VALORIZATION 2026

International Conference on Science & Technology Integration for Circular Economy

BITS Pilani
Hyderabad Campus

Program Schedule

DAY 1: Thursday 29th January 2026 Venue: Classroom No. F-101 Link: https://meet.google.com/vtw-gxdy-tjv	
10:00 – 10:30AM	**Inauguration**
10:30 – 10:40AM	**Group Photo**
10:40 – 11:00AM	**High Tea and Networking Session**
Invited Lectures	
11:00 – 11:30AM	**Prof. Sai P. Katikaneni** **Adjunct Professor, Department of Chemical Engineering, BITS Pilani Dubai Campus, United Arab Emirates** ***Invited Lecture 1:*** *Methane to hydrogen and eFuels: Technologies and R&D challenges & opportunities*
11:30AM – 12:00PM	**Mr. Vinod Kumar Mauriya** **Dy. General Manager, Project Engineering (Civil), National Thermal Power Corporation, Limited, Hyderabad.** ***Invited Lecture 2:*** *Restorative solution to toe-drain water collected at Ash-dyke of thermal power plants*
Oral Presentations	

Scientific Session: 1 **Theme: Circular Economy** **Venue: Classroom No. F-101** **Chair – Prof. Satyapaul Singh** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/vtw-gxdy-tjv**		**Scientific Session: 2** **Theme: Environment & Waste Management and Sustainable Development** **Venue: Classroom No. F-202** **Chair – Prof. Ankur Bhattacharjee** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/npe-xnmh-ryf**
12:00 – 12:10PM	**Arun Barathi S** **SRM University, AP** ***VAL01:*** *Efficient laccase production by Schizophyllum commune through process optimization in solid-state fermentation of lignocellulosic biomass*	**Anna Varghese, Bhuvaneswari Raman, Harsh Mittal** **BITS Pilani, Hyderabad Campus** ***VAL07:*** *Reimagining just transition of electronics economy: Thinking with Hyderabad's and Delhi's popular repair clusters*
12:10 – 12:20PM	**Arunika Srivastava** **BITS Pilani, Hyderabad Campus** ***VAL02:*** *Life cycle assessment of solar photovoltaic panels for the circular economy*	**Banoth Rajesh** **BITS Pilani, Hyderabad Campus** ***VAL08:*** *Experimental evaluation of fresh properties and buildability of 3D printed concrete*

12:20 – 12:30PM	**Chepyala Sahith** **Forest College & Research Institute, Siddipet** ***VAL03:*** *Selective lignin degradation of Eucalyptus and Bamboo residues through fungal consortium-based biological pretreatment*	**Dr. Lata Ramrakhiani** **CSIR - Central Glass & Ceramic Research Institute, Kolkata** ***VAL09:*** *Valorization of jute mill waste for treatment of electroplating effluent and sludge management as zinc micro-fertilizer*
12:30 – 12:40PM	**Dr. Anshu Priya** **Center of Innovative and Applied Bioprocessing, Punjab** ***VAL04:*** *Valorization of lignin waste for the production of eco-friendly lignosulfonate-based cement admixture for sustainable construction*	**Niha Nousheen** **Forest College and Research Institute, Siddipet** ***VAL10:*** *Fire and thermal performance of Melia dubia-Pleurotus ostreatus mycelium-based bio-composites for sustainable packaging and insulation applications*
12:40 – 12:50PM	**Hameeda Bee** **University College of Science, Osmania University, Hyderabad** ***VAL05:*** *Valorization of agro-industrial substrates for biosurfactant production*	**Rushikesh Tahakik** **MGM College of Agricultural Biotechnology, Maharashtra** ***VAL11:*** *Eco-friendly bio cement production using urease-producing Bacillus sp. for self-healing concrete applications*
12:50 – 01:00PM	**Keitumetse Ngaka** **BITS Pilani, Hyderabad Campus** ***VAL06:*** *The critical and unbiased assessment of composting*	**Saurabh Chandrakant Patankar** **BITS Pilani, K K Birla Goa Campus** ***VAL12:*** *Densification of lignocellulosic biomass using recyclable deep eutectic solvents*
Scientific Session: 3 **Theme: Anaerobic digestion/ Biomethanation/ Methane to Hydrogen** **Venue: Classroom No. F-203** **Chair – Prof. K. Supradeepan** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/dxq-ihat-iqf**		**Scientific Session: 4** **Theme: Wastewater Treatment** **Venue: Classroom No. F-106** **Chair – Prof. Chanchal Chakraborty** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/nht-qdjo-srd**
12:00 – 12:10PM	**Danavath Balu** **BITS Pilani, Hyderabad Campus** ***VAL13:*** *Evaluation of polyurethane free-standing films as hydrogen barrier for steel components in hydrogen infrastructure*	**Dr. Vidhi Bhatt** **Charotar University of Science and Technology, Gujarat** ***VAL19:*** *Photocatalytic degradation of glyphosate contaminated wastewater by WS2/ZnO nanohybrids*
12:10 – 12:20PM	**Madhava Surya S** **SRM University, AP** ***VAL14:*** *Fermentation strategies for efficient bioethanol Production: A bibliometric analysis*	**Harshavardhan M** **National Institute of Technology, Surathkal** ***VAL20:*** *Utilizing millet straw biochar for effective malachite green dye adsorption and application of RSM*
12:20 – 12:30PM	**Hemapriya S** **BITS Pilani, Hyderabad Campus** ***VAL15:*** *Hydrogel-mediated chemisorption of volatile fatty acids and concomitant biogas enhancement in high solids biomethanation*	**Rashmi Ranjan Mandal** **SRM University, AP** ***VAL21:*** *Integrated phytoremediation and biomass valorization of Eichhornia crassipes for sustainable arsenic and mercury removal*
12:30 – 12:40PM	**Dr. Addagatla Ravindar** **Osmania University, Hyderabad** ***VAL16:*** *Invitro method development for bioassay of fab antibody molecule*	**Ravindra Kulal** **BITS Pilani, Hyderabad Campus** ***VAL22:*** *Sustainable Inactivation of Antimicrobial Resistance in biopharmaceutical wastewater via non-thermal pulsed electric field electroporation*

