



Indian Academy of Sciences

Bengaluru - 560 080

80th ANNUAL MEETING

04-06 November, 2022
SRM University - AP, Amaravati

4 NOVEMBER 2022 (FRIDAY)

0900-0930	Registration
0930-1100	Inauguration and Presidential Address Umesh V Waghmare , JNCASR, Bengaluru <i>Instabilities of crystals and their functional properties</i>
1100-1200	Tea break and Group Photograph
1200-1240	Special Lecture Chairperson: Swagata Dasgupta , IIT, Kharagpur AS Raghavendra , University of Hyderabad, Hyderabad <i>Uniqueness of plant mitochondria: Relevance to crop improvement and climate change</i>
1250-1400	Lunch break
1400-1450	Lectures by Fellows/Associates Chairperson: K Bhanu Sankara Rao , University of Hyderabad, Hyderabad
1400-1420	DB Ramachary , University of Hyderabad, Hyderabad <i>Discovery of sustainable organocatalytic reactions: Expansion of substrate/ catalysts scope</i>
1425-1445	Aditya Bandyopadhyay , IIT, Kharagpur <i>Electrified fluid interfaces - Waves and pattern formation</i>
1450-1530	Tea break
1530-1730	Symposium on "Green Energy" Introduction by Convener – Ranjit Thapa , SRM-University, Amaravati
1535-1600	Ashok K Ganguli , IIT, New Delhi <i>Photoelectrochemical water splitting for green energy</i>
1605-1630	S Venkata Mohan , IICT, Hyderabad <i>Low-carbon biohydrogen: Enabling through biorefinery</i>
1635-1700	S Sampath , IISc, Bengaluru <i>Electrochemical energy systems: Hydrogen generation and its use in fuel cells</i>
1705-1730	Ramendra Sundar Dey , Institute of Nano Science & Technology, Mohali <i>Electrochemical nitrogen reduction reaction for the synthesis of ammonia: A pathway to a green future</i>
1730	Discussion
1730-1800	Tea break
1800-1900	Public lecture Chairperson: Umesh V Waghmare , JNCASR, Bengaluru P Sainath , Mumbai <i>Telling the stories of rural Indians in the digital age. The People's Archive of Rural India</i>
1930	Dinner

5 NOVEMBER 2022 (SATURDAY)

0900-1030	Lectures by Fellows/Associates Chairperson: G V Anand , Dayanand Sagar University, Bengaluru
0900-0920	P Vijay Kumar , IISc, Bengaluru <i>The Novel (IZ4) spreading code design for NavIC's L1 SPS signal</i>
0925-0945	Anil K Tripathi , BHU, Varanasi <i>Regulatory cascades of alternative sigma factors are involved in controlling rhizocompetence in a plant growth promoting rhizobacterium, Azospirillum brasilense</i>
0950-1010	G R Chandak , CCMB, Hyderabad <i>Early life exposure and future risk of non-communicable diseases: Relevance in Indian context</i>
1015-1035	Atul Goel , CDRI, Lucknow <i>Development of donor-acceptor based fluorescent dyes for diagnostics and biomedical applications</i>
1040-1100	Tea break

1100-1300	Symposium on "Floods in the Anthropocene"
1100-1105	Introduction by the Convener – Pradeep P Mujumdar , IISc Bengaluru <i>Floods in the Anthropocene – An overview of the Symposium</i>
1105-1130	Rajiv Sinha , IIT, Kanpur <i>Hydrogeomorphology and sediment dynamics of floods</i>
1135-1200	Subimal Ghosh , IIT, Mumbai <i>Extreme precipitation under human-induced climate change</i>
1200-1225	Arpita Mondal , IIT, Mumbai <i>Deciphering the role of climate change in floods</i>
1230-1255	J Indu , IIT, Mumbai <i>Floods from the vantage point of Radars</i>
1300	Discussion
1310-1400	Lunch break
1400-1540	Lectures by Fellows/Associates Chairperson: C Pulla Rao , IIT, Tirupati
1400-1420	Sourav Pal , IIT, Mumbai <i>Distinguished varieties in the polydisc and dilation of commuting matrices</i>
1425-1445	Binod Sreenivasan , IISc, Bengaluru <i>Understanding Earth's magnetic reversals</i>
1450-1510	Ullas K Seetharam , TIFR, Mumbai <i>You are what you eat: linking metabolism to physiology & health</i>
1515-1535	Meena B Mahajan , IMSc, Chennai <i>What is hard to prove, and why?</i>
1540-1600	Tea break
1600-1730	Business Meeting of Fellows
1730-1830	Tea break
1830-1900	Public Lecture Chairperson: Umesh V Waghmare , JNCASR, Bengaluru Ananya Vajpeyi , Centre for Study of Developing Societies, New Delhi <i>The Modern Life of an Ancient Language</i>
1900-2000	Cultural Programme
2000	Dinner

6 NOVEMBER 2022 (SUNDAY)

0900-1015	Lectures by Fellows / Associates Chairperson: Swapan K Ghosh , University of Mumbai, Mumbai
0900-0920	Prabhat Mandal , SN Bose National Centre for Basic Sciences, Kolkata <i>A new paradigm for understanding solids</i>
0925-0945	Jitendra K Bera , IIT, Kanpur <i>Water as a reactant in organometallic catalysis</i>
0950-1010	P Sreenivas , University of Hyderabad, Hyderabad <i>An advanced Ensemble Kalman Filter based Ocean-Atmospheric coupled Data Assimilation system and its impact in enhancing the Indian monsoon predictions</i>
1015-1045	Tea break
1045-1200	Lectures by Fellows / Associates Chairperson: A Jayaraman , Bangalore University, Bengaluru
1045-1105	Suchana Taral , Pondicherry University, Puducherry <i>Source-to-sink pathway of the Himalayan sediments: new evidence from the eastern Himalayan foreland</i>
1110-1130	Gobardhan Das , JNU, New Delhi <i>Mycobacterium tuberculosis programs mesenchymal stem cells to establish dormancy and persistence</i>
1135-1155	Sneha Sagarkar , SP Pune University, Pune <i>Reward memory recall: Role of glutamatergic neurotransmission in the dentate gyrus</i>
1200-1240	Special Lecture Chairperson: V A Raghunathan , RRI, Bengaluru Sadiqali Rangwala , RRI, Bengaluru <i>Nobel Prize for Physics 2022 From Foundational Questions in Quantum Physics to Cutting Edge Technology of Today</i>
1240	Lunch