1st DAE-BRNS
Trombay Symposium on Life Sciences-2026
(TSLS-2026)

NOVEMBER 25 – 28, 2026

DAE Convention Centre, Anushaktinagar, Mumbai

Organized by

Bhabha Atomic Research Centre, Mumbai

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Trombay Society For Biological Sciences

SCIENTIFIC PROGRAMME

Day 1: 25th November 2026	
09:30 AM-10:30 AM	**INAUGURAL CEREMONY,** followed by High Tea
10:30 AM-11:15 AM	**Keynote Lecture** Chair: Dr. Sudeep Gupta, Director, Tata Memorial Centre, Mumbai **Prof. Kumarasamy Thangaraj, Padma Shri, CSIR-Centre for Cellular and Molecular Biology, Hyderabad** Our origin, culture and consequences
11:15 AM-12:40 PM	**Session 1: Cancer & Radiation Biology** Chair: Prof. Kumarasamy Thangaraj, CCMB, Hyderabad Co-Chair: Dr. P. A. Hassan, Director, Bio-Science Group, BARC
11:15 AM-11:45 AM	**PL-1: Dr Sudeep Gupta, Tata Memorial Centre, Mumbai** Clinical and translational research in gynecological and breast cancers - Improving outcomes

11:45 AM-12:15 PM	**PL-2: Dr. Sudhir Chandna, INMAS, DRDO, Delhi** Post-radiotherapy second primary or secondary malignancies- Deciphering the etiology and mechanisms
12:15 PM-12:40 PM	**IL-1: Dr. Vidita Vaidya, Tata Institute of Fundamental Research, Mumbai** Early stress and accelerated aging
12:40 PM-1:10 PM	**Session 2: Molecular Biology** Chair: Dr. S. K. Apte, Ex-Director, Bio-Science Group, BARC Co-Chair: Dr. Neetu Singh, IIT, Delhi
12:45 PM-01:10 PM	**IL-2: Dr. Radha Prasanna, ICAR-Indian Agricultural Research Institute, New Delhi** Cyanobacteria as climate-smart inputs to sustain healthy microbiomes in soil and produce across crops
01:10 PM-02:00 PM	**LUNCH**

02:00 PM-04:00 PM	**POSTER SESSION - I (PP 1 - PP 54)**
04:00 PM-05:35 PM	**Session 2: Molecular Biology (Continued)**
04:00 PM-04:25 PM	**IL-3: Dr. Neeti Sanan Mishra, International Centre for Genetic Engineering and Biotechnology, New Delhi** miRNAs: Master modulators of multigenic stress responses in plants
04:25 PM-04:50 PM	**IL-4: Dr. Dipshikha Chakravortty, Indian Institute of Science, Bengaluru** Formate's Whisper- How a metabolite can decide the bacteria's response to antibiotics
04:50 PM-05:05 PM	**OP-1: Dr. Arvind Kumar Mishra, Bhabha Atomic Research Centre, Mumbai** Molecular insights into double strand break repair in the radioresistant cyanobacterium *Nostoc* PCC 7120

05:05 PM-05:20 PM	**OP-2: Dr. Vinay Jain, Bhabha Atomic Research Centre, Mumbai** Understanding biological responses to radiation: From nature's own laboratory to cancer therapy and radiation protection
05:20 PM-05:35 PM	**OP-3: Dr. Sanjana Negi, National Agri Food and Biomanufacturing Institute, SAS Nagar** Unravelling the MYB regulatory network governing anthocyanin biosynthesis in banana
07:00 PM	**CULTURAL EVENING & DINNER**

Day 2: 26th November 2026	
09.15 AM-10:45 AM	**Session 3: Cancer Biology** Chair: Dr. Punit Kaur, AIIMS New Delhi Co-Chair: Dr. S. K. Sandur, Head, RB&HSD, BARC
09.15 AM-09:45 AM	**PL-3: Dr. Pankaj Chaturvedi, TMC-Advanced Centre for Treatment, Research & Education in Cancer, Navi Mumbai** Affordable cancer care - Role of Tata Memorial Centre, Department of Atomic Energy
09.45 AM-10:10 AM	**IL-5: Dr. Sib Sankar Roy, CSIR-Indian Institute of Chemical Biology, Kolkata** Mitochondrial association with oncogenesis: Impact of its deregulated bioenergetic function and beyond

10:10 AM-10:35 AM	**IL-6: Dr. Rakesh S. Laishram, BRIC-Rajiv Gandhi Centre for Biotechnology, Kerala** Untranslated RNA dynamics in anti-oxidant and radiation response: Implications in cardiac hypertrophy and failure
10:35 AM-10:45 AM	**TT 1: Dr. Gagan Deep Jhingan, VProteomics, New Delhi** Clinical mass spectrometry and its applications in personalized medicine
10:50 AM -11:20 AM	**Session 4: Agriculture** Chair: Dr. Anand Badigannavar, NA&BTD, BARC Co-Chair: Dr. Neeti Sanan Mishra, ICGEB, New Delhi
10:50 AM-11:20 AM	**PL- 4: Dr. Anil Kumar Tripathi, Indian Institute of Science Education and Research, Mohali** Deciphering the repertoire of mechanisms of rhizocompetence in a plant growth promoting Rhizobacterium
11:20 AM-11:30 AM	**TEA**