12:40 – 12:50PM	**Balamanikandan R.** **BITS Pilani, Hyderabad Campus** ***VAL17:*** *Valorization of food waste via anaerobic bioprocessing: Carbon accounting and carbon credit potential*	**Venkatalakshmi Jakka** **Vignan's Foundation for Science, Technology & Research, Guntur** ***VAL23:*** *Eco-Friendly polyvinyl alcohol/ nanocellulose bio-composite film as sustainable adsorbent for Safranin-O and reactive red dyes*
12:50 – 01:00PM	**Dimple K** **BITS Pilani, Hyderabad Campus** ***VAL18:*** *Metabolic pathway integration in anaerobic digestion for circular waste valorization*	**Chaitanya Dhangar, Rudra Pratap Singh Shekhawat** **Amity University, Rajasthan** ***VAL24:*** *Review on low-cost bio waste derived adsorbents for wastewater treatment*
01:00 – 02:00PM	**Lunch Break**	
Invited Lectures **Venue: Classroom No. F-101** **Link: https://meet.google.com/vtw-gxdy-tjv**		
02:00 – 02:20PM	**Dr. Biju Philip** **La Trobe University, Melbourne, Victoria, Australia.** ***Invited Lecture 4:*** *Sustainable circular economy innovation: Bridging business, science, technology, and academic–industry collaboration*	
02:20 – 02:40PM	**Dr. Gangagni Rao A** **Senior Principal Scientist, CSIR-Indian Institute of Chemical Technology, Hyderabad.** ***Invited Lecture 5:*** ***TBA***	
02:40 -03:00PM	**Dr. M. Dwarakanath** **Chairman, State Environment Impact Assessment Authority, Puducherry** ***Invited Lecture 3:*** *Legislative, cultural principles infused in ancient India towards circular economy*	
Oral Presentations		
Scientific Session: 5 **Theme: Circular Economy** **Venue: Classroom No. F-101** **Chair – Prof. Ankur Bhattacharjee** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/vtw-gxdy-tjv**		**Scientific Session: 6** **Theme: Environment & Waste Management and Sustainable Development** **Venue: Classroom No. F-201** **Chair – Prof. Satyapaul Singh** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/npe-xnmh-ryf**
03:00 – 03:10PM	**Palvi Andotra** **BRIC-National Agri-Food and Biomanufacturing Institute, Punjab** ***VAL25:*** *Enhanced photocatalytic oxidation of 5-Hydroxymethylfurfural to 2,5- Diformylfuran over modified TiO_2*	**Varshini R** **SRM University, AP** ***VAL31:*** *Waste is not a burden: Unlocking economic and climate benefits in cassava starch biorefineries*
03:10 – 03:20PM	**Sonal Ayakar** **BITS Pilani, K K Birla Goa Campus** ***VAL26:*** *Microbial consortia engineering and genome-guided enzyme discovery for lignocellulosic waste valorization*	**A. Thulasi** **K. S. Rangasamy College of Technology, Tamil Nadu** ***VAL32:*** *A green solution for waste management and the circular economy in KSR Institutions*
03:20 – 03:30PM	**Syamala Diwakaruni** **BITS Pilani, Hyderabad Campus** ***VAL27:*** *Circular economy strategies for sustainable management of municipal solid waste landfill leachate*	**Aliya Navas** **NICMAR University, Pune** ***VAL33:*** *Framework for organisational change while driving sustainability in the construction industry*

