

International Conference on
Advances in Biotechnology, Bioprocess and Structural Biology (ICABSB-2025)
December 11-14, 2025
Indian Institute of Technology Roorkee (IITR), Uttarakhand, India
The Biotech Research Society, India (BRSI)

PROGRAM

11th December 2025 (Venue- MAC Auditorium, IIT Roorkee)

1400-1600	Registration (MAC Auditorium, IIT Roorkee)
1630-1830	<ul style="list-style-type: none">• Opening session and BRSI awards function• Release of ICABSB Abstract book and BRSI-Taylor & Francis Books
1830-1930	BRSI Foundation Day Lecture - 2025 <ul style="list-style-type: none">• Biotechnology & Bioprocessing as Enablers for a Sustainable Energy Future, Sanjiv Singh, Group President, Reliance Industries Ltd, Mumbai
1930-2030	Presentations by BRSI awards winners (Lifetime Achievement, Young Scientist, Woman Scientist, Industrial Medal awardees)
2030-2130	DINNER

12th December 2025 (Venue- APJ AKB L2)

Time, h	Session IA: Biomass to Fuels and Chemicals (Room: APJ AKB L2-003)	Session IB: Sustainable Energy & Environment and Circular Economy (Room: APJ AKB L2-004)	Session IC: Drug Development and Disease Control (Room: APJ AKB L2-103)	Session ID: Sustainable Agriculture and Plant-Microbe Interaction (Room: APJ AKB L2-005)	Session IE: Structural Biology (Room: APJ AKB L2-104)
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	Coordinator: Kamlesh Choure, AKSU, Satna
	Chairs: Mark Wilkins, KSU, USA & N. Siva Mohan Reddy, IITR	Chairs: Ramaraj Boopathy, NU, USA & Debabrata Sircar, IITR	Chairs: Renu Wadhwa, AIST, Japan & Ranjana Pathania, IITR	Chairs: Dev Mani Pandey, Birla Institute of Technology, Ranchi & Harsh Chauhan, IITR	Chairs: TP Singh, AIIMS, New Delhi & BVV Prasad, Baylor College of Medicine, USA
0900-0930	PL 01: Biomass based binders from waste biomass: Opportunities and Challenges, Thallada Bhaskar, CSIR-Advanced Materials and Processes Research Institute, Bhopal	PL 02: Tunable bioelectrocatalysis via material–microbe interfaces, S. Venkata Mohan, CSIR-National Environmental Engineering Research Institute, Nagpur	PL 03: Small molecule-guided trans-differentiation: Unlocking neuronal fate from induced pluripotent stem cells (iPSCs) for regenerative neurotherapies, Javed Iqbal, Scimplify Centre for Innovation, Hyderabad	PL 04: CRISPR-Cas Genome Editing for Climate Resilient Agriculture as part of Bio-E ³ Policy, K C Bansal, Guru Jambheshwar University of Science and Technology, Hisar	PL 05: Shape, Sequence, Specificity? The Enigma of Transcription Factor Binding to DNA, Manju Bansal, Indian Institute of Science, Bangalore
0930-1000	PL 06: Waste as a raw material for bioplastics synthesis, RD Tyagi, BOSK Bioproducts, Canada	PL 07: Bioplastic and Circular economy: the Italian approach, Fabrizio Adani, Università degli Studi di Milano, Italy	PL 08: Multipronged approach for an affordable healthcare ecosystem, Alok Dhawan, Centre of BioMedical Research, Lucknow	PL 09: Biopesticides in sustainable agriculture: IPFT's role in innovation and development, Mohana Krishna Reddy Mudiam, Institute of Pesticide Formulation Technology, Gurugram	PL 10: Understanding an Entropy-drive Phospho-regulation of Protein-Protein Interactions: Explorations with Molecular Dynamics Simulation Anchored by NMR Experiments, Carol Post, Purdue University, USA

1000-1020	IL 01: Bioprocess development of biomass derived sugars to 2,5-furandicarboxylic acid, Binod Parameswaran, CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum	IL 02: Process development to produce various microbial metabolites and use of enzymes and whole cells for the synthesis of chiral drugs and drug intermediates, UC Banerjee, Amity University, Mohali	IL 03: Association of slow acetylator genotype of NAT2 and null mutation in GSTs with antituberculosis drug-induced liver injury in an Indian Manipuri population, Reena Haobam, Manipur University, Imphal	IL 04: Genome-wide identification of root colonization fitness genes in plant growth-promoting <i>Pseudomonas</i> spp., Jeyaprakash Rajendhran, Madurai Kamaraj University, Madurai	IL 05: TBC
1020-1030	OP 01: Sustainable Valorization of Cashew Nut Shells: Bio-Oil Production and Chemical Characterization, Ravi Kumar Sonwani, Indian Institute of Petroleum and Energy, Visakhapatnam	OP 02: Integration of microbial electrosynthesis and photoheterotrophy for improved production of squalene from CO ₂ derived acetate, Suresh G, CSIR-Indian Institute of Chemical Technology, Hyderabad	OP 03: Biopolymer Degrading Enzymes as Catalysts for Innovative Drug Development, Deepika Sharma, Chandigarh College of Technology, Mohali	OP 04: Characterization and implication of bacteria associated with mung sprouts, Nandita Baxi, Maharaja Sayajirao University of Baroda, Vadodara	OP 05: Computational Insights into the Prevalence, Variants, and Structural Aspects of Efflux Pumps in <i>Klebsiella pneumoniae</i> Isolated from Gujarat, Khushbu Verma, GSFC University, Vadodara OP45
1030-1100	TEA/COFFEE (Venue: APJ AKB Parking)				
1100-1300	Session IIA: Advance Bioprocessing (Room: APJ AKB L2-003)	Session IIB: Anaerobic Digestion, Environmental Processes (Room: APJ AKB L2-004)	Session IIC: Drug Development and Disease Control (Room: APJ AKB L2-103)	Session IID: Sustainable Agriculture and Food & Health (Room: APJ AKB L2-005)	Session IIE: Structural Biology/Others (Room: APJ AKB L2-104)
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	Coordinator: Kamlesh Choure, AKSU, Satna
	Chairs: Christian Larroche, Universite Clermont Auvergne, France & Amit Dhiman, IITR	Chairs: Philippe Michaud, Universite Clermont Auvergne, France & Vimal Kumar, IITR	Chairs: Alok Dhawan, CBMR, Lucknow & Neelima Alam, DBT, New Delhi	Chairs: Sunil Kaul, AIST, Japan & Partha Roy, IITR	Chairs: Saif Hasan, University of Maryland, USA & Deepak Sharma, IITR

