International Conference on New Horizons in Biotechnology (NHBT-2023)
November 26-29, 2023
Trivandrum, Kerala, India

PROGRAM

26th November 2023

0930-1700	Registration – NOVA & BOARD ROOM (1st Floor)
0930-1330	Workshop on *Scientific Writing*- Director & Moderator- Dr Eldon Rene, Institute of Water Education, Delft, Netherlands (prior registration mandatory) LUNA (Ground Floor)
1300-1500	BRSI Board of Governors and Management Council meetings (PLANET - 3rd Floor)
1600-1800	Opening session and BRSI awards function (GALAXY -2nd Floor) Guests of Honor: Prof Javed Iqbal, Incor Renovis, Hyderabad, India Prof Christian Larroche, Universite Clermont Auvergne, France
1800-1845	BRSI Foundation Day Lecture by Prof Javed Iqbal, '*Natural product inspired differentiation of Human Stem Cells to Neuron-like cells: The implications to neurological disorders*' (GALAXY - 2nd Floor)
1900-2000	Presentations by BRSI awards winners (Life-Time, Young Scientist, Woman Scientist, Industrial Medal awardees)
20:00-21:00	**DINNER**

27th November 2023

0900-1035	Session IA The LUNA, Ground Floor	Session IB The NOVA, 1st Floor	Session IC The GALAXY, 2nd Floor	Session ID The PLANET, 3rd Floor

	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	PIKNIKH Workshop/Health Care Biotechnology: Cancer Biology	Biorefineries: Bio-upgradation of gas, bioelectrochemistry and biohydrogen	Bioprocesses and Products: Biopolymers/Biomaterials; Green Chemistry/ manufacturing	Environmental Biotechnology, Anaerobic Digestion
	Chairs: KS Rangappa, Univ of Mysore, Mysore & KV Radhakrishnan, CSIR-NIIST, Trivandrum	Chairs: Duu-Jong Lee, City University of Hong Kong, Hong Kong & Apostolis Koutinas, Agricultural University of Athens, Athens, Greece	Chairs: Sunil K Khare, IIT, New Delhi & RS Jayasomu, CSIR-NISCPR, New Delhi, India	Chairs: Samir Khanal, University of Hawaii, USA & C Kesavachandran, CSIR-NIIST, Trivandrum
0900-0920	PL 1: Basic and interventional understanding of the link between stress, aging and cancer: insights from cell culture technologies Renu Wadhwa National Institute of Advanced Industrial Science and Technology, Tsukuba, Japan	PL 2: An Innovative Strategy for Complete Gas-to-Liquids (GtL) Without CO_2 Emissions Through Synthesis Gas Bio-upcycling In-Seop Chang Gwangju Institute of Science and Technology, Gwangju, Korea	PL 3: Green Chemistry and Engineering in Biotransformation of Industrial Relevance Ganapati D Yadav Institute of Chemical Technology, Mumbai	PL 4: Fractionation of biocomponents can enhance the accessibility and efficient bioconversion of lignocellulose in anaerobic digestion by an acclimatized cellulolytic microbial consortium Byong-Hun Jeon Hanyang University, Seoul, Korea
0920-0940	PL 5: TBC Sanjay Behari Sree Chitra Tirunal Centre for Medical Science and Technology, Trivandrum, India	PL 6: The zero/negative carbon effect and research prospect of photo-fermentative bio-hydrogen production from agricultural wastes Quanguo Zhang Henan Agricultural University, Henan, China	PL 7: Exopolysaccharides in Green Economy: Enhanced Production from Carbon Dioxide Sequestrating Bacteria and Application Indu Shekhar Thakur Amity University, Gurgaon, India	PL 8: Full scale biological degradation of high-strength recalcitrant wastewater using anaerobic granulation Duu-Jong Lee City University of Hong Kong, Hong Kong
0940-0955	IL 1: Role of Oral Microbiome in Human Health and Diseases Swati Joshi	IL 2: Perspectives for soybean biorefineries in Brazilian bioeconomy Susan Karp	IL 3: Prospective Use of Lignin in Biodegradable Film Paripok Phitsuwan	IL 4: Effects of Osmoprotectants Addition on Ammonia Inhibition in Continuous Biogas Reactors Dafang Fu