03:30 – 03:40PM	**AL Mushavir Rahman M** **Kalaignarkarunanidhi Institute of Technology, Tamil Nadu** ***VAL28:*** *Valorization of jackfruit (Artocarpus Heterophyllus) rind via solid state fermentation for antioxidant rich postbiotic-recovery*	**Aman Kumar Bhonsle** **CSIR-Indian Institute of Petroleum, Dehradun** ***VAL34:*** *Utilization of used cooking oil into bio-based value-added products*
03:40 – 03:50PM	**Anushree Pant** **Dr. B.R. Ambedkar National Institute of Technology, Punjab** ***VAL29:*** *Biochemical characterization and molecular evaluation of Aspergillus flavus LP1 lipase for eco-friendly detergent applications*	**Amogh Kale, Sujal Balapure** **MIT Art, Design & Technology University, Pune** ***VAL35:*** *Green synthesized silver nanoparticles from Moringa oleifera integrated into chitosan gelatin films for sustainable food packaging applications*
03:50 – 04:00PM	**Aryasree M** **Central University of Kerala, Kerala** ***VAL30:*** *Valorization of cashew processing waste for sustainable lignin extraction and applications using deep eutectic solvents*	**Apoorva K. V.** **National Institute of Technology, Surathkal** ***VAL36:*** *Operational assessment of ward-level urban groundwater stress and seasonal recovery for sustainable development in a coastal city*
Scientific Session: 7 **Theme: Anaerobic digestion/ Biomethanation/ Methane to Hydrogen** **Venue: Classroom No. F-204** **Chair – Prof. K. Supradeepan** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/dxq-ihat-iqf**		**Scientific Session: 8** **Theme: Wastewater Treatment** **Venue: Classroom No. F-106** **Chair – Prof. Lavanya Suresh** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/qvb-crob-ram**
03:00 – 03:10PM	**Mihir Acharya** **CSIR -IICT, Hyderabad** ***VAL37:*** *Hydrodynamic cavitation–driven disintegration of lignocellulosic agri-residues: From lab-scale optimization to pilot-scale validation for enhanced anaerobic digestion*	**Supriya Jena** **Kalinga Institute of Industrial Technology, Bhubaneswar, Odisha** ***VAL43:*** *Sustainable remediation of fluoride-contaminated groundwater using activated sludge: Experimental validation, mechanistic understanding, and modeling*
03:10 – 03:20PM	**Pallavi Vadla** **BITS Pilani, Hyderabad Campus** ***VAL38:*** *Performance evaluation and industrial-scale demonstration of thermophilic anaerobic co-digestion for renewable energy production*	**Prema Malali** **KLE Technological University, Hubballi** ***VAL44:*** *Assessment of surface water quality for sustainable domestic use: A case study of Tolankere lake.*
03:20 – 03:30PM	**Sibin V Mathew** **BITS Pilani, Hyderabad Campus** ***VAL39:*** *Numerical investigation of two-phase mixing in an anaerobic digester*	**Gobinda Chandra Mahapatra** **KIIT School of Chemical Engineering, Bhubaneswar** ***VAL45:*** *Solar-driven Fe/ ZnO photocatalyst for sustainable water disinfection*
03:30 – 03:40PM	**Sandhya Gupta** **BITS Pilani, Hyderabad Campus** ***VAL40:*** *Role and fate of microplastics as substrata during anaerobic digestion: Biofilm formation, microbial community dynamics, and polymer alterations*	**Dr. V. Saravanan** **Annamalai University, Tamil Nadu** ***VAL46:*** *Photocatalytic treatment of dairy industry wastewater: Process optimization and performance evaluation using response surface methodology*
03:40 – 03:50PM	**Ritik Kumar Yadav** **Amity University Rajasthan** ***VAL41:*** *Bio-methanation of municipal waste in India: Decentralized circular economy analysis*	**G. Satish Kumar** **Vellore Institute of Technology, Vellore** ***VAL47:*** *Effect of redox-active and redox-inactive metal doping in magnetite spinel on catalytic wet peroxide oxidation of sulfamethoxazole*