1100-1130	PL 11: Cofactor-driven pathway optimization enables byproduct-free biosynthesis of 1,3-propanediol in <i>Escherichia coli</i> , Sunghoon Park, Ulsan National Institute of Science and Technology, Republic of Korea	PL 12: Microbiota recovery in distressed anaerobic digesters: a synergistic bioaugmentation and biostimulation approach to organic overload stress, Byong-Hun Jeon, Hanyang University, Republic of Korea	PL 13: Regulatory T cells: Mechanisms of immune regulation and therapeutic avenues, Jagadeesh Bayry, Indian Institute of Technology Palakkad	PL 14: Prediction of heat and mass transfer for the growth of higher plants in life support systems with a mechanistic model for space applications, Jean-Pierre Fontaine, Universite Clermont Auvergne, France	PL 15: Chemical Biology based technologies to solve unmet clinical needs, Praveen Kumar Vemula, InStem, Bangalore
1130-1200	PL 16: Morphological engineering of <i>Streptomyces</i> cell factories, Kashyap Kumar Dubey, Jawaharlal Nehru University, New Delhi	PL 17: Wastewater surveillance and non-target analyses for targeted recommendations, Manish Kumar, Tecnológico de Monterrey, Mexico	PL 18: Lipidomics for disease biomarker discovery and food lipid fingerprinting, Siddabasavegowda, B, Hokkaido University, Japan	PL 19: 3D-bioprinting enzyme-hydrogels to improve polyphenols bioactivity in tropical juices: A nutritional strategy for health promotion, Maria H Ribeiro, Universidade de Lisboa, Portugal	PL 20: Cryo-EM structures of the ribosomes from the pathogenic protozoan <i>Entamoeba histolytica</i> , Prem S Kaushal, Regional Centre for Biotechnology, Faridabad
1200-1220	IL 06: Unraveling the structural and biotechnological basis of biofilm-driven functions in sulfate-reducing bacteria via OMICS and systems biology, Rajesh Sani, South Dakota Mines, Rapid City, USA	IL 07: Solid-state anaerobic digestion of agricultural residues and its concurrent treatment to enhance methanogenesis, V Vivekanand, Malaviya National Institute of Technology, Jaipur	IL 08: Evolving frontiers in trauma care: Wound management and the challenge of antimicrobial resistance, Madhur Uniyal, All India Institute of Medical Sciences, Rishikesh	IL 09: Acidic stress responsive genes and their characterization: A comprehensive study using rice landraces of Jharkhand, Dev Mani Pandey, Birla Institute of Technology, Ranchi	OP 06: A Computational Biology Perspective on the Association Between Type 2 Diabetes and Coronary Artery Disease, John J George, University of North Bengal, Darjeeling OP 07: Expansion Microscopy: A Super Resolution Technique for Quantifying the Synapse in Alzheimer Disease, Amit Kumar Tripathi, Galgotias University, Greater Noida
1220-1240	IL 10: Marine macroalgal biorefinery - From Sea to Sustainability, Baskar Gurunathan, St. Joseph's	IL 11: Harnessing metagenomic insights to design microbial decomposers for effective spent mushroom substrate management and	IL 12: Strengthening One Health through animal health innovations, Yashpal Singh Malik, ICAR- Indian	IL 13: T Decoding the hidden secrets of chemical space using AI, Gaurav Ahuja, IIIT Delhi, New Delhi	OP 08: Genetic Landscape of Gallbladder Cancer Identifies HMGA1 as a Potential Therapeutic Target, Girijesh Kumar Patel,

	College of Engineering, Chennai	sustainable cultivation of <i>Agaricus bisporus</i> , Kamlesh Choure, AKS University, Satna	Veterinary Research Institute, Mukteshwar		Motilal Nehru National Institute of Technology Allahabad, Prayagraj <hr/> OP 09: Shear Rate Analysis of the Uterine Artery: A Newtonian Study, Khemraj Deshmukh, Parul University, Vadodara
1240-1300	IL 14: Exploitation of comparative genomics data in industrial <i>Aspergillus</i> strain development, István Pócsi, University of Debrecen, Hungary	IL 15: From pollutant to polymer: Transforming wastewater microalgae into sustainable bioplastics, Ashokkumar Veeramuthu, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai	OP 46: Marine diatoms as a novel platform for targeted drug delivery: A Proof-of- Concept, Abhishek Saxena, Amity University, Noida <hr/> OP 47: Assessment of cytogenotoxic effects of anticancer drugs on interphase cells in <i>Lathyrus sativus</i> L, Aveek Samanta, Prabhat Kumar College, Contai	IL 16: Hairy root and in vitro cultures of <i>Strobilanthes cusia</i> for sustainable indigo production, K Sanatombi, Manipur University, Imphal	OP 09A: Exploring Ascorbic acid's therapeutic potential against <i>M. tb</i> : A computational drug-based approach, Radhey Shyam Kaushal, Parul University, Vadodara <hr/> OP 09B: Newly known signature protein, Rv1509 as a potential target to deal with pulmonary and extra pulmonary tuberculosis, Sada Nand Pandey, Banaras Hindu University, Varanasi
1300-1400	LUNCH (Venue: APJ AKB Parking)				
1300-1500	POSTER SESSION I: PP 001-PP130B Coordinators: Binod Parameswaran, CSIR-NIIST, Trivandrum; Baskar Gurunathan & Pravin R, SJCE, Chennai, Vivek Kumar Gaur & Rinku, Amity University, Noida; Akshay Kumar, JNU, New Delhi (Venue: APJ AKB Ground floor)				