	ICMR-National Institute of Occupational Health, Ahmedabad, India	Federal University of Parana, Curitiba, Brazil	King Mongkut's University of Technology Thonburi, Bangkok, Thailand	Southeast University, Nanjing, China
0955-1010	IL 5: Pharmaceuticals, Endocrine Disruptive Chemicals, and Antimicrobial Resistance: Biotechnology in Wastewater Surveillance Manish Kumar University of Petroleum and Energy Studies, Dehradun, India	IL 6: Biomass Torrefaction for Biofuel, Environment, and Materials Wei-Hsin Chen National Cheng Kung University, Tainan, Taiwan	IL 7: Cationic Lignin Nanoparticles with Antibacterial Properties Pedram Fatehi Lakehead University,Thunder Bay, Canada	IL 8: Siloxanes in Biogas: Approaches of Sampling Procedure and GC-MS Method Determination Grzegorz Piechota GPCHEM- Laboratory of Biogas Research and Analysis, Poland
1010-1025	IL 9: Revelation of Therapeutic Potential of Diatom Metabolites Using Complex Networking Approach Archana Tiwari Amity Institute of Biotechnology, Noida, India	IL 10: Microbial Fuel Cell: Opportunities and Challenges Ram Sharan Singh Indian Institute of Technology BHU, Varanasi, India	IL 11: Exploring the possibilities of engineering tailored nanoparticles and plant productivity Ram Prasad Mahatma Gandhi Central University, Motihari, India	IL 12: Application of anaerobic membrane bioreactor as an alternative for aerobic treatment for industrial wastewater purification with low energy consumption Sumate Chaiprapat Prince of Songkla University, Hat Yai, Thailand
1025-1035	QA	QA	QA	QA
1035-1100	**TEA/COFFEE**			
1100-1300	Session IIA The LUNA, Ground Floor	Session IIB The NOVA, 1st Floor	Session IIC The GALAXY, 2nd Floor	Session IID The PLANET, 3rd Floor
	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	PIKNIKH Workshop/Health Care Biotechnology: Surveillance, Drug Discovery, Bio/medical systems & Devices	Biorefineries/Bioproducts	Bioprocesses and Products: Biopolymers/Biomaterials; Green Chemistry/ Manufacturing	Environmental Biotechnology, Anaerobic Digestion

	Chairs: Alok Dhawan, CBMR, Lucknow & Ohmiya Yoshihira, AIST, Japan &	Chairs: You-Kwan Oh, Pusan National University, Pusan & Baskar Gurunathan, St Joseph's College, Chennai	Chairs: P Gunasekaran, Madurai Kamaraj University, Madurai & Su Shuing Lam, Universiti Malaysia Terengganu, Terengganu, Malaysia	Chairs: Sang-Hyoun Kim, Yonsei University, Seoul, Korea & Krishnakumar B, CSIR-NIIST, Trivandrum
1100-1120	PL 9: TBC Chandrabhas Narayan Rajeev Gandhi Centre for Biotechnology, Trivandrum, India	PL 10: Microbial Catalyzed CO_2 Reduction to Chemicals and Fuels: Biorefinery Approach Venkata Mohan S CSIR-Indian Institute of Chemical Technology, Hyderabad, India	PL 11: *Cupriavidus cauae* PHS1: A Promising Thermophilic Organism for Biopolymer Production and Diverse Applications Sung Kuk Lee Ulsan National Institute of Science and Technology, Ulsan, Korea	PL 12: Hints and resources for improving the quality of biochemical methane potential tests Konrad Koch Technical University of Munich, Garching, Germany
1120-1135	IL 13: TBC Ritu Trivedi CSIR-Central Drug Research Institute, Lucknow, India	IL 14: Polyhydroxybutyrate Production by Biological Methane Conversion: A Promising Route for the Sustainable Society Jeong Geol Na Sogang University, Seoul, Republic of Korea	IL 15: Biological production of C5 platform chemicals and their applications in bioplastic synthesis Jeong Chan Joo The Catholic University of Korea, Gyeonggi-do, Korea	IL 16: Gaseous biofuels and value-added products recovery from wine and dairy industries wastewaters Germán Buitrón Universidad Nacional Autónoma de México, Querétaro, Mexico
1135-1150	IL 17: Development of novel M-ASPAR to improve the treatment of primary and relapse acute lymphoblastic leukemia Avinash Sonawane Indian Institute of Technology, Indore, India	IL 18: Industrial carbon dioxide utilization through integrated bioelectrochemical processes Sunil Patil Indian Institute of Science, Education and Research, Mohali, India	IL 19: Physical and Biochemical Characteristics of Carbon Dots from Bio-residual Wastes Chi-Wei Lan Yuan Ze University, Taiwan	IL 20: The growing magic of conductive materials in anaerobic digestion: how to move forward? Bipro Ranjan Dhar University of Alberta, Edmonton, Canada
1150-1205	IL 21: Self-Renewal and Chemoresistance of Cancer Stem Cells: Is Chemosensitization an Ideal Approach for reversing therapy Resistance?	IL 22: Critical impacts of energy and water targeting in sustainable biorefinery development	IL 23: Green Manufacturing of Biopolymers in Consolidated Mini-cell Factories	IL 24: Closing the loop – Role of anaerobic fermentation based biorefinery utilizing organic waste