03:50 – 04:00PM	**Pitta Abhishek** **Gandhi Institute of Technology and Management, Visakhapatnam** ***VAL42:*** *Development of sequential nano-enrichment of inoculum for dark fermentation-driven biohydrogen and volatile fatty acid production*	**Taksheel Jain** **Work Integrated Learning Program, BITS Pilani** ***VAL48:*** *Sustainable and Green Wastewater Treatment Methodologies*
04:00 – 04:15PM	**High Tea and Networking Session**	
Oral Presentations		
	Scientific Session: 9 **Theme: Circular Economy** **Venue: Classroom No. F-101** **Chair – Prof. Ankur Bhattacharjee** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/vtw-gxdy-tjv**	**Scientific Session: 10** **Theme: Environment & Waste Management and Sustainable Development** **Venue: Classroom No. F-201** **Chair – Prof. Lavanya Suresh** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/npe-xnmh-ryf**
04:15 – 04:25PM	**Bhuvaneshwari G** **Guru Nanak College, Chennai** ***VAL49:*** *Fabrication, characterization and application of a sustainable eggshell bio-composite for slow release of TSP*	**Dharani S, Dr. N. Muthulakshmi Andal** **PSGR Krishnammal College for Women, Coimbatore** ***VAL55:*** *Extirpation and infusion of spent POP's in corrosion alleviation as inhibitors*
04:25 – 04:35PM	**Bragadish Iyer** **Charotar University of Science & Technology, Gujarat** ***VAL50:*** *Sustainable valorization of paper waste into bio-based adhesives for circular economy applications*	**Dr. Abir Sarbajna** **Vellore Institute of Technology, Vellore** ***VAL56:*** *Metal-directed structural divergence governing cytotoxic and antimicrobial activity in multinuclear quinoline complexes*
04:35 – 04:45PM	**Dildivya, Kalaivani E** **KalaignarKarunanidhi Institute of Technology, Tamil Nadu** ***VAL51:*** *Biodiesel production from Animal waste fat using fe_2O_3-ZrO_2 nanomagnetic catalyst*	**Dr. Vikash** **Government Post Graduate College, Uttarkashi** ***VAL57:*** *Sustainable keratin extraction from wool cortical cells for tissue engineering applications*
04:45 – 04:55PM	**Dr Palashpriya Das** **Guru Nanak Institute of Pharmaceutical Science & Technology, West Bengal** ***VAL52:*** *Valorization of floral waste and slaughterhouse remains via microbial fermentation for biosurfactant production & environmental remediation*	**Mohamed Tharik. A** **Vellore Institute of Technology, Vellore** ***VAL58:*** *Integrated assessment of seasonal climate variability, surface energy balance, and drought dynamics in a rain-fed semi-arid region of south India*
04:55 – 05:05PM	**Gundlapalli Manaswini** **Vellore Institute of Technology, Vellore** ***VAL53:*** *Waste valorization for sustainable bioplastics: Microbial production of Polyhydroxyalkanoates (PHAs) in a circular bioeconomy*	**P. Revathi Prasanna** **Acharya Nagarjuna University, Guntur** ***VAL59:*** *Sustainable Development Goals globalization and health equity towards sustainable development*
05:05 – 05:15PM	**Imran Ahmad** **Durban University of Technology, Durban** ***VAL54:*** *High-rate algal ponds for wastewater valorization in a circular economy*	**Nivedhini M** **Anna University, Chennai** ***VAL60:*** *GIS-Based planning framework for recyclable waste management: A conceptual case study towards circular economy*

