

INDIAN ACADEMY OF SCIENCES BENGALURU

29th MID-YEAR MEETING

29-30 June 2018

Mahatma Gandhi Hall, Infosys Leadership Institute, Mysore Development Centre, Mysuru

PROGRAMME

29 June 2018, FRIDAY

Session 1A: Special Lecture

Chairperson: H Sharath Chandra

0930–1010 **G Nageswara Rao**, LVPEI, Hyderabad Research, relevance and public good

Session 1B: Inaugural Lectures by Fellows/Associates

Chairperson: Aswini Ghosh

1010–1030 **Ritabrata Munshi**, ISI, Kolkata *The subconvexity problem*

1035–1055 **P Anbarasan**, **II**T, Chennai Transition-metal-catalyzed selective functionalization of metallocarbenes to N-Heterocycles

1100-1120 Tea break

Session 1C: Inaugural Lectures by Fellows/Associates

Chairperson: E Arunan

1120-1140 **Anuradha Dube**, CDRI, Lucknow Kala-Azar – A neglected disease of poverty: Search for affordable lasting cure

1145-1205 **C Narayana**, JNCASR, Bengaluru Application of Raman spectroscopy from condensed matter to biology

1210–1230 **Ramesh Hariharan**, Strand Life Sciences, Bengaluru *Industrializing genomic diagnoses in India*

1235–1255 **V K Gahalaut**, MoES, New Delhi India plate motion and its interaction with Eurasian plate along the Himalayan and Indo-Burmese arc

1300–1430 *Lunch break*

Session 1D: Symposium: Remembering Francis Crick:
A multifaceted visionary scientist

Chairperson: Manju Bansal

1430–1500 **Yamuna Krishnan**, University of Chicago, USA *Quantitative chemical imaging in vivo*

1500–1530 **Rajan Sankaranarayanan**, CCMB, Hyderabad *Transfer RNAs: Not merely adaptor molecules in protein synthesis*

1530–1600 **Souvik Maiti**, IGIB, New Delhi *RNA G-Quadruplex: Re-Search*

1600–1630 **Manju Bansal**, IISc, Bengaluru Francis Crick: A Renaissance scientist

1630-1700 High Tea

Session 1E: Public Lecture

Venue: Senate Hall, Nalwadi Krishnaraja Wadiyar Auditorium, University of Mysore

Chairperson: Ram Ramaswamy

1800–1900 **Upinder Singh**, University of Delhi, Delhi Politics and violence: Ancient debates on a perennial problem

1900 Cultural Programme: Yakshagana – Abhimanyu Kaalaga by Sri Guru Prasadita Yakshagana Mandali, Saligrama

2000 Dinner

30 June 2018, SATURDAY

Session 2A: Inaugural Lectures by Fellows/Associates

Chairperson: Anil K Gupta

0930–0950 Manoj Kumar, GNDU, Amritsar Development of fluorescent probes for molecular recognition, bio-imaging and catalytic applications

0955–1015 **Prabal K Maiti**, **II**Sc, Bengaluru
Structure, dynamics and thermodynamics of confined water

1020–1040 **Nagasuma Chandra**, IISc, Bengaluru *Identification of a host biomarker signature for detecting tuberculosis through a blood test*

1040–1100 Tea break

Session 2B: Inaugural Lectures by Fellows/Associates

Chairperson: H Shekar Shetty

1100-1120 **Swagata Dasgupta**, **II**T, Kharagpur The evolving story of protein polyphenol interactions

1125-1145 **Varun Bhalerao**, IIT Bombay, Mumbai Cosmic fireworks: Shining light on gravitational wave sources!

1150-1210 **Maitrayee DasGupta**, University of Calcutta, Kolkata

Challenges in extending symbiotic nitrogen fixation beyond current host range

1215–1235 **Souvik Mahapatra**, IIT Bombay, Mumbai Reliability of CMOS IC chips – From atoms to processors

1240–1300 **C T Dhanya**, **II**T, New Delhi

Hydrological extremes and hazard modeling –

Exploring the intricacies and predictability of the regional hydrologic system

1300–1430 Lunch break

Session 2C: Symposium: *Blockchains and cryptocurrency*

Chairperson: R L Karandikar

1430–500 **Madhavan Mukund**, CMI, Chennai *Introduction to blockchains*

1500–1530 **Bimal Roy**, ISI, Kolkata Cryptographic primitives for blockchains

1530–1600 **S P Suresh**, CMI, Chennai Bitcoin – Economic aspects

1600–1630 **R L Karandikar**, CMI, Chennai Blockchains: Beyond cryptocurrency

1630-1700 High Tea

Session 3C: Special Lecture

Chairperson: N Mukunda

1200–1240 **R Sukumar**, IISc, Bengaluru

Thinking long-term in ecology: Insights from 3decades of monitoring a tropical forest in
Mudumalai

