



Programme

ANNIVERSARY GENERAL MEETING
INDIAN NATIONAL SCIENCE ACADEMY

26-28 December 2018

Hosted by

PHYSICAL RESEARCH LABORATORY (PRL), AHMEDABAD

Co-hosted by

INSTITUTE FOR PLASMA RESEARCH (IPR), BHAT

INDIAN INSTITUTE OF TECHNOLOGY (IIT-GN), GANDHINAGAR

Wednesday, 26 December 2018

(at PRL)

TIME	ACTIVITY	CHAIR/ CONVENERS	SPEAKERS
09:00-09:45	Inauguration	Chair Prof AK Sood, President, INSA (IISc, Bengaluru)	Dr K Sivan, Chairman, ISRO & Secretary, Dept. of Space, Bengaluru
09:45-10:30	Presidential Address		Prof AK Sood, President, INSA (IISc, Bengaluru) <i>Nano Heat Engines</i>
10:30-11:00	TEA		
11:00-11:30	Science at PRL	Chair Prof AK Sood, President, INSA	Prof A Bhardwaj, Director, PRL, Ahmedabad
11:30-13:15	SYMPOSIUM 1: Vikram Sarabhai Space Science Symposium (VS ⁴): Innovations from Space Program	Chair Prof AK Sood, President, INSA	
		Conveners Dr BN Suresh, Distinguished Professor, ISRO, Bengaluru Prof A Bhardwaj, PRL, Ahmedabad	<ul style="list-style-type: none"> • Dr K Sivan, Chairman, ISRO & Secretary, Dept. of Space, Bengaluru <i>ISRO programs, present and future directions and their contribution in Nation building</i> • Dr S Somanath, Director, VSSC, Thiruvananthapuram <i>Launch vehicles, innovations and future perceptive:</i> • Sri P Kunhikrishnan, Director, URSC, Bengaluru <i>Satellites, interplanetary missions, technologies and future trends</i> • Dr P Diwakar, Earth Sci. Prog., ISRO HQ, Bengaluru • <i>Space application programme: Societal applications and their benefits</i>
13:15-14:15	LUNCH		
14:15-15:00	Meghnad Saha Medal Lecture (2018)	Chair Prof AK Sood, President, INSA	Prof Ashutosh Sharma, Secretary, DST <i>Navigating Complexity by Common Sense</i>
15:00-15:45	Aryabhata Medal Lecture (2018)	Chair Prof AK Sood, President, INSA	Prof SC Lakhotia, BHU, Varanasi <i>Need for Integration of Ayurveda with Modern Biology</i>
15:45-16:15	TEA		
16:15-18:15	SYMPOSIUM 2: Food Security and Genomics	Chair Prof K Veluthambi, MKU, Madurai	
		Conveners Prof Deepak Pental, DU, New Delhi Dr RK Varshney, ICRISAT, Patancheru Dr IP Abrol, CASA, New Delhi	<ul style="list-style-type: none"> • Prof Deepak Pental, DU, New Delhi <i>Transgenic Technologies for Low-input, High-output Agriculture</i> • Sri ML Jat, Int. Maize and Wheat Improvement Centre, Delhi <i>Conservation Agriculture</i> • Dr TR Sharma, NABI, Mohali <i>Plant Pathogen Interaction-Developing Disease Resistant Plants</i>

			<ul style="list-style-type: none"> • Dr RK Varshney, ICRISAT, Patancheru <i>Genomics and Legume Breeding</i> • Dr IP Abrol, CASA, New Delhi • <i>Future Agriculture</i>
18:15-18:40	TEA		
18:45-19:45	PUBLIC LECTURE	Chair Prof A Bhardwaj, PRL, Ahmedabad	Dr AV Ramarao, AVRMA Industries <i>Reflections from a Personal Journey as Scientist, Technologist and Entrepreneur (Academia and Industry Interactions)</i>
19:45- onwards	DINNER		
21:00-22:00	Meeting of Editorial Board of PINSAs	Chair Prof SC Lakhotia, BHU, Varanasi	
21:00-22:00	Meeting of INYAS Core Committee	Chair Dr Mahesh Kumar, IIT, Jodhpur	