1500-1630	Session IIIA: Microbes & Sustainable Bioprocessing (Room: APJ AKB L2-003)	Session IIIB: Sustainable Environment- Waste to Wealth (Room: APJ AKB L2-004)	Session IIIC: Drug Development and Disease Control (Room: APJ AKB L2-103)	Session IIID: New & Fermented Food and Nano technology (Room: APJ AKB L2-005)	Session IIIE: School Children's Presentations (Room: APJ AKB L2-104)
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	Coordinator: Kamlesh Choure, AKSU, Satna
	Chairs: Jose A Teixeira, University of Minho, Portugal & Bijon Choudhary, IITR	Chairs: RD Tyagi, BOSK, Bioproducts, Canada & Nitin Khandelwal, IITR	Chairs: Maria H Ribeiro, Universidade de Lisboa, Portugal & Sanjai Kumar, DST, New Delhi	Chairs: Yashpal Singh Malik, ICAR- Indian Veterinary Research Institute, Mukteshwar & Bhaskar Jyoti Deka, IITR	Chairs: Carol Post, Purdue University, USA & Jeffery T. Bolin, Purdue University, USA
1500-1520	IL 17: A Physics-Informed Neural Network (PINN) framework for generic bioreactor modelling, Rui Oliveira, Universidade NOVA de Lisboa, Portugal	IL 18: Educating for a sustainable future: Accelerating the shift to a circular bioeconomy, Marina Tisma, Josip Juraj Strossmayer University of Osijek, Croatia	IL 19: Microalgal nanocellulose as a versatile platform for food-grade emulsion and regenerative medical biomaterial application, Shantonu Roy, Indian Institute of Engineering Science and Technology, Kolkata	IL 20: Unlocking the potential of corn protein meal for sustainable protein source, Meena K Choudhary, National Agri-Food and Biomanufacturing Institute, Mohali	SR0P 01: Dual-Chamber Bio-Solar Cell System for Microplastic Degradation and Energy Generation, Saanvi Singh, Vanya Gupta, Swasti Bhargava, Bhavya Sahni, Archana Joshi, Montfort School, Roorkee SR0P 02: Food and Agricultural Biotechnology, Isha Tyagi, Ananya Tyagi, Vaishnavi Salar, Archana Joshi, Montfort School, Roorkee SR0P 03: Medical and Health Biotechnology, Sparsh Jabin Kumar, Jhanvi Bhatia, Arham Khan, Archana Joshi, Montfort School, Roorkee
1520-1540	IL 21: Role of microbial consortia in climate change remediation and in renewable energy production, Christian Larroche, Universite Clermont Auvergne, France	IL 22: Resource recovery from waste streams for enhancing the sustainability of microalgae biomass production, Thilini Ariyadasa, University of Moratuwa, Katubedda, Sri Lanka	IL 23: Association of genotypic and phenotypic resistance mechanisms in clinical isolates of <i>Salmonella typhi</i> from India, Punit Kaur, All India Institute of Medical Sciences, New Delhi	IL 24: Extraction, quantification and value-added applications of polyphenolic compounds from colored corn cellulosic biomass, Pavel Somavat, University of Missouri, USA	SR0P 04: Bones do not lie, Goral Pahuja, Montfort School, Roorkee
1540-1600	IL 25: Structure and reaction mechanism analysis of a novel xylobiohydrolase (AcGH30A) from <i>Acetivibrio clariflavus</i> and its application	IL 26: The Sustainability educational programme for greener fuels and energy on ports – Practical experiences from the SEANERGY project,	IL 27: TBC	IL 28: Potential of Indian fermented foods as reservoir of beneficial microorganisms having potential for biomanufacturing functional	