	Scientific Session: 11 Theme: Anaerobic digestion/ Biomethanation/ Methane to Hydrogen Venue: Classroom No. F-204 Chair – Prof. K. Supradeepan BITS Pilani Hyderabad Campus Link: https://meet.google.com/dxq-ihat-iqf	Scientific Session: 12 Theme: Wastewater Treatment Venue: Classroom No. F-106 Chair – Prof. Chanchal Chakraborty BITS Pilani, Hyderabad Campus Link: https://meet.google.com/qvb-crob-ram
04:15 – 04:25PM	**Sri Himaja Pamu** **BITS Pilani, Hyderabad Campus** ***VAL61:*** *Harnessing sunlight for photocatalytic hydrogen evolution via band engineered $LaNiO_3$-$LaVO_4$ heterostructures*	**Krishika Aneja** **IISER, Mohali** ***VAL67:*** *A metal-tolerant mesophilic laccase from Achromobacter sp.: Molecular identification, biochemical characterization and dye decolorization*
04:25 – 04:35PM	**Sridhar Babu Gaddala** **CSIR-IICT, Hyderabad** ***VAL62:*** *CFD-guided design of a hydrodynamic cavitator for enhanced biomethane production from rice straw*	**M. Nanthini** **Coimbatore Institute of Engineering and Technology, Coimbatore** ***VAL68:*** *Nano-activated carbon composites for removal of emerging contaminants in wastewater*
04:35 – 04:45PM	**Urvi Milind Dixit** **BITS Pilani, Hyderabad Campus** ***VAL63:*** *Valorization of marine macroalgae biomass via sequential protein recovery and anaerobic digestion for circular bioenergy*	**Mahek Vadalia** **Atmiya University, Rajkot, Gujarat** ***VAL69:*** *Combinatorial approach for efficient dye degradation using green tea extract and Streptomyces rochei MMAD5.*
04:45 – 04:55PM	**Dr. Johnravindar Daviraj** **PSG Institute of Advanced Studies, Coimbatore** ***VAL64:*** *Impact of biochar addition on VFA degradation and methane production during food waste sludge co-digestion*	**Monisha M** **Vellore Institute of Technology, Vellore** ***VAL70:*** *Advanced treatment approaches for the removal of Per- and polyfluoroalkyl substances (PFAS) in wastewater.*
04:55 – 05:05PM	**Dr. Sreetama Ghosh** **Vellore Institute of Technology, Vellore** ***VAL65:*** *From CO_2 to hydrocarbons: A methanol-mediated route using bifunctional catalysts*	**P Udaya Chandrika** **Gandhi Institute of Technology & Management, Visakhapatnam** ***VAL71:*** *Enhanced azo and basic dye degradation using inorganic and organic nanoparticle-encapsulated aerobic consortia*
05:05 – 05:15PM	**Drishti Wacchani** **Amity University, Rajasthan** ***VAL66:*** *Bio-methanation of municipal waste in India: Decentralized circular economy analysis*	**Preeti** **ICAR- Central Soil Salinity Research Institute (Karnal), Haryana** ***VAL72:*** *Impact of different RSC neutralized water irrigation on soil properties under vegetable production*
Poster Presentations **Venue: LTC-Foyer** **Chair – Prof. P. Sankar Ganesh** **BITS Pilani, Hyderabad Campus** **Time: 12:00 – 4:00PM**		
Ayushi Kumari, Advaith Roy **BITS Pilani, Hyderabad Campus** ***VAL73:*** *Comparative analysis of biological treatment systems for Pulsed Electric Field-pretreated biopharmaceutical effluent*		
Balamanikandan R, Tanaya Pol, Nithila S, Shriya K, Bhargavi Ambatkar **BITS Pilani, Hyderabad Campus** ***VAL74:*** *Synergistic effects of substrate composition and electrode potential on voltage-assisted anaerobic digestion*		

Dhanushkumar Annadhurai, Lithisri Saravanan, Mahasree Mohan **K. S. Rangasamy College of Technology, Tamil Nadu.** ***VAL75:*** *Rapid composting of solid waste: An eco-friendly solution for affordable organic manure*	
Kirti Jyoti, Sonam Rani **National Institute of Technology Durgapur, West Bengal** ***VAL76:*** *Aerobic deterioration of waste biomass using bacterial consortia for biobutanol production: An overview*	
Murali Krishnan B, Balaji Prithiviraj P, Jyothish Krishna K B **SRM Institute of Science and Technology, Tamil Nadu** ***VAL78:*** *Circular valorization of soybean processing residues into functional lipopeptide biosurfactants for sustainable food systems*	
Sneha S, Ashwina T Shankar, Pradhanyaa S **SRM Institute of Science and Technology, Tamil Nadu** ***VAL79:*** *Bioconversion of agro-industrial protein by-products into high-value functional food and feed ingredients*	
Sutharsanan V, Mugunthan J Y, Chirag Malik **SRM Institute of Science and Technology, Tamil Nadu** ***VAL80:*** *Development and performance evaluation of glycolipid-based biosurfactants for industrial detergent formulations*	
End of Day 1	
DAY 2: Friday 30th January 2026 **Venue: Classroom No. F-101** **Link: https://meet.google.com/vtw-gxdy-tjv**	
10:00 – 10:20AM	**Mr. Kiran KK** **Managing Director, Kaashyap Envergy Infrastructure Private Limited, Hyderabad** ***Invited Lecture 6:*** *Applications of Artificial Intelligence and Machine Learning in Anaerobic Digestion*
10:20 – 10:40AM	**Prof. Nicky Eshtiaghi** **Chemical Engineering, School of Engineering, RMIT University, Melbourne, Australia.** ***Invited Lecture 7:*** *Sludge Rheology Role in Sustainable Treatment of Wastewater Sludge*
10:40 – 11:00AM	**High Tea and Networking Session**
Oral Presentations	
Scientific Session: 13 **Theme: Circular Economy** **Venue: Classroom No. F-101** **Chair – Prof. Lavanya Suresh** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/vtw-gxdy-tjv**	**Scientific Session: 14** **Theme: Environment & Waste Management and Sustainable Development** **Venue: Classroom No. F-205** **Chair – Prof. Chanchal Chakraborty** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/npe-xnmh-ryf**
11:00 – 11:10AM	**Dr Jampala Annie Modestra** **CSIR-NEERI, Hyderabad** ***VAL81:*** *Tailored microbiome-driven upcycling of plastic waste to value-added bioproducts: Sustainable bioprocessing towards a circular bioeconomy*
	Sahana R & Kavin Prakash T **KalaignarKarunanidhi Institute of Technology, Tamil Nadu** ***VAL87:*** *Starch-based biodegradable film reinforced with natural fibers for sustainable food packaging*
11:10 – 11:20PM	**Jeya Preethi** **Bharathiar University, Tamil Nadu** ***VAL82:*** *Circular bioeconomy potential of mushroom biomass valorization for medicinal bioactive production: An integrated life cycle and techno-economic perspective*
	Saniya P, Loukya D **KalaignarKarunanidhi Institute of Technology, Tamil Nadu** ***VAL88:*** *Biochar-Phase Change Material (PCM) hybrid for passive thermal regulation and environmental sustainability*

