



Indian Academy of Sciences 84th ANNUAL MEETING

2–4 November 2018 Swatantrata Bhavan, Banaras Hindu University, Varanasi

> Programme and General Information



INDIAN ACADEMY OF SCIENCES

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^{*}Filled by the President for the remaining term due to the vacancy created by the demise of Prof. R Ramesh (demised on 2 April 2018).

Friday | 2 November 2018

0900-0930 Registration

SESSION IA [Main Hall]

Inauguration & Presidential Address

0930–1100 The uses of chance
Ram Ramaswamy, INU, New Delhi

1100–1115 Group Photograph

Venue: Front Gate, Swatantrata Bhavan

1115-1200 Tea break

SESSION IB [Senate Hall]

Inaugural Lectures by Fellows

Chairperson: Dhananjai Pandey, BHU, Varanasi

1200–1220 DNA inspired physics
Sanjay Kumar, BHU, Varanasi

1225–1245 Low-dimensional spin systems and quantum magnetism
S M Yusuf, BARC, Mumbai

1250-1400 Lunch break

SESSION IC [Senate Hall]

Inaugural Lectures by Associates

Chairperson: V C Thakur, Dehradun

1400–1420 Multiproxy studies on dung of endangered Sangai (*Rucervus eldii eldii*) and Hog deer (*Axis porcinus*) from Manipur, India: Implications to paleoherbivory and paleoecology

Swati Tripathi, BSIP, Lucknow

1425–1445 Hardware implementation of neural network algorithms, based on

machine learning and neuroscience models, using spintronic devices as non-volatile memory elements Debanjan Bhowmik, IIT Delhi, New Delhi

1450-1515 Tea break

SESSION ID [Senate Hall]

Symposium: Materials of Today and Tomorrow Chairpersons: A K Ganguli, IIT Delhi, New Delhi, and Giridhar Kulkarni, CeNS, Bengaluru

- 1515–1535 Introduction
 A K Ganguli and Giridhar Kulkarni
- 1540–1600 Battery materials for electric vehicles: Today and tomorrow K Vijayamohanan, CECRI, Karaikudi
- 1605–1625 Rational design of materials with tailored functionalities

 A K Tyagi, BARC, Mumbai
- 1630–1650 Biomaterialomics: Data-driven accelerated pathways for next generation biomaterials

 Bikramjit Basu, IISc, Bengaluru
- 1655–1715 Low thermal conductive chalcogenides for high performance thermoelectric energy conversion Kanishka Biswas, JNCASR, Bengaluru
- 1720-1730 Discussion
- 1730-1745 Tea break

SESSION IE [Main Hall]

Public Lecture and Cultural Event

Chairperson: Ram Ramaswamy, JNU, New Delhi

1745–1845 Public Lecture: Buddhism and science

Geshe Ngawang Samten, Central

Institute of Higher Tibetan Studies,

Varanasi

1915–2015 Cultural Event: Concert – Three generations on the violin

Smt N Rajam and group

2015-2130 Dinner

Saturday | 3 November 2018

SESSION 2A [Senate Hall]

Special Lecture

Chairperson: N Sathyamurthy, JNCASR, Bengaluru

0900–0940 GM crops in the Indian context:
Looking back, looking forward
Imran Siddiqi, CCMB, Hyderabad

SESSION 2B [Senate Hall]

Inaugural Lectures by Fellows/Associates

Chairperson: E D Jemmis, IISc, Bengaluru

0940–1000 Electrochemical energy storage *via* batteries: Prospects and limitations *Aninda J Bhattacharyya, IISc, Bengaluru*

1005–1025 Host-microbial associations in a changing world

Deepa Agashe, NCBS, Bengaluru

1030-1050 Tea break

SESSION 2C [Senate Hall]

Symposium: Community Health – A Genomic Perspective

Chair	person: Ra	jiva Raman	. BHU.	Varanasi
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- 1050–1115 Genetics and biology of neuromuscular disorders: Unmet scientific need Alok Bhattacharya, INU, New Delhi
- 1120–1145 Translational research approach:
 Primary congenital glaucoma
 Prevalence, genetics and
 collaboration between scientists and
 clinicians for successful treatment
 D Balasubramanian, LVPEI, Hyderabad
- 1150–1215 Public health genomics to innovative targeted therapeutic approaches for relapse-free survival of cancer patients