	in degumming of plant fibres for textile, Arun Goyal, Indian Institute of Technology, Guwahati	Eldon Rene, IHE Delft Institute for Water Education, Delft, The Netherlands		foods, Amit K Rai, National Agri-Food and Biomanufacturing Institute, Mohali	SROP 05: What happens when antibiotics doesn't work? Neil Navani, Montfort School, Roorkee
1600-1620	IL 29: From Aspen to Aspirin: GWAS-driven discovery of a Salicin Acetyltransferase for bio-based acetylation, Vikash Kumar, Umeå University, Umeå, Sweden	IL 30: Synergistic Enhancement of Oil Recovery via Rhamnolipid-Surfactant-Salt Formulations, Lalit Mohan Pandey, Indian Institute of Technology, Guwahati	IL 31: CS/PEG/PVA/Marsilea nanogel effectiveness towards wound healing in diabetic rat models, Vinay Kumar, Saveetha Institute of Medical and Technical Sciences, Chennai	IL 32: Potential of Biosynthesized Nanoparticles, Indu Bhushan, Sri Mata Vaishno Devi University, Katra, J&K	SROP 06: What do probiotics do for our health? Siddharth Navani, Montfort School, Roorkee SROP 07: Recycling of printed circuit board (PCB) through circular economy approach Bitthal Mandal, Montfort School, Roorkee
1620-1630	OP 10: Exploring Engineered Yeast as a Green Biomanufacturing Engine for Sustainable Alternative Protein Production, Bijay Kumar, Tropilite Biosciences Pvt Ltd, Gwalior	OP 11: Harnessing the potential of microalgae cultivated in wastewater for industrial dye degradation for sustainable environment and biorefinery biochemicals, BR Sreelekshmy, Rajagiri College of Social Sciences, Cochin	OP 12: AI-Driven screening and molecular dynamics-based evaluation of phytochemicals against streptomycin-resistant <i>Erwinia amylovora</i> , Sneha Murmu, ICAR-Indian Agricultural Statistics Research Institute, New Delhi	OP 13: Sustainable biovalorization of jackfruit rind: Pectin extraction for enzyme and prebiotic production, Pinaki Dey, CSIR - National Institute for Interdisciplinary Science and Technology, Trivandrum	SROP 08: Cell Structure Function and their relationship Suhas Chandra Gourishetty, Sri Chaitanya Techno School, Roorkee SROP 09: Salt activated capillary switching on paper, Sayuri Sinha, Montfort School, Roorkee SROP 10: Oxygen Inhibition of Evaporation: Controlling Water Loss with Dissolved Air Gradients, Sayona Sinha, Montfort School, Roorkee
1630-1700	TEA/COFFEE (Venue: APJ AKB Parking)				
1700-1830	Session IVA: Biofuels & Biorefineries (Room: APJ AKB L2-003)	Session IVB: Thermochemical Processing of Biomass (Room: APJ AKB L2-004)	Session IVC: Structural Biology (Room: APJ AKB L2-104)	Session IVD: Drug & Vaccine Development (Room: APJ AKB L2-103)	

	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	
	Chairs: MM Ghangrekar, NIT Puducherry & Sanjoy Ghosh, IITR	Chairs: Marina Tisma, Josip Juraj Strossmayer University of Osijek, Croatia & Vimal Chandra Srivastava, IITR	Chairs: Jeffery T Bolin, Purdue University, USA & Prince Tiwari, IITR	Chairs: Naveen Kumar Navani, IITR, Sachin Suresh Tiwari, IITR	
1700-1730	PL 21: Unravelling the potential of diatom-derived cosmeceuticals, Archana Tiwari, Amity University, Noida	PL 22: Pyrolysis and combustion behavior of de-oiled yeast biomass, Alain Brillard, UHA University, France	PL 23: PET plastic degradation by natural and engineered cutinases, Purnananda Guptasarma Indian Institute of Science Education and Research, Mohali	PL 24: Engineering a Novel Recombinant <i>Burkholderia pseudomallei</i> Multi-Epitope Antigen for Enhanced Melioidosis Disease Diagnosis, DT Selvam, Defence Research & Development Organization, Timarpur	
1730-1800	PL 25: Exopolysaccharides from microalgae with high potentials in the field of bioactive compounds and hydrocolloids, Philippe Michaud, Universite Clermont Auvergne, France	PL 26: Green extraction and valorization of lignin: Toward sustainable nanomaterials for multifunctional applications, Jose A Teixeira, University of Minho, Portugal	PL 27: Inhibition of <i>Plasmodium falciparum</i> Lysyl-tRNA Synthetase via a Piperidine-Ring Scaffold Inspired Cladosporin Analogues, Amit Sharma, International Centre for Genetic Engineering and Biotechnology, New Delhi	PL 28: Bedside-to-bench AMR: A reverse translational medicine approach in India, Prasan Kumar Panda, All India Institute of Medical Sciences, Rishikesh	
1800-1820	IL 33: Waste-based biorefineries for sustainable production of biochemicals, Vinod Kumar, Cranfield University, UK	IL 34: Advancing gasification technology: Enhanced poly-generation and sustainable bioenergy solutions, Nitin D Chaturvedi, Indian Institute of Technology, Patna	IL 35: <i>Staphylococcus aureus</i> PlyGRCS endolysin: A potential biotherapeutic target for treating MRSA infections, B Padmanabhan, National Institute of Mental Health and Neurosciences, Bangalore	IL 36: Decoding coatomer interactions: From autoimmunity to universal vaccines, S Saif Hasan, University of Maryland School of Medicine, USA	

1820-1840	IL 37: Integrated valorization of palm oil empty fruit bunch for clean bioenergy production and industrial sustainability, Sumate Chaiprapat, Prince of Songkla University, Thailand	IL 38: Breaking biomass recalcitrance: Microwave-assisted integrated pretreatment strategies for efficient bioconversion of agro-industrial wastes, Pradeep Verma, Central University of Rajasthan, Ajmer	IL 39: Multi-model approach to evaluate the pathogenicity of genetic alterations discovered in BRCA1 gene and associated complexes, Ashok Verma, Advanced Centre for Treatment Research and Education in Cancer, Mumbai	IL 40: Transferrin Binding protein (Tbp) from <i>Neisseria meningitidis</i> as a carrier protein for conjugate vaccines, Neelu N Nawani, Dr DY Patil Biotechnology & Bioinformatics Institute, Pune	
1915-2030	DINNER (Venue: APJ AKB Parking)				
<u>13th December 2025 (Venue- APJ Block)</u>					
0900-1030	Session VA: Rapid Oral Presentation (Room: APJ AKB L2-003)	Session VB: Rapid Oral Presentation (Room: APJ AKB L2-004)	Session VC: Rapid Oral Presentation (Room: APJ AKB L2-005)	Session VD: Rapid Oral Presentation (Room: APJ AKB L2-103)	Session VD: Industry-Academia-Policy Planners Panel Discussion (Room: APJ AKB L2-104)
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	Coordinator: Kamlesh Choure, AKSU, Satna
	Chairs: Reena Haobam, Manipur University & Sachin Suresh Tiwari, IITR	Chairs: Alain Brillard, UHA University, France & Mukesh Sharma, NIH, Roorkee	Chairs: Nagendra Singh, GBU, Greater Noida & Satyanarayan Rao, IITR	Chairs: Ramkumar Dhaked, DRDE, Gwalior & K Sanatombi, Manipur University	Theme: Advancing Translational Research and Funding through Industry-Academia Partnerships in Health, Environment, and Sustainability
	ROP 001-018	ROP 019-036	ROP 037-054	ROP 055-072	Panelists: Neelima Alam, DST, New Delhi; SK Chauhan, THDC India;