	Hifzur R Siddiqui Aligarh Muslim University, Aligarh, India	Keikhosoro Karimi Vrije Universiteit, Brussels, Belgium	Rajesh Sani South Dakota Mines, Rapid City, USA	Anish Ghimire Kathmandu University, Dhulikhel, Nepal
1205-1220	IL 25: Metabolic Alterations in Head and Neck Cancer Dhruv Kumar University of Petroleum and Energy Studies, Dehradun, India	OP 1: Microbial characterization and metabolomic studies on 'Pakkat su', a fermented food of Tai-Phake community of Assam Minakshee Sarmah Darrang College, Tezpur, India	OP 2: Valorisation of non-hazardous laboratory waste through pyrolysis: biochar yield and comprehensive characterization Viniti Vaidya Dr. D. Y. Patil Biotechnology and Bioinformatics Institute, Pune, InDIA	IL 26: Pretreatment Process for anaerobic digestion Ria Millati Gadjah Mada University, Bulaksumur Yogyakaarta, Indonesia
1220-1235	IL 27: Chemopreventive effect of cinnamon and its bioactive compounds in vivo in a rat model of premalignant prostate carcinogenesis Ayesha Ismail ICMR-National Institute of Nutrition, Hyderabad, India	OP 3: Impact of Diverse Green Waste on Food Waste Digestate Composting and Identification of Optimal Operating Conditions Rajendra Prasad Singh Southeast University, Nanjing, China	OP 4: Direct electrochemical extraction of succinic acid with a two-stage pH regulation using OFMSW hydrolysate as carbon source Eleni Stylianou Agricultural University of Athens, Athens, Greece	OP 5: Simultaneous Wastewater denitrification and Biogas Desulfurization by Membrane Biofilm Reactor: Operational Performance and Metabolic Mechanisms Chuan Chen Harbin Institute of Technology, Harbin, China
1235-1250	IL 28: Basic and interventional biology of oral cancer - a challenge to address in North-East region of India Ajaikumar B. Kunnumakkara Indian Institute of Technology, Guwahati, India	IL 29: Use of Cellulosic Materials from Agricultural Residues for Biodegradable antimicrobial packaging for uncooked meat, poultry & seafood Poonam Singh University of Ulster, Northern Ireland, UK	OP 6: Sustainability assessment of bioprocess development using lignocellulosic biomass for biopolymer production Dimitrios Ladakis Agricultural University of Athens, Athens, Greece	OP 7: Single-stage anaerobic digestion can recover more biofuel than two-stage after optimized pretreatment in a vortex layer apparatus Andrey A. Kovalev Federal Scientific Agroengineering Center VIM, Moscow, Russia
1250-1300	**QA**	**QA**	**QA**	**QA**