11:20 – 11:30AM	**Jiji M** **Indian Institute of Technology, Palakkad** ***VAL83:*** *PET glycolysis catalyzed by acid-base bifunctional metal oxyhydroxides*	**Sanjay S** **KalaignarKarunanidhi Institute of Technology, Tamil Nadu** ***VAL89:*** *Smart Waste Segregation System*
11:30 – 11:40AM	**Kaviraj R** **Central University of Kerala, Kerala** ***VAL84:*** *Enhanced bioethanol production from sugarcane leaves through ionic liquid, Dimethylbutylammonium hydrogen sulfate pretreatment*	**Sanket Chawke** **NICMAR University, Pune** ***VAL90:*** *Assessment of impact on air quality index from manufacturing industries in Gujarat using GIS*
11:40 – 11:50AM	**Kevanshi M. Dave** **Gujarat University, Ahmedabad** ***VAL85:*** *From waste streams to bioplastics: Circular bioeconomy-based PHA production*	**Swati B. Khunt** **Atmiya University, Rajkot** ***VAL91:*** *Microbial carbon circularity: Engineering CO_2-fixing autotrophic microbes for sustainable industrial biomanufacturing*
11:50AM – 12:00PM	**Kingston. S** **Sathyabama Institute of Science and Technology, Chennai** ***VAL86:*** *Grafting effect of polystyrene blend with epoxy resin on the properties of the resulting paint formulation*	**Vani G Viswam** **Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science and Technology, Chennai** ***VAL92:*** *Valorization of underexplored northeast Indian plant resources into sustainable surfactant systems for cosmetic applications*
Scientific Session: 15 **Theme: Anaerobic digestion/ Biomethanation/ Methane to Hydrogen** **Venue: Classroom No. F-208** **Chair – Prof. P. Sankar Ganesh** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/dxq-ihat-iqf**		**Scientific Session: 16** **Theme: Wastewater Treatment** **Venue: Classroom No. G-108** **Chair – Prof. Abhradeep Majumder** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/nht-qdjo-srd**
11:00 – 11:10AM	**Jijnasha Bal** **College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Rajasthan** ***VAL93:*** *Green hydrogen as a cornerstone of decarbonization: Processes & Prospects*	**Dr. Pratibha V. Bakre** **Government College of Arts, Science & Commerce, Goa** ***VAL99:*** *Biopolymer based hydrogels for sustainable removal of water pollutants*
11:10 – 11:20AM	**Gantala Sarva Sai Nikhilesh** **BITS Pilani, Hyderabad Campus** ***VAL94:*** *Electrode assisted biomethanation of food waste under high organic loading*	**Sakshi Dange** **Vellore Institute of Technology, Vellore** ***VAL100:*** *Machine learning–assisted GIS analysis of groundwater contamination for irrigation suitability in Katpadi block*
11:20 – 11:30AM	**Pavithra Pari** **BITS Pilani, Hyderabad Campus** ***VAL95:*** *Hydrothermal and partial wet oxidation pretreatment of food organics and garden organics for enhanced biogas production*	**Sattam Mandal** **Vignan's Foundation for Science, Technology & Research, Andhra Pradesh** ***VAL101:*** *Membrane filtration for microplastic removal: A comprehensive review of wastewater treatment technologies, performance, and mechanisms*
11:30 – 11:40AM	**Vanshikha Gupta** **Defence Research and Development Establishment (DRDE), Gwalior** ***VAL96:*** *Development and characterization of anaerobic microbial inoculum for anaerobic digestion of synthetic night soil and microbial community dynamics revealed by metagenomics*	**Vikram Hiren Raval, Riddhi M Kathrotiya** **Gujarat University, Ahmedabad, Gujarat** ***VAL102:*** *Valorization of agricultural wastes for cost-effective removal of acid azo dyes from wastewater*