					Sanjai Kumar, DST, New Delhi; Richi Mahajan, DBT New Delhi; CN Ramchand, SLSPL, Chennai; Balendra Singh, DBT, New Delhi; Komal Tripathi, IIT Roorkee, Prof Vimal Chandra Srivastava, Dean IR, IIT Roorkee; Anurag K. Varshney, Patanjali Research Institute, Haridwar
1030-1100	TEA/COFFEE (Venue: APJ AKB Parking)				
1100-1300	Session VIA: Microbial Processes and Products (Room: APJ AKB L2-003)	Session VIB: Wastewater Treatment (Room: APJ AKB L2-004)	Session VIC: Structural Biology (Room: APJ AKB L2-104)	Session VID: New & Emerging Viruses and Drug Development (Room: APJ AKB L2-103)	
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	
	Chairs: Sumate Chaiprapat, PSU, Thailand & Purushottam Tomar, SVPUA&T, Meerut	Chairs: Reeta Rani Singhania, National Kaohsiung University of Science and Technology, Taiwan & Brijesh Kumar Yadav, IITR	Chairs: Kashyap Kumar Dubey, Jawaharlal Nehru University, New Delhi & Ashok Varma, ACTREC, Bombay	Chairs: Jagadeesh Bayry, Indian Institute of Technology Palakkad & Rajesh Kalra, IITR	
1100-1130	PL 29: An End-To-End pipeline for succinic acid production at an industrially relevant scale using <i>Issatchenkia orientalis</i> , Vijay	PL 30: Advanced Bioelectrochemical and Electrochemical Strategies for Complete Wastewater Treatment and Resource Recovery, Makarand M	PL 31: Design of synthetic biology tools for engineering biological systems, B Gopal, Indian Institute of Science, Bengaluru	PL 32: Rotate and rise to enter and escape - Conformational plasticity in entry and antibody neutralization of human noroviruses, BVV	

	Singh, University of Illinois at Urbana-Champaign, USA	Ghangrekar, National Institute of Technology, Pondicherry		Prasad, Baylor College of Medicine, USA	
1130-1150	IL 45: Lasiodiplodan: A new carbohydrate polymer by <i>Lasiodiplodia theobromae</i> grown on renewable sugar and nitrogen sources, Anuj K Chandel, Universidade de São Paulo, São Paulo, Brazil	IL 46: Water quality and the antibiotic resistance in the recreational waters of Southeast Louisiana, USA, Ramaraj Boopathy, Nicholls University, USA	IL 47: Structural insights regarding methyl-independent DNA mismatch repair, Deepak T Nair, Regional Centre for Biotechnology, Faridabad	IL 48: The hidden viral world: Understanding the role of virome in HIV pathogenesis, Ravi Tandon, Jawaharlal Nehru University, New Delhi	
1150-1210	IL 49: Structure, function and evolutionary relationships of amylolytic enzymes from the alpha-amylase family GH57, Stefan Janecek, University of SS Cyril and Methodius, Slovakia	IL 50: Synergistic role of ultrasound in stimulating enzyme activity for treatment of pharmaceutical wastewater, Chakma Sankar, Indian Institute of Science Education and Research, Bhopal	IL 51: Structure-based drug discovery for mitigation of <i>Pseudomonas aeruginosa</i> biofilms, Deepti Jain, Regional Centre for Biotechnology, Faridabad	IL 52: Dynamics of virus capsid assembly and disassembly, Manidipa Banerjee, Indian Institute of Technology Delhi, New Delhi	
1210-1230	IL 53: Reformed kinetics of immobilized enzymes in non-conventional media: A case of lipase catalyzed esterification, Emmanuel M Papamichael, University of Ioannina, Greece	IL 54: Intensified biological oxidation of industrial effluents based on cavitation-based processes as pretreatment, Parag Gogate, Institute of Chemical Technology, Mumbai	IL 55: Structural insights into bacterial efflux mechanisms, Aravind Penmatsa, Indian Institute of Science, Bangalore	IL 56: The immunogenic potential of the combination of repurposed drugs targeting Post-Kala-Azar dermal Leishmaniasis, Ramendra Pati Pandey, SRM University, Sonapat	
1230-1250	OP 14: Discovering and designation of the novel subfamilies within the main α -amylase family GH13, Filip Mareček, Institute of Molecular Biology, Slovak Academy of Sciences, Bratislava, Slovakia	IL 57: Ultrasonic assisted extraction of a plant-based biosurfactant for the effective removal of emerging contaminants from water environment: Design and optimization of dissolved air flotation process, P Senthil Kumar, Pondicherry University, Pondicherry	IL 58: Fine-tuning the brain: Structural mechanisms and functional modulation of kainate receptors, Janesh Kumar, CSIR-Centre for Cellular & Molecular Biology, Hyderabad	IL 59: 8-Hydroxyquinoline scaffold: A promising avenue for botulinum neurotoxin inhibition, Ram Kumar Dhaked, DRDE, Gwalior	