Thursday, 27 December 2018

TIME	ACTIVITY	CHAIR/ CONVENERS	SPEAKERS
08:30	Departure from hotels to IPR and Tea on Arrival		
10:00-10:30	IPR-Welcome and Introduction	Chair Prof Shobhona Sharma, TIFR, Mumbai	Prof Shashank Chaturvedi, Director, IPR, Ahmedabad
10:30-11:00	TEA		
11:00-13:00	SYMPOSIUM 3: AI-Scaling Up Artificial Intelligence in India	Chair Prof Manindra Agrawal, IIT, Kanpur	
		Convener Prof Y Narahari, IISc, Bengaluru	<ul style="list-style-type: none"> • Prof Y Narahari, IISc, Bengaluru <i>Current trends and challenges</i> • Prof S Bandyopadhyay, ISI, Kolkata <i>AI in Life Sciences</i> • Prof PP Mujumdar, IISc, Bengaluru <i>AI in Climate Sciences, Water Resource Management, etc.</i>
	Panel Discussion Strengthening AI Research & Education in India	Chair Prof Chiranjib Bhattacharyya, IISc, Bengaluru	Prof Balaraman Ravindran, IIT, Chennai Prof Subhasis Chaudhuri, IIT, Mumbai Prof S Bandyopadhyay, ISI, Kolkata
13:00-13:45	LUNCH		
13:45-15:00	Departure to IIT Gandhinagar + Tea on arrival		
15:00-15:30	About IIT Gandhinagar	Chair Dr Chandrima Shaha, NII, New Delhi	Prof Sudhir K Jain, Director, IIT, Gandhinagar
15:30-17:00	SYMPOSIUM 4: Water Futures	Chair Prof RN Singh, IIT, Gandhinagar	
		Conveners Prof PP Mujumdar, IISc, Bengaluru Prof VM Tiwari, NGRI, Hyderabad	<ul style="list-style-type: none"> • Prof PP Mujumdar, IISc Bengaluru <i>Introduction</i> • Prof Veena Srinivasaan, ATREE Bengaluru <i>Human Alterations of Catchment Processes: Understanding the Cauvery Conflict</i> • Prof M Sekhar, IISc, Bengaluru <i>Adaptation of irrigated agriculture under Global Change</i> • Prof Subimal Ghosh, IIT, Mumbai <i>Hydrologic Simulations of Human-Natural System: Simple vs Complex Models</i>
	INSPIRE APEX COMMITTEE MEETING (Parallel Session)	Chair Prof AK Sood, President, INSA	
17:00-17:30	TEA		
17:30-19:30	SYMPOSIUM 5: Ethics in Science and Education	Chair Prof JP Mittal, BARC, Mumbai	
		Conveners Prof Amit Ghosh, NICODE, Kolkata	• Dr Amit Ghosh, NICODE, Kolkata <i>Introductory remarks</i>

		Prof K Muralidhar, UoH, Hyderabad	<ul style="list-style-type: none"> • Prof K Muralidhar, UoH, Hyderabad <i>Ethics: Issues and Dimensions</i> • Dr Praveen Chaddha, Gurugram <i>Ethics in Publication</i> • Dr Sunil Mukhi, IISER, Pune <i>Ethics in Work Places</i> • Dr Shobhana Sharma, TIFR, Mumbai <i>Gender issues/equal opportunity</i> • Sri Pallav Bagla, NDTV <i>Ethics in Science Journalism</i>
19:30-20:30	DINNER		
20:00	COUNCIL MEETING	Chair Prof AK Sood, President, INSA	
20:30	Return to Hotels for other delegates		

Friday, 28 December 2018

(at PRL)

TIME	ACTIVITY	CHAIR/ CONVENER	SPEAKERS
09:30-11:00	SYMPOSIUM 6: Drug Discovery and Drug Development: The Indian Narrative	Chair Prof S Sinha, AIIMS, New Delhi	
		Conveners Dr Madhu Dikshit, TSTI and IIT, Jodhpur Prof BK Thelma, DU, New Delhi	<ul style="list-style-type: none"> • Dr Madhu Dixit, TSTI and IIT, Jodhpur <i>Introduction</i> • Dr Deepa Joshi, Torrent Pharma, Ahmedabad <i>New Drug Discovery and Development in India: An Industry Perspective</i> • Dr Tapas Kundu, CDRI, Lucknow <i>Epi Genetics, a Target of New Generation Drug Discovery</i> • Dr Praveen Kumar Vemula, InSTEM, Bengaluru • <i>Translating Technologies in India: A Scientist's Perspective</i>
11:00-11:30	TEA		
11:30-13:00	SYMPOSIUM 7: Sustainable Energy and Chemical Engineering Platforms	Chair Dr Saurav Pal, IISER, Kolkata	
		Convener Dr A Nangia, NCL, Pune	<ul style="list-style-type: none"> • Dr Ashwini Nangia, NCL, Pune <i>Overview</i> • Dr Amol Kulkarni, NCL, Pune <i>Continuous manufacturing platforms for fine and specialty Chemicals Industry: Relevance toward Sustainability</i> • Dr Paresh Dhepe, NCL, Pune <i>Sustainable catalytic transformations of renewables into chemicals and fuels</i> • Prof Sanjay Mahajani, IIT, Mumbai <i>Process intensification through Multifunctional Reactors</i> • Dr Ramesh Bhujade, RIL, Jamnagar • <i>Catalytic Hydrothermal Liquefaction – Sustainable Technology for Biomass Conversion to drop-in liquid fuel</i>
13:00-14:00	LUNCH		
14:00-17:00 With a break from 14.45-14.55	Anniversary General Meeting	Chair Prof AK Sood, President, INSA (IISc, Bengaluru)	<ul style="list-style-type: none"> • General Body Meeting (Fellows only) ----- <i>For all participants</i> • Induction of New Fellows • Felicitations of awardees of INSA Medal for Young Scientists and INSA Teachers Award • Felicitations of outgoing Council members • INYAS Activities presentations • Conclusion
17:00	TEA / DEPARTURE		