

# INDIAN ACADEMY OF SCIENCES

28-29 June 2019

Satish Dhawan Auditorium, CSIC Building, Indian Institute of Science, Bengaluru

# **PROGRAMME**

## 28 June 2019 Friday

0900–0930 Registration

0930–0950 Second edition of *C V Raman* – A *Pictorial Biography* Book launch by R. Ramaswamy

### **Session 1A: Special Lecture**

Chairperson: N V Madhusudana

0950–1030 The marvel and the mystery of quantum mechanics – some reflections

N. Mukunda, IASc, Bengaluru

1030–1050 Tea break

### Session 1B: Inaugural Lectures by Fellows/Associates

Chairperson: E D Jemmis

1050–1110 An analysis of *Candida glabrata* – host interaction *Rupinder Kaur, CDFD, Hyderabad* 

1115–1135 Development of two-phase heat sinks for Earth and microgravity thermal management applications

Rishi Raj, IIT, Patna

1140–1200 Online algorithms for packing and covering problems Amit Kumar, IIT, New Delhi

1205–1225 Molecular chaperones as gateways to mitochondrial health

Devanjan Sinha, BHU, Varanasi

1230–1250 Reconstructing diet and environment of ancient mammals of India using stable isotopes and microwear Rajeev Patnaik, Panjab University, Chandigarh

1300–1430 Lunch break

## Session 1C: Inaugural Lectures by Fellows/Associates

Chairperson: Arnab Rai Chaudhuri

1430–1450 Studying the flow of electrons in 2-D materials Mandar M Deshmukh, TIFR, Mumbai

1455–1515 Studying plant environment interactions through the lens of epigenomics

Rohini Garg, Shiv Nadar University, Gautam Buddha Nagar

1520–1540 Evolution of galaxies in the cosmic-suburbs

Smriti Mahajan, IISER, Mohali

1545–1605 Computer simulation of biomolecular recognition at atomistic precision and in real time

Jagannath Mondal, TIFR-CIS, Hyderabad

1610–1700 High Tea

#### **Session 1D: Invited Talk**

Chairperson: D Balasubramanian

1700–1730 Teaching science to students with visual impairment Beula Christy, LVPEI, Hyderabad

1730–1745 Discussion

#### Session 1E: Public lecture

Chairperson: Partha P Majumder

1800–1900 The four prehistoric migrations that shaped Indian demography and population structure

Tony Joseph, Author/Former Editor, Businessworld, New Delhi

1900-2030 Dinner

## 29 June 2019

Saturday

# Session 2A: Symposium: Prasanta Chandra Mahalanobis – A Tribute to His Scientific Contributions

Chairperson: Partha P Majumder

0900–0940 Statistics with 'a clearly defined purpose': A brief history of sampling and economic planning in Nehruvian India *Poornima Paidipaty, London School of Economics, England* 

0940–1020 From Mahalanobis distance to fractile graphs via sample survey

Probal Chaudhuri, ISI, Kolkata

1020–1100 Mahalanobis, Anthropometric diversity and the birth of human genetics in India

Partha P. Majumder, NIBMG, Kalyani

1100-1120 Tea break

#### Session 2B: Inaugural Lectures by Fellows/Associates

Chairperson: Rajiva Raman

1120–1140 Neuroscience of Yoga in psychiatry: Treatment of depression

B N Gangadhar, NIMHANS, Bengaluru

1145–1205 Fuel-driven temporal supramolecular polymers Subi J George, JNCASR, Bengaluru

### **Session 2C: Special Lecture**

Chairperson: S S Krishnamurthy

1210–1250 Physics of the monsoon and its variability Sulochana Gadgil, Pune

1300-1430 Lunch