	OP 15: <i>Bacillus subtilis</i> based pretreatment of sugarcane bagasse to tune the metabolite profile: A new approach for enhanced performance in Microbial Fuel Cell, Anjana Ratheesh, University of Kerala, Thiruvananthapuram				
1250-1310	<p>OP 16: Unraveling lignocellulosic xylan degradation by a novel strain of <i>Streptomyces</i> sp.: An exploration through genomic and transcriptomic perspectives, Leya Thomas, Kerala Agricultural University, Thrissur</p> <p>OP 17: Efficient bioproduction of poly(3-hydroxypropionate) homopolymer using engineered <i>Escherichia coli</i> strains, Vivek Kumar Gaur, Amity University Uttar Pradesh, Noida</p>	IL 60: Microbial Consortium driven solutions for Wastewater Recycling and Reuse in Textile sector, Anushree Malik, Indian Institute of Technology, New Delhi	IL 61: Structural Insights into Calmodulin-Mediated Inactivation of TRPM3 Appu Kumar Singh, Indian Institute of Technology, Kanpur	IL 62: The phantom serine 7 mark of RNA polymerase II-CTD: The enigmatic function in interacting with proteins that play a role in gene expression, Md Sohail Akhtar, CSIR-Central Drug Research Institute, Lucknow	
1310-1400	LUNCH (Venue: APJ AKB Parking)				
1310-1500	POSTER SESSION II- PP 131-PP 271 Coordinators: Coordinators: Binod Parameswaran, CSIR-NIIST, Trivandrum; Baskar Gurunathan, & Pravin R, SJCE, Chennai, Vivek Kumar Gaur & Rinku, Amity University, Noida; Akshay Kumar, JNU, New Delhi				

(Venue: APJ AKB Ground floor)					
1500-1630	Session VIIA: Biomass to Fuels and Chemical and Materials (Room: APJ AKB L2-003)	Session VIIB: Biodegradation & Bioremediation (Room: APJ AKB L2-004)	Session VIIC: Drug Development and Disease Control (Room: APJ AKB L2-103)	Session VIID: Structure Biology (Room: APJ AKB L2-104)	
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	
	Chairs: Datta Madamwar, Charutar Vidya Mandir, Vallabh Vidyanagar & Anuj K Chandel, Universidade de São Paulo, São Paulo, Brazil	Chairs: Fabrizio Adani, USM, Italy & Thilini Ariyadasa, University of Moratuwa, Katubedda, Sri Lanka	Chairs: Deepak T Nair, Regional Centre for Biotechnology, Faridabad & Kaushik Ghosh, IITR	Chairs: Stefan Janecek, University of SS Cyril and Methodius, Slovakia & Ashutosh Kumar, IITB, Bombay	
1500-1520	IL 63: Design & Development of lignocellulosic biomass fractionation technologies for sustainable biorefinery toward bio-circular economy, Santi Chuetor, King Mongkut's University of Technology North Bangkok, Thailand	IL 64: Biodegradation of coffee pulp tannins: progress and challenges towards sustainability and circularity, Cristobal Noe Aguilar Gonzalez, Autonomous University of Coahuila, Mexico	IL 65: Hydroxylation-Induced conformational changes in Flaviviral NS2B reveal a host-dependent regulatory mechanism, Dilip Kumar, Ashoka University, India	IL 66: Structural and functional analysis of key AAA+ATPases EccA1 and EccC1 from <i>M. tuberculosis</i> ESX-1 secretion system: key targets for drug developments, Ajay Saxena, Jawaharlal Nehru University, New Delhi	
1520-1540	IL 67: Sustainable biomass utilization for carbon capture and utilization, Deepak Pant, Central University of Himachal Pradesh, Kangra	IL 68: Genome-based exploration of bacterial community for degradation of polyethylene: future possibilities and sustainability, Indu S Thakur, Amity University, Gurugram	IL 69: Engineering Immune Precision: A Versatile Strategy for Macrophage-Driven Disease Control, Shailza Singh, National Centre for Cell Science, Pune	IL 70: Structural, functional, and regulatory aspect of histone ubiquitination, Prakash Kumar Shukla, Vellore Institute of Technology, Vellore	

1540-1600	<p>OP 18: Enhancement of hydrogen and methane rich syngas emission through co-pyrolysis of de-oiled microalgae and coal blending, Shweta Rawat, Indian Institute of Technology (BHU) Varanasi</p> <hr/> <p>OP 19: Biohydrogen production from starchy agro-residues by <i>Clostridium beijerinckii</i> G117, Akanksha Jain, South Asian University, New Delhi</p>	IL 71: Bioremediation of Textile Effluents using agricultural residues in economical environment friendly way and Solid-State Fermentation of Dye-Adsorbed Substrates, Poonam Nigam Singh, University of Ulster, Northern Ireland, UK	IL 72: Man9GlcNAc2 from plant lectins in targeting of c-type lectin receptors on dendritic cells for enhanced antigen cross-presentation and antigen-specific cellular immunity, Rajesh K Gupta, Dr DY Patil Biotechnology & Bioinformatics Institute, Pune	IL 73: Use of multiplex PCR in difficult to diagnose neurosurgical cases, Rajnish Arora, All Indian Institute of Medical Sciences, Rishikesh	
1600-1620	<p>OP 20: Development and characterization of a multifunctional composite from <i>Komagataeibacter</i> sp. Garima Mathur, Jaypee Institute of Information Technology, Noida</p> <p>OP 21: Development and characterization of starch-oxilate tea leaf composite with enhanced water binding capacity and antimicrobial attributes, Kunal Kumar, Amity University Jharkhand, Ranchi</p>	IL 74: Hydrogel and biofloc-based bioremediation processes for contaminants of environmental and emerging concern – Application of structural biology, Kishore K Krishnani, ICAR-Indian Institute of Agricultural Biotechnology, Ranchi	IL 75: Amyloid induction and its inhibition by various anti-tuberculosis drugs, Rizwan Khan, Aligarh Muslim	<p>OP 22: Arabidopsis AtGELP53 modulates polysaccharide acetylation and defense response through oligosaccharide-mediated signaling, Prashant Anupama-Mohan Pawar, Regional Centre for Biotechnology, Faridabad</p> <p>OP 23: Structural insights into MeibuL, a galactose-binding lectin from <i>Meizotropis buteiformis</i>, and its prospective anticancer effects in cancer cells, Rana Kamei, Dr. B.R. Ambedkar Center for Biomedical Research, University of Delhi, Delhi</p>	

