

ABOUT US

The Department of Biological Sciences and Bioengineering (BSBE) was established in 2001 with the vision to provide quality teaching and research training in basic biology, biomedical, bioengineering fields and translational applications. The department currently offers three academic programs - B.Tech, M. Tech and PhD, under the supervision of 29 faculty members and a Emeritus Fellow. The broad research domains at BSBE include Cellular & Molecular Biology, Neuroscience, Developmental Biology, Microbiology, Bioengineering and Structural & Computational Biology. Our aim is to nurture young minds to become scientists and entrepreneurs.

STATE OF THE ART FACILITIES

- Cryo-electron microscopy facility
(300 KV KRIOS G4 with direct electron detector and energy filter)
- Optical microscopy facility
(Super-resolution STORM/PALM, Confocal, Live-cell imaging system)
- Cell sorting facility
(Cell sorter and analyser)
- Centrifuge facility:
(Ultra speed, large volume, and multipurpose centrifuges)
- Protein purification and characterization facility:
(Chromatography, HPLC, and FPLC systems)
- Tissue culture facility:
(Culture rooms for cell and organ cultures)
- Histopathology facility:
(Tissue processing unit, automated microtome, and cryostat)
- Protein crystallization facility:
(X-ray data collection facility with cryo cooling features)
- Genomic facility:
(DNA sequencer, microarray scanner, and real-time PCR machines)
- Animal and transgenic facility:
(Primate, Mouse, Chicken, Drosophila, C.elegans, Zebrafish)
- Bioinformatics facility:
(Workstations, software modules for high-performance computing servers)
- Material characterization facility:
(SEM, rheometer, fabrication facilities)

B.Tech students: 276
B.Tech-M.Tech students: 6
M. Tech students (BSBE): 20
M. Tech students (Biomed): 20
Ph.D. students: 208
Post doctoral fellows: ~25
Research associate and technical staff: ~40
Faculty Members : 29
Administrative Staff : 16
Maintenance Staff : 9



Contact us
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BSBE DAY 2025 ANNUAL SYMPOSIUM



DISCOVER. INNOVATE. TRANSLATE

NEUROBIOLOGY
STRUCTURAL & COMPUTATIONAL BIOLOGY
BIOENGINEERING
DEVELOPMENTAL BIOLOGY
CELLULAR & MOLECULAR BIOLOGY
MICROBIOLOGY

VENUE: OUTREACH AUDITORIUM, IITK



INDIAN INSTITUTE OF TECHNOLOGY
KANPUR

DEPARTMENT OF
BIOLOGICAL SCIENCES
& BIOENGINEERING

Session	Time slot	Chair	Speakers	Event
Inaugural Session	9:25 - 9:35 AM	Welcome & Lamp Lighting		
	9:35 - 9:50 AM	Prof. Ashwani Kumar Thakur, HOD, BSBE Department		Welcome Address & BSBE journey
	9:50 - 10:00 AM	Prof. R. Sankararamakrishnan	Prof. Shekhar Mande Chief Guest Former Director General CSIR	Inaugural address
Session 1	10:00 - 10:40 AM	Prof. Jonaki Sen	Prof. Usha Vijayraghavan IISc Bangalore	Codes for rice floret development: roles for evolutionarily conserved transcription factors
10:40 - 11:00 AM Tea/Coffee Break				
Session 2	11:00 - 11:40 AM	Prof. Shanu Jain	Prof. Sagar Sengupta Director, NIBMG Kalyani	Linking basic biology questions with potential translational possibilities
	11:40 - 12:10 PM		Prof. Sivaprakash Ramalingam IIT Kanpur	Rewinding the internal clock of haemoglobin synthesis in haematopoietic stem cells
	12:10 - 12:40 PM		M. Akshara., Himanshi S., Promit G.,	Flash Talks
	12:40 - 12:55 PM		Dr. Shubhendu Seal (Cytiva)	Industrial talk
12:55 – 2:20 PM Lunch Break				
Session 3	2:20 - 3:00 PM	Prof. Anusmita Sahoo	Prof. Aravind Penmatsa IISc, Bangalore	NETs and GATs: A tale of two transporters
	3:00 - 3:40 PM		Prof. Vivekanandan Perumal IIT Delhi	G-quadruplexes (GQs): stealthy regulators of microbial life
	3:40 - 4:20 PM		Ankur M., Moumita C., Archita M.	Flash Talks
4:20 - 4:40PM Tea / Coffee Break				
Session 4	4:40– 5:20 PM	Prof. Debanjan Dasgupta	Prof. Shekhar Mande Former Director General CSIR	Tech-based entrepreneurship: CSIR experience
	5:20 - 5:40 PM		Dr. Gopalakrishna Ramaswamy CEO, Theracues Innovations	Spatial Biology: New paradigm for understanding tissue architecture
	5:40 - 6:10 PM		Piyush K., Shefali T., Swarnali D.	Flash Talks
Session 5	6:10-7:20 PM	Prof. Santosh Mishra and Prof. Nitin Mohan, BSBE, IIT Kanpur		Certificate Distribution
	7:20 PM	Prof. Appu Kumar Singh		Vote of thanks
8:00 PM Gala Dinner				