11:40 – 11:50AM	**Varshashree R** **Vel Tech Rangarajan Dr Sagunthala R&D Institute of Science & Technology, Chennai** ***VAL97:*** *Synthesis of Ch-TiO_2-Fe_3O_4 nanoparticles and conjugated with phycocyanin extracted from Arthrospira platensis for Lactobacillus spp. separation*	**Mathu Metha K** **KPR Institute of Engineering and Technology, Tamil Nadu** ***VAL103:*** *An Investigation of antimicrobial activity of biomolecule metal oxide nanoparticles*
11:50AM – 12:00PM	**Tushar Singh** **G.B. Pant University of Agriculture & Technology, Uttarakhand** ***VAL98:*** *Enhanced biomass hydrolysis using recombinant cellulase produced by Penicillium funiculosum*	**Sunil Sahu** **National Institute of Technology, Raipur** ***VAL104:*** *Scale-up performance of Microbial Electrolysis Cells (MECs) for sustainable biohydrogen production and wastewater valorization*
Scientific Session: 17 **Theme: Circular Economy** **Venue: Classroom No. F-101** **Chair – Prof. Satyapaul Singh** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/vtw-gxdy-tjv**		**Scientific Session: 18** **Theme: Energy Management/ Membrane Fuel Cells** **Venue: Classroom No. F-207** **Chair – Prof. Ankur Bhattacharjee** **BITS Pilani Hyderabad Campus** **Link: https://meet.google.com/dxq-ihat-iqf**
12:00 – 12:10PM	**Lata Pawar** **BRIC - National Agri-Food & Biomanufacturing Institute, Mohali** ***VAL105:*** Advanced *biocatalyst for the green conversion of 5-hydroxymethyl furfural to a biopolymer precursor 2,5-furandicarboxylic acid*	**Anup Kumar Pradhan** **BITS Pilani Hyderabad Campus** ***VAL111:*** *Metal-free electrocatalyst for improved oxygen electrocatalysis towards solid state flexible zinc-air battery*
12:10 – 12:20PM	**M. Lavanya** **Vel Tech Rangarajan Dr. Sagunthala R&D Institute of Science & Technology, Chennai** ***VAL106:*** *Valorization of finger millet husk an agro-residue for sustainable aquafeed development in Clarias gariepinus*	**Birudu Sarika** **Indian Institute of Petroleum & Energy (IIPE), Anakapalli** ***VAL112:*** *Investigation of pyrolysis behavior and kinetics of de-oiled cashew nutshell using kinetic models*
12:20 – 12:30PM	**Patel Rutu H.** **Shree Ramkrishna Institute of Computer Education and Applied Sciences, Sarvajanik University, Surat** ***VAL107:*** *Synergistic biological pretreatment of substrate and lignocellulolytic enzyme production by fungal consortium for valorization of wheat straw to levulinic acid*	**Kandi Mounika** **BITS Pilani, Hyderabad Campus** ***VAL113:*** *Machine learning enabled forecasting of energy allocation in fuel cell integrated grid connected local energy system*
12:30 – 12:40PM	**Pooja G, Mathiyazhagan R** **KalaignarKarunanidhi Institute of Technology, Tamil Nadu** ***VAL108:*** *Production of bioethanol using agricultural wastes*	**Aparna I** **National Institute of Construction Management and Research, Pune** ***VAL114:*** *Wind analysis for rooftop solar PV at NICMAR University, Pune*
12:40 – 12:50PM	**Rajesh Cheduri** **SRM University, AP** ***VAL109:*** *Valorization of secondary resource materials from E-waste*	**Dr. Aswin Sriram G, Dr. Vijayalakshmi Ramalingam, Sandya Rajan, Sai Manaswini J** **Sri Sivasubramaniya Nadar College of Engineering, Chennai** ***VAL115:*** *Thermochemical conversion of Africana sp. biomass towards feedstock fuel*

