harnessing Light and Heat at Nanoscale*** by Dr Pavan Kumar; ***Black Holes: Fundamentals and Applications*** by Dr Nabamita Banerjee; ***Development of Synthetic Chloride Transporters for Inducing Cell Death*** by Dr Pinaki Talukdar; ***The molecular basis of nucleobase selectivity in nucleotide triphosphate-utilizing enzymes*** by Dr Amrita Hazra; ***Distribution patterns in number sequences*** by Dr Kaneenika Sinha; ***Zeta functions for locally symmetric spaces and graphs*** by Dr Chandrasheel Bhagwat; ***Stable oxygen isotope as a proxy for paleo-humidity*** by Dr Gyana Ranjan Tripathy; ***Understanding El-Nino Monsoon tele-connections*** by Dr Neena Joseph Mani; ***Understanding astronomy through verses, prose and phrases*** by Dr Venketeswara Pai.

- ***Science in India in the Era of Mega Projects*** (Chair: Professor Ajay Sood, FNA)

The following lectures were delivered during the above mini symposia:

Large projects in High Energy Physics by Sunil Mukhi, FNA; ***LIGO/Giant Telescopes*** by Somak Roychaudhury; ***Discovering the palimpsest of our history using genome scale analysis*** by Partha P Majumder, FNA and ***Mega efforts in Cancer Research*** by RA Badwe

INSA Award Lectures (27-28 December 2017):

- **Indira Gandhi Prize for Popularization of Science Medal (2017) Lecture on *Seeking N-lightenment, one cup at a time! The Journey of Chai and Why?*** by Arnab Bhattacharya, TIFR, Mumbai

- The Homi Jehangir Bhabha Medal (2014) Lecture on ***Reconstructing Dark Energy*** by Varun Sahni, FNA
- The Homi Jehangir Bhabha Medal (2017) Lecture on ***Dynamics of Galaxies: Effect of Interstellar Gas and Dark Matter Halo*** by Chanda J Jog, FNA.
(summaries of the lectures at ***Annexure-I, p/ 7-8***)

Special Lectures:

- ***Gandhi and Science*** by Dr Subodh Kerkar, Artist, Activist, Cultural theorist and Historian, founding Director of Museum of Goa
- ***ASSURED: The Game Changing Innovation Paradigm*** by Dr RA Mashelkar, FNA, FRS were also delivered.

Release of an INSA Publication:

Dr RA Mashelkar also released INSA publication on *Indian National Science Academy's Inspirational Journey in 75 years* by Shri SK Sahni and Professor PN Tandon, FNA.

Anniversary General Meeting

29 December, 2017 at 9.00 am

President, INSA welcomed all the Fellows at IISER, Pune. Thereafter, the regular agenda items were taken up.

1. Condolence at the passing away of the distinguished Fellows:

The sad demise of Professors Komaravolu Chandrasekharan and Lalji Singh esteemed Fellows of the Academy was reported. The obituary notes were read by the President, INSA and all those present stood in silence for a minute as a mark of respect to the departed soul.

2. Confirmation of minutes of the Annual General Meeting held on 14 October, 2017.

Professor Anurag Sharma, Vice-President (Fellowship Affairs) gave a brief overview of the issues discussed in the Annual General Meeting of the Academy held on 14 October 2017 at Bose Institute, Kolkata. The minutes were thereafter confirmed by the members of the general body.

3. Announcement of the award of the General Medal / Lecture due for the year 2018.

Professor Anurag Sharma, Vice-President (Fellowship Affairs) announced the names of the recipients of General Medal / Lecture due for the year 2017 as follows:

General Medal:

Meghnad Saha Medal to Professor Ashutosh Sharma, FNA

Aryabhata Medal to Professor SC Lakhotia, FNA

General Lecture:

Sisir Kumar Mitra Memorial Lecture to Professor Indira Nath, FNA

- 4. To read names whose nominations have been received after the last Annual General Meeting on 14 October, 2017 to 7 December, 2017 for election as Fellows/ Foreign Fellows/ Pravasi Fellows of INSA.**

Professor Anurag Sharma, Vice-President mentioned that 65 nominations for Fellowship and one nomination for Pravasi Fellowship were received.