1620-1640	IL 76: Bioprocess development and scale-up for 2G-ethanol production from lignocellulosic biomass, Sanjoy Ghosh, Indian Institute of Technology Roorkee	IL 77: Transforming coastal waste into value-added bioproducts: harnessing microbial catalysts for conversion of chitin-rich residual resources into glucosamine and oligosaccharides, Nidhi Pareek, Central University of Rajasthan, Ajmer	IL 78: Engineering PROTACs against ASK1: A mechanism-based approach to treat metabolic liver disease, Arindam Talukdar, CSIR-Indian Institute of Chemical Biology, Kolkata	OP 24: IL-33–Mediated Mast Cell Proliferation: Implications for Drug Discovery in Allergic Asthma, Rohit Saluja, All India Institute of Medical Sciences, Bibinagar, Hyderabad OP 25: PIM1 Kinase Regulates CAF Activation and Tumor-Stroma Signaling in Pancreatic Cancer, Kumar Nikhil, Kalinga Institute of Industrial Technology, Bhubaneswar	
1640-1710	TEA/COFFEE (Venue: APJ AKB Parking)				
1700-1850	Session VIIIA: Sustainable Industrial Bioprocesses (Room: APJ AKB L2-003)	Session VIIIB: Sustainable Environmental Processes (Room: APJ AKB L2-004)	Session VIIIC: Food & Agri Biotechnology (Room: APJ AKB L2-103)	Session VIIID: Health & Medical Biotechnology/ Structure Biology (Room: APJ AKB L2-104)	
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	
	Chairs: Jean-Pierre Fontaine, Universite Clermont Auvergne, France & Poonam Chaudhary, IITR	Chairs: Rui Oliveira, Universidade NOVA de Lisboa, Portugal & Nidhi Pareek, Central University of Rajasthan, Ajmer	Chairs: Vivek S Agarwal, Institute of Chartered Waste Managers, Jaipur & Santi Chuetor, King Mongkut's University of Technology North Bangkok, Thailand	Chairs: Pradeep Verma, Central University of Rajasthan, Ajmer & Vinay Kumar, Saveetha Institute of Medical and Technical Sciences, Chennai	

1710-1800	ROP 073-082	ROP 083-092	ROP 093-102	ROP 103-112
1800-1810	OP 26: Structural and Bioengineering Insights into Extremozymes and Gas Vesicle Nanoparticles for Next-Generation Bioprocessing, Ram Karan, University of Delhi South Campus, New Delhi	OP 27: Bioleaching of precious metals from waste mobile phones PCBs by cyanogenic bacteria, Devayani R Tipre, Gujarat University, Ahmedabad	OP 28: Biochemistry of human gut bacteria for utilizing dietary fibre, Ravindra Pal Singh, Gujarat Biotechnology University, Gandhinagar	OP 29: pH-Responsive magnetic nanocarriers for bimodal (MRI/SPECT-CT) image-guided chemo-hyperthermia therapy in human breast carcinoma, Bijaideep Dutta, Bhabha Atomic Research Centre, Mumbai
1810-1820	OP 30: Metabolomic Insights into Mango Juice Fermentation by Diverse <i>Lactiplantibacillus plantarum</i> Strains, Ram Kulkarni, Symbiosis International (Deemed) University, Pune	OP 31: Advanced cultivation of <i>Chlorella sorokiniana</i> in Food Waste Anaerobic Digestate for enhanced biomass productivity and carbohydrate accumulation, Supratim Ghosh, BITS Pilani, Hyderabad	OP 32: Intervention of endophytic bacteria to enhance the lipid and metabolite profiling in soybean during charcoal rot infection, Priyanka Chauhan, PP Savani University, Surat	OP 33: Exploring the role of Small Maf Proteins in regulating Tumor supportive Tryptophan Metabolism, Soumya R Mohapatra, KIIT University, Bhubaneswar
1820-1830	OP 34: Bioprocessing of Macroalgae for economic and energy effective biohydrogen recovery using integrated solubilization approach, Tamilarasan K, Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science and Technology, Chennai	OP 35: A Dual-Stage Fluidized Bed Reactor with Biofiltration Unit for Sustainable Antibiotic Removal, R Brindha, Anna University, Tiruchirappalli	OP 36: Development of CRISPR/Cas9 construct for knocking out the Flavanone biosynthesis gene in Urd bean, Shambhu Krishan Lal, ICAR-Indian Institute of Agricultural Biotechnology, Ranchi	OP 37: Immunomodulatory Effects of Live and Apoptotic Canine Adipose-Derived SVF in a Murine Model of Acute Liver Injury, Ratan Kumar Choudhary, ICAR-National Research Centre on Camel, Bikaner
1830-1840	OP 38: Efficient Inhibitor Management in Lignocellulosic Biorefinery Systems by Adapted Yeast, Jitendra Kumar Saini, Central	OP 39: Incidence and Distribution of Microplastics in Industrial Wastewater from Urkura Industrial Region in Chhattisgarh, D Vasanth,	OP 40: Salinity stress alleviation in rice by <i>Pseudomonas</i> and <i>Bacillus</i> reveal distinct but synergistic approaches, Charanpreet Kaur, National Agri-Food and	OP 41: Towards Personalized Women's Health: A Non-Invasive Hormone Monitoring Approach, Shagun Gupta, PES University, Bengaluru