12:50 – 01:00PM	**Ruksana S** **Central University of Kerala, Kerala** ***VAL110:*** *Pectin extraction from cashew apple bagasse: Extraction methods and valorization*	**Dr. K. Sivagami** **Vellore Institute of Technology, Vellore,** ***VAL116:*** *Performance, emission, and combustion analysis of different waste oil blends in a diesel engine*
01:00 – 02:00PM	**Lunch Break**	
Scientific Session: 19 **Theme: Circular Economy** **Venue: Classroom No. F-202** **Chair – Prof. Chanchal Chakraborty** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/npe-xnmh-ryf**		**Scientific Session: 20** **Theme: Energy Management/ Membrane Fuel Cells** **Venue: Classroom No. G-106** **Chair – Prof. P. Sankar Ganesh** **BITS Pilani, Hyderabad Campus** **Link: https://meet.google.com/nht-qdjo-srd**
12:00 – 12:10PM	**Shrestha Mondal** **Vellore Institute of Technology, TN** ***VAL117:*** *Next-generation biodiesel production from non-edible oilseed feedstocks*	**V.S. Shanthini** **Vellore Institute of Technology, TN** ***VAL122:*** *Sustainable biodiesel production from used rice bran oil: Catalyst development and characterization*
12:10 – 12:20PM	**Sonali Biswas** **Vellore Institute of Technology, TN** ***VAL118:*** *Microalgae cultivation in wastewater as a dual strategy for biodiesel production and nutrient remediation*	**Kumar Gaurav** **Amity University Haryana, Gurugram** ***VAL123:*** *Simultaneous wastewater treatment and power generation via microbial fuel cells*
12:20 – 12:30PM	**Suha Rahman P K** **Central University of Kerala, Kerala** ***VAL119:*** *Improved delignification and fermentable sugar recovery from spent Cymbopogon biomass using γ - Valerolactone/ $Fecl_3$ pretreatment*	**Narender Kumar** **National Institute of Technology, Hamirpur** ***VAL124:*** *Eco-friendly recovery and graphene valorization of spent lithium-ion batteries for next generation energy storage*
12:30 – 12:40PM	**Susovan Patra** **Vidyasagar University, West Bengal** ***VAL120:*** *Valorization of chicken slaughterhouse waste into enriched biofertilizer through bacterial fermentation*	**R. Kaviya, Dr. P. Kanchana** **PSGR Krishnammal College for Women, Coimbatore** ***VAL125:*** *Crystallographic and theoretical design of a Co (II) complex for enhanced energy storage, efficient catalysis, and selective L-Cysteine fluorescent sensing*
12:40 – 12:50PM	**Dr. K. Kiruthika** **K. S. Rangasamy College of Technology, Tamil Nadu** ***VAL121:*** *Deep Learning-Based Smart Waste Disposal Approach for Smart Recycling in Circular Economy Systems*	**Maddipatla Naga Sai Karthik** **BITS Pilani, Hyderabad Campus** ***VAL126:*** *Valorization of anaerobic digestate for enhanced biomass production in Chlorella sorokiniana: A circular economy approach*
01:00 – 02:00PM	**Lunch**	
Invited Lectures **Venue: Classroom No. F-101** **Link: https://meet.google.com/vtw-gxdy-tjv**		
02:00 – 02:30PM	**Dr. Atun Roy Choudhury** **Technical Head-Unison i3x Pvt. Ltd., Hyderabad** ***Invited Lecture 8:*** ***Global Shortcomings in Handling and Management of Organic Sludge and Associated Hazards: A Comprehensive Assessment***	

02:30 – 03:00PM	**Dr. Hélène Carrère** **Director of Research, INRAE, University of Montpellier, Laboratory of Environmental Technology, Narbonne, FRANCE.** ***Invited Lecture 9:* Which Pretreatments for Anaerobic Digestion Process?**
03:00 – 03:30PM	**Prof. Ashish A Prabhu** **Assistant Professor, Department of Biotechnology, National Institute of Technology, Warangal** ***Invited Lecture 10:* Valorization of Water Hyacinth for Xylitol and Lipid Accumulation using Meyerozyma Guilliermondii**
03:30 – 04:00PM	**High Tea and Networking Session**
04:00 – 5:00PM	**VALEDICTORY SESSION**
End of Day 2	

DAY 3: Saturday 31st January 2026 Venue: Classroom No. F-101		
Post-Conference Workshop		
10:00 – 10:30AM	**Introductory Session**	**F-101**
10:30 – 10:50AM	**Biomethanation of Organic Waste** **Prof. P. Sankar Ganesh**	**BITS Environmental Science & Technology (BEST) Laboratory** A-Block
10:50 – 11:10AM	**Conversion of Biogas to Electricity** **Prof. Supradeepan K**	**Computing Lab** W-Block
11:10 – 11:30AM	**Conversion of Methane to Hydrogen** **Prof. Satyapaul A. Singh**	**Colloids and Interfaces Laboratory** D-Block
11:30AM – 12:10PM	**Hydrogen-fed Membrane Fuel Cells** **Prof. Chanchal Chakraborty** **Power Demand Response Management** **Prof. Ankur Bhattacharjee**	**DST-PURSE Lab** A-Block
12:10 – 01:00PM	**Field visit to On-campus Biomethanation Plant** **Prof. P. Sankar Ganesh**	**Sewage Treatment Plant**
01:00PM	**End of Workshop and Lunch**	

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