11:30 AM-1:10 PM	**Session 4: Agriculture (Continued)**
11:30 AM-11:55 AM	**IL-7: Dr. Ajay Kumar Pandey, BRIC-National Agri-Food and Biomanufacturing Institute, Mohali** Bioengineering genes to generate iron rich wheat grains using genome editing
11:55 AM-12:20 PM	**IL-8: Dr. Girdhar K. Pandey, University of Delhi South Campus, New Delhi** Interplay of calcium and ROS in regulating mitochondrial retrograde signaling under oxidative stress in plants
12:20 PM-12:45 PM	**IL-9: Dr. Santosh Satbhai, Indian Institute of Science Education and Research, Mohali** From plant science to public health: Innovating for iron security and sustainable agriculture
12:45 PM-1:10PM	**IL-10: Dr. Shilpi Sharma, Indian Institute of Technology, Delhi** Rewiring the rhizosphere: Next-Generation solutions for resilient agriculture
01.10 PM-02.15 PM	**LUNCH**

02:15 PM-04:00 PM	**POSTER SESSION (PP55 - PP106)**
04:00 PM-05:45 PM	**Session 5: Bioinformatics and Structural Biology** Chair: Dr. Anil Kumar Tripathi, Director, IISER, Mohali Co-Chair: Dr. Mukesh Kumar, Head, PCS, BARC
04:00 PM-04:25 PM	**IL-11: Dr. B. Anand, Indian Institute of Technology, Guwahati** Waking up bacteria from stress-induced slumber
04:25 PM-04:50 PM	**IL-12: Dr. Punit Kaur, AIIMS, New Delhi** Structural insights into the function of a carbohydrate-active enzyme, GH43
04:50 PM-05:15 PM	**IL-13: Dr. Sangram Bagh, Saha Institute of Nuclear Physics, Kolkata** Towards AI bacteria: Genetically engineered *E. coli* networks identifies prime numbers, vowels and answer math questions

05:15 PM-05:30 PM	**OP-4: Ms. Rimanshee Arya, Bhabha Atomic Research Centre, Mumbai** Structural biology research at BARC: An overview
05:30 PM-05:45 PM	**OP-5: Dr. Chitra S Misra, Bhabha Atomic Research Centre, Mumbai** Genomics-based approaches for diagnosis of infectious and non-infectious diseases
07.30 PM	**DINNER** Buses will leave from the venue at 6:45 PM

Day 3: 27th November 2026	
09.15 AM-11:35 AM	**Session 6: Food Technology** Chair: Dr. Dipshikha Chakravortty, IISc, Bengaluru Co-Chair: Dr. S. Gautam, Head, FTD, BARC
09.15AM-09:45 AM	**PL-5: Dr. Narottam P Sahu, Central Institute of Fisheries Education, Mumbai** Valorisation of agro-industrial residues for sustainable protein resources and nutrient-enriched aquatic foods
09.45 AM-10:15 AM	**PL-6: Dr. Alka Rao, CSIR-Institute of Microbial Technology, Chandigarh** Microbes on our plate: Safety, standards and strains
10:15 AM-10:40 AM	**IL-14: Dr. Ashutosh Upadhyay, National Institute of Food Tech. Entrepreneurship & Management, Sonipat** Bioactive molecules at biological interfaces: engineering natural coatings for protection against oxidative and microbial stress

10:40AM-11:05 AM	**IL-15: Mr. Subray Pavar, Marine Products Export Development Authority Regional Division, Mumbai** Role and functions of MPEDA, registration procedure of seafood processing plants and marine products exports
11:05 AM-11:20 AM	**OP-6: Dr. Nilantana C. Bandyopadhyay, Bhabha Atomic Research Centre, Mumbai** From safe and healthy food to global trade: Expanding applications of radiation processing in India
11:20 AM-11:35 AM	**OP-7: Ms. Indu Pant, Bhabha Atomic Research Centre, Mumbai** Exploring fundamental research in food safety and nutrition: Insights from the Food Technology Division
11:35 AM-11:45 AM	**TEA**

11:45 AM-01:10 PM	**Session 7: Biomaterials** Chair: Dr. Alka Rao, Director, CSIR-IMTech, Chandigarh Co-Chair: Dr. B. N. Pandey, RB&HSD, BARC
11:45 AM-12:15 PM	**PL-7: Dr. Sandeep Verma, Indian Institute of Technology, Kanpur** Therapeutic gases in chemical neuroscience and development of biomicrofluidic platforms
12:15 PM-12:45 PM	**PL-8: Dr. Neetu Singh, Indian Institute of Technology, Delhi** The Chemistry-Biology nexus: Shaping the future of healthcare
12:45 PM-01:00 PM	**OP-8: Dr. Priyadarshi Chakraborty, Indian Institute of Technology, Hyderabad** From supramolecular assembly to tissue regeneration: Peptide-based hybrid hydrogels