- 5. To report appointment/ retirement of staff of the Academy since last Anniversary Meeting.**

Professor Anurag Sharma, Vice-President announced the names of the those staff members who retired during the year 2017. It was noted that no permanent staff was appointed in 2017. However, the appointment of Dr VK Arora, Sr. Consultant for one year on ad-hoc basis was mentioned to the Fellowship.

- 6. Institution of a New Endowment Award - Professor Mihir Chowdhury Memorial Medal**

Professor Anurag Sharma, Vice-President informed the decision of the Council to institute a new endowment award named as *Professor Mihir Chowdhury Memorial Medal*. The Medal will be awarded to an eminent scientist for outstanding contributions in any branch of *Chemistry*. The award carries an honorarium of Rs. 25,000/-, a bronze medal and a citation. The first medal will be awarded in 2019.

- 7. To discuss the issues related Pravasi Fellows.**

President, INSA briefed the Fellows about the background of the Pravasi Fellows and the discussion in the Council. Pravasi Fellows are being considered since the year 2014. Every year nominations are received from the Fellowship which are reviewed by a nominating committee consisting of President, INSA (Chair), two Past-Presidents, two Fellows, Vice-President (Fellowship Affairs) and Vice-President (International Affairs, Member Secretary). The recommendations of this committee are directly considered by the Council.

The primary concern of the Academy in introducing the Pravasi Fellowship stream was to involve scientists of Indian diaspora working in India/ abroad holding Indian or Overseas passport without diluting the criterion of academic excellence which INSA strives for.

The council at its July 2017 meeting considered the fact that so far only four Pravasi Fellows could be elected in the year 2014 and 2015. During last two years of consideration no Pravasi Fellow could make it to the fold of the Academy. It was also noted that Academy should not lower its bar of academic excellence for inducting Pravasi Fellow. No other scientific academy of any other country has such a category of fellowship. It was, therefore, decided that this stream of fellowship should be reviewed. A committee consisting of senior fellows under the Chairmanship of Professor SK Joshi, past President of the Academy reviewed this programme and recommended that the category of Pravasi Fellow may be abolished.

This recommendation regarding the closure of Pravasi Fellowship programme was accepted by the Council at its meeting on 28th December, 2017. The Fellows present in the Anniversary General body meeting unanimously endorsed decision of the Council and agreed to abolish Pravasi Fellowship category.

President, INSA mentioned that since the category of Pravasi Fellows is a part of INSA Rules, there will be amendments in certain Rules. These amendments can be made after Rules are put to vote by the entire fellowship. The Rules can be changed only if a majority of the two-thirds of the Fellows who have voted are in favour of the proposed changes. It was decided that the voting papers will now be issued to the Fellowship.

29 December, 2017 at 09.30 am

8. Anniversary Address by President, INSA

Nature Inspired Physics: Flocking and Bacterial Heat Engine by Professor Ajay K Sood, President, INSA (summary of the lecture at ***Annexure-II, p/ 9***)

9. Admission of Fellows under Rule 11

Professor Ajay K Sood, President INSA inducted 39 Fellows including two Foreign Fellows (list enclosed at ***Annexure-III, p/ 11-16***). The newly elected fellows took the oath, signed the fellowship register and received the fellowship scroll from President INSA. They were also presented with Fellowship tie and the lapel pin/ scarf.

10. Presentation of awards: a) INSA Teachers Award b) INSA Medal for Young Scientists c) INSA Medal for Young Historian of Science

11 INSA Teachers Awardees received the INSA Teachers award from President INSA. In addition, of the 30 Young Scientists selected in 2017, 22 received the INSA Medal from President INSA and 1 Young Historian

awardee received the INSA Medal from President INSA. The list is given at ***Annexure-IV, p/ 17-22.***

11. Presentation of mementos to outgoing Officers and members of the Council of INSA.

The outgoing members of the Council (Professor SC Lakhotia, Professor LS Shashidhara, Vice-Presidents; Professor SK Ghosh, Professor Nibir Mandal and Professor Dhananjai Pandey, Members) were felicitated. President, INSA presented them a shawl as a token of respect. (Other members: Professor VS Borkar, Dr VS Chauhan, Professor IBS Passi, Dr AJ Rao, Professor Jaya S Tyagi, Professor R Ramamurthi, Professor UB Desai were not present during this function). President profusely thanked the members of the Council for their continued support to him in carrying out the programmes during his tenure as a President of the Academy.

The meeting ended with a vote of thanks to the Chair.