	University of Haryana, Mahendergarh	National Institute of Technology Raipur, Raipur	Biotechnology Institute, Mohali		
1840-1850	OP 42: Whole genome analysis of halotolerant, surfactant producing <i>Rhodococcus ruber</i> PCTR1 isolated from bacterial consortium developed using sediment of Cochin Port and application for naphthalene degradation, Tripti Raghavendra, Cochin University of Science and Technology, Cochin	OP 43: Screening and characterization of bacterial strains for degradation of laboratory wastewater contaminants, Asmita Gupta, Daulat Ram College, University of Delhi, New Delhi	OP 44: Cracking the code for high temperature resilience in Barley, Lisha Khungar, Indian Institute of Technology, Roorkee	ROP 113-115	
1900-2000	DINNEER (Venue: APJ AKB Parking)				
<u>14th December 2025 (Venue- APJ AKB Block)</u>					
0900-1030	Session IXA: Biofuels & Biorefineries and Health (Room: APJ AKB L2-003)	Session IXB: Sustainable Environment and Disease Control (Room: APJ AKB L2-004)	Session IXC: Structural Biology (Room: APJ AKB L2-104)	Session IXD: Cancer Biology (Room: APJ AKB L2-103)	
	Coordinator: Praveenkumar Ramanujam, AEC, Tiruvannamalai	Coordinator: Preeti Chaturvedi, CSIR-IITR, Lucknow	Coordinator: Archana Tiwari, AU, Noida	Coordinator: V Vivekanand, MNIT, Jaipur	
	Chairs: Rajesh Sani, South Dakota Mines, Rapid City, USA & Emmanuel M Papamichael, University of Ioannina, Greece	Chairs: István Pócsi, University of Debrecen, Hungary & Vikash Kumar, Umeå University, Sweden	Chairs: Aravind Penmasta, Indian Institute of Science, Bangalore & Maya Nair, IITR	Chairs: S Kartikeyan, CSIR-IMTech, Chandigarh & Partha Roy, IITR	

0900-0930	PL 33: Biorefining the blue resource: integrated pathways for seaweed-based circular bioprocessing, Reeta Rani Singhania, National Kaohsiung University of Science and Technology, Taiwan	PL 34: “Reductive Acetogenesis” in Acetogens, In-Seop Chang, Gwangju Institute of Science and Technology, Republic of Korea	PL 35: Mechanistic insights into therapy resistance in pancreatic cancer, Pankaj Singh, University of Oklahoma Health Sciences, Oklahoma City, USA	PL 36: CARF protein: molecular insights to its discovery, functional characterization and intervention for stress, steatosis, and cancer, Renu Wadhwa, National Institute of Advanced Industrial Science & Technology, Japan	
0930-0950	IL 79: Lignocellulosic biomass as a potential resource for biofuel-ethanol generation, Bijender Kumar Bajaj, University of Jammu, Jammu	IL 80: Targeting hydrogen sulfide biosynthetic pathways to overcome antibiotic resistance, Samudrala Gourinath, Jawaharlal Nehru University, New Delhi	IL 81: tRNase toxins as regulators of stress, survival, and microbial competition, Krishan Gopal, National Institute of Pharmaceutical Education and Research, Mohali	IL 82: MASTL Inhibition: A promising strategy for breast cancer therapeutics, Gauri Misra, National Institute of Biologicals, Noida	
0950-1010	IL 83: Microalgae-driven tertiary wastewater treatment: A sustainable approach to pollutants, pathogen removal and recovery of valuable resources, Sabeela B Ummalyma, Rajagiri College of Social Sciences, Kalamassery	IL 84: Production and testing of biomulches from animal processing waste, Mark Wilkins, Kansas State University, USA	IL 85: Fascinating mechanism of single-stranded nucleic acid recognition by RNA Recognition Motifs, Neel Sarovar Bhavesh, International Centre for Genetic Engineering and Biotechnology, New Delhi	IL 86: Anticancer and antistress functions of Ashwagandha extracts - Evidence from cell culture-based assays, Sunil Kaul, National Institute of Advanced Industrial Science & Technology, Japan	
1010-1030	OP 45: A Strategy for Improved Vascular Disease Resistance via Targeted Expression of Fungal Elicitors in Xylem Tissue, Sanjana Negi, National Agri-Food Biotechnology Institute, Mohali	IL 87: Epigenetic control of DNA replication in human malaria parasite <i>Plasmodium falciparum</i> , Suman Kumar Dhar, TERI School of Advanced Studies, New Delhi	IL 88: A Wheel-and-Spoke model of bacterial stress response: Central Network Elements as Players of Antibiotic Response and Resistance, Sonika Bhatnagar, NSUT, New Delhi		

	OP 48: Eco-Friendly Adsorptive Removal of Genotoxic Dyes Using Zinc-Modified Rice Straw Cellulose, Ramesh Kumar, Hanyang University, Seoul, Republic of Korea				
1030-1100	TEA/COFFEE (Venue: APJ AKB Parking)				
1100-1230	YOUNG RESEARCHERS-INDUSTRIES INTERACTIVE SESSION Chair & Moderator: Dr Raghavendra Gaikawai, Chairman & Managing Director, Hi-tech Biosciences Ltd, Pune Panellists: Mr RK Vishnoi, Chairman and Managing Director, THDC India Ltd; Dr Sangeeta Srivastava, Executive Director, Godavari Biorefineries, Mumbai; Dr Vivek S Agarwal, Chairman, Institute of Chartered Waste Managers, Jaipur; Mr SK Chauhan, Assistant General Manager, THDC India Ltd (Venue: MAC Auditorium)				
1230-1315	CLOSING SESSION – Declaration of Best Paper Awards and venue for XXIII BRSI Convention (Venue: MAC Auditorium)				
1315-1400	LUNCH (Venue: APJAKB Parking)				