01:00 PM-01:10 PM	**TT2: Subhash Tripathi, Country Manager India, Cytek Biosciences Inc.** Enabling A Full Spectrum of Flow Cytometry Applications
01:15 PM-02:15 PM	**LUNCH**
02:15 PM-04:00 PM	**POSTER SESSION (PP 107 - PP 152)**
04:00 PM-06:15 PM	**Session 8: Health Sciences** Chair: Dr. Sandeep Verma, IIT, Kanpur Co-Chair: Dr. B. S. Patro, Head, BOD, BARC
04:00 PM-04:25 PM	**IL-16: Dr. Agneyo Ganguly, Indian Institute of Technology, Kharagpur** RECQ1-RPA interaction promotes fork restoration and facilitates efficient recovery from replication stress following DNA damage induced by topoisomerase inhibitors

04:25 PM-04:50 PM	**IL-17: Dr. Kamalesh D Mumbrekar, Manipal School of Life Sciences, Manipal** Individual radiosensitivity revisited: Fixed and modifiable determinants of normal tissue response
04:50 PM-05:15 PM	**IL-18: Dr. Ruchi Anand, Indian Institute of Technology, Bombay** Can we reverse antibiotic resistance: a glimpse into molecular mechanism and drug design
05:15 PM-05:30 PM	**OP-9: Dr. Mahesh Kumar Padwal, Bhabha Atomic Research Centre, Mumbai** Deconvolution based 'other cells': A prognostic alternative to circulating tumour cells in Neuroendocrine tumours
05:30 PM-05:45 PM	**OP-10: Dr. Ananda Guha Majumdar, Bhabha Atomic Research Centre, Mumbai** Targeting DNA repair vulnerabilities and autophagy to overcome therapeutic resistance in cancer

05:45 PM-06:00 PM	**OP-11: Dr. Himanshi Narang, Bhabha Atomic Research Centre, Mumbai** Dissecting the cancer: Molecular networks, microenvironmental dynamics, and vulnerabilities in precision therapeutics
06:00 PM-06:15 PM	**OP-12: Dr. Sucheta Chatterjee, Bhabha Atomic Research Centre, Mumbai** Functional organic materials for cancer therapy
08.00 PM	**DINNER**

Day 4: 28th November 2026	
09.30 AM-11:00 AM	**Session 9: Health Sciences** Chair: Dr. A. C. Bhasikuttan, Director, Chemistry Group, BARC Co-Chair: Dr. Devashish Rath, Head, AGS, BARC
09.30 AM-9:55 AM	**IL-19: Dr. Bushra Ateeq, Indian Institute of Technology, Kanpur** DKC1-mediated sphingolipid dysregulation drives colorectal cancer and therapy resistance
09:55 AM-10:20 AM	**IL-20: Dr. Mohankumar K. Murugesan, Christian Medical College, Vellore** Targeted base editing for ELANE-associated severe congenital neutropenia
10:20 AM-10:45 AM	**IL-21: Dr. Siddharth Jhunjhunwala, Indian Institute of Science, Bengaluru** Altered neutrophil pool mediates tissue injury in chronic inflammatory disease

10:45 AM-11:00 AM	**OP-13: Dr. Cuckoo Mahapatra, MSCB University, Odisha** Amphibian resilience under radiation stress
11:00 AM-11:15 AM	**TEA**
11:15 AM-01:20 PM	**Session 10: Plant Biology** Chair: Dr. Anand Ballal, Head, NA&BTD, BARC Co-Chair: Dr. Ajay Saini, MBD, BARC
11:15 AM-11:45 PM	**PL-9: Dr. Alok Sinha, National Institute of Plant Genome Research, New Delhi** MAPKs beyond stress: Rewiring plant growth and photosynthesis
11:45 PM-12:10 PM	**IL-22: Dr. P. V. Shivaprasad, National Centre for Biological Sciences, Bengaluru** Epigenetic regulation of rice genomic imprinting

12:10 PM -12:35 PM	**IL-23: Dr. N. K. Dhal, Institute of Minerals and Materials Technology, Bhubaneswar** Phytoremediation of ^{137}Cs and ^{90}Sr at nuclear power plant sites: From site-specific strategies to sustainable remediation
12:35 PM -12:50 PM	**OP-14: Dr. Himanshu Tak, Bhabha Atomic Research Centre, Mumbai** Transgenic approaches for vascular wilt in banana
12:50 PM- 01:05 PM	**OP-15: Dr. Vikash Kumar, Bhabha Atomic Research Centre, Mumbai** Integrating mutation breeding and molecular approaches to enhance rice productivity, climate resilience and nutritional security in India
01:05 PM- 01:20 PM	**OP-16: Dr. Keithellakpam Sanatombi, Manipur University, Imphal** Strains and SynCom: Shaping *Capsicum chinense* cv. 'Umorok' chilli seedling performance

1:20 PM-02:30 PM	**LUNCH**
02.30 PM-03.30 PM	**CLOSING CEREMONY AND VALEDICTORY FUNCTION**