 Bhudev C Das, Amity University, Noida
- 1220–1245 Early life origins of diabetes in Indians

 C S Yajnik, KEM Hospital Research
 Centre, Pune

1250–1300 Discussion 1300–1400 Lunch break

SESSION 2D [Senate Hall]

Inaugural Lectures by Fellows/Associates

Chairperson: R K Srivastava, BHU, Varanasi

- 1400–1420 Fluorescent, AIEgen and cytotoxic behaviour of annulated polcyclic heteroaromatics

 Bhisma K Patel, IIT, Guwahati
- 1425–1445 Organophosphate hydrolase exists

as part of ton complex in *Sphingobium* fuliginis ATCC27551 and plays role in active transport of nutrients across energy deprived outer membrane *S Dayananda, University of Hyderabad, Hyderabad*

1450–1510 Diffusion, growth, and elasticity in batteries – A mathematical modelling perspective

Jeevanjyoti Chakraborty, IIT, Kharagpur

1515–1535 Discovering CP violation in the lepton sector: Challenges and possibilities

Srubabati Goswami, PRL, Ahmedabad

1540-1600 Tea break

1600–1730 Business Meeting of Fellows
Venue: Senate Hall

1730-1800 Tea break

SESSION 2E [Main Hall]

Public Lecture

Chairperson: Ram Ramaswamy, JNU, New Delhi

1800–1900 Changing faces of women in Hindi cinema

Shabana Azmi, Actress, Social Activist, Mumbai

1900-2030 Dinner

4 November 2018 | Sunday

SESSION 3A [Senate Hall]

Inaugural Lectures by Fellows/Associates

Chairperson: S Ananthakrishnan, Savitribai Phule Pune University, Pune

- 0900–0920 Importance of cellular organelles in controlling miRNA-mediated gene expression in mammalian cells Suvendra N Bhattacharyya, IICB, Kolkata
- 0925–0945 Impact of copy number variations in genome organization, evolution and diseases

 N B Ramachandra, University of Mysore,
 Mysuru
- 0950–1010 Large scale geometry of randomly growing interfaces

 Riddhipratim Basu, ICTS, Bengaluru

1015-1045 Tea break

SESSION 3B [Senate Hall]

Inaugural Lectures by Fellows/Associates

Chairperson: A K Singhvi, Physical Research Laboratory, Ahmedabad

- 1045–1105 From serendipity to designing molecular gels for drug delivery *P Dastidar, IACS, Kolkata*
- 1110–1130 Cold fermions in artificial gauge fields

 Jayanth Vyasanakere, Azim Premji

 University, Bengaluru

1135–1155 Local index formula – Where do we stand today?

Partha S Chakraborty, IMSc, Chennai

SESSION 3C [Senate Hall]

Special Lecture

Chairperson: N Viswanadham, IISc, Bengaluru

1200–1240 The sciences of the artificial: Promise and reality

Vijay Chandru, IISc, Bengaluru

1240-1400 Lunch

SPOUSES PROGRAMME

2-3 November 2018

Vishwanath Temple, BHU Bharat Kala Bhavan, Museum, BHU Ramnagar Fort Sarnath

4 November 2018

Ganga Aarti, Dashashwamedh Ghat

ALLIED EVENTS

31 October 2018 – 1 November 2018 Journal of Earth System Science Workshop:

ADVANCES IN EARTH SYSTEM SCIENCES

I November 2018

Indian Academy of Sciences – American Chemical Society Publications Forum:

EXPANDING FRONTIERS IN CHEMICAL SCIENCES

I November 2018

tAcT Science Outreach Programme

POPULAR SCIENCE WORKSHOP

2–4 PM, Dept. of Chemistry, BHU Speakers:

Prof. S C Lakhotia Prof. Amitabh Joshi

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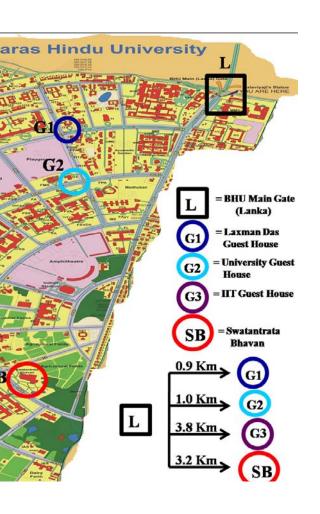
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