1300-1400	**LUNCH**			
1300-1500	**POSTER SESSION I** **Coordinators: Thallada Bhaskar, CSIR- IIP, Dehradun & Ayon Tarafdar, ICAR-IVRI, Bareilly** **NIIST Coordinators: Pinaki Dey and Jedy Jose**			
1500-1630h	Session IIIA The LUNA, Ground Floor	Session IIIB The NOVA, 1st Floor	Session IIIC The GALAXY, 2nd Floor	Session IIID The PLANET, 3rd Floor
	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	PIKNIKH Workshop/Health Care Biotechnology: Diagnostics, Therapy and Pathology	Biorefineries: Thermochemical	Algal Biotechnology: Products from algae	Environmental Biotechnology Wastewater and Solid Waste Management
	Chairs: Sunil Kaul, AIST, Japan & & Kaustubha Maiti, CSIR-NIIST, Trivandrum	Chairs: Hector Ruiz, Autonomous University of Coahuila, Mexico & Jin Ho Yun, Korea Research Institute of Bioscience & Biotechnology, Seoul, Korea	Chairs: Jo-Shu Chang, National Cheng Kung University, Tainan, Taiwan & Praveenkumar Ramanujam, Arunai Engineering College, Thiruvannamalai	Chairs: Yen Wah Tong National, University of Singapore & Preeti Chaturvedi, CSIR-IITR, Lucknow
1500-1520	PL 13: Interdisciplinary Approaches Towards Understanding Disease Biology and New Age Diagnostics Alok Dhawan Centre for BioMedical Research, Lucknow, India	PL 14: Pyrolysis and combustion of a wood pellet in a drop tube furnace: experiments and kinetic modeling Alain Brillard UHA University, Mulhouse, France	PL 15: Screening, identification and implementation of polysaccharides from microalgae as biological agents and hydrocolloids Philippe Michaud Universite Clermont Auvergne, Clermont Ferrand, France	PL 16: The Challenges and Opportunities of Organic Solid Waste Composting in China Zhengqiang Zhang Northwest A&F University, Yangling, China
1520-1540	PL 17: Bioluminescence of marine crustacean from basic to engineering Ohmiya Yoshihira	PL 18: Energy and environmental application of carbon material produced from organic waste stream using hydrothermal carbonization Brajesh Kumar Dubey	PL 19: Cell Stimulation and Nanoparticle Engineering for Microalgal Lipid and Astaxanthin Production You-Kwan Oh	PL 20: Hybrid process, biofiltration-electrocoagulation for the treatment of landfill leachates Patrick Drogui

	National Institute of Advanced Industrial Science & Technology, Tsukuba, Japan	Indian Institute of Technology, Kharagpur, India	Pusan National University, Pusan, Republic of Korea	INRS, University of Quebec, Quebec, Canada
1540-1555	OP 8: Biological elimination of *Fusarium mycotoxins*: yeasts and bacteria in work Tünde Pusztahelyi University of Debrecen, Debrecen, Hungary	IL 30: Enhanced bio-monoaromatic production by the CH4-assisted pyrolysis of biomass using Metal loaded HZSM-5 catalysts Young-Kwong Park The University of Seoul, Seoul, Republic of Korea	IL 31: Greening the Future: Enhancement of Sustainable Astaxanthin Production from Haematococcus pluvialis Thilini Ariaydasa University of Moratuwa, Sri Lanka	IL 32: Agar Waste Management Technologies: Resource Recovery for Neelu Nawani Dr DY Patil Biotechnology and Bioinformatics Institute, India
1555-1605	QA	QA	QA	QA
1605-1630	**TEA/COFFEE**			
1630	**TRANSFER TO KERALA ARTS & CRAFTS VILLAGE, KOVALAM BY BUS**			
1715-1845	**CULTURAL ARTS & CRAFTS VILLAGE VISIT**			
1845-2015	**CULTURAL PROGRAM AND DINNER AT OPEN AIR AMPHI THEATER**			
2015	**TRANSFER TO HOTELS BY BUS**			

28th November 2023

0900-1030	Session IVA Luna, Ground Floor	Session IVB The NOVA, 1st Floor	Session IVC The GALAXY, 2nd Floor	Session IVD The PLANET, 3rd Floor
	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	PIKNIKH Workshop/Health Care Biotechnology: Diagnostics, Therapy and Pathology	Biorefineries, Biofuels, Bioproducts	Algal Biotechnology: Products from Algae	Environmental Biotechnology Wastewater and Solid Waste Management
	Chairs: Avinash Sonawane, Indian Institute of Technology, Indore & Renu Wadhwa, AIST, Japan	Chairs: Jose Sandoval-Cortés, Autonomous University of Coahuila Mexico & Narayanan Unni, CSIR-NIIST, Trivandrum	Chairs: Cheng-Di Dong, National Kaohsiung University of Science and Technology, Taiwan & B Bharathiraja, Vel's Institute, Chennai	Chairs: Huu Hao Ngo, University of Technology, Sydney & Datta Madamwar, Charotar University of Science and Technology, Gujarat

0900-0920	PL 21: Story of mammalian heme-peroxidases in the first of defense as the powerful border security force of the human body Tej P Singh All India Institute of Medical Sciences, New Delhi, India	PL 22: Biorefinery of Spent brewery grains for Sustainable Aviation fuel production: process performance and feasibility study Gopalakrishnan Kumar University of Stavanger, Stavanger, Norway	PL 23: Valorization of Carbon Dioxide (CO_2) for Producing Tocopherols in Monoraphidium sp.: An Algal Biorefinery Perspective Pavan Jutur International Centre for Genetic Engineering and Biotechnology, New Delhi, India	PL 24: $KHCO_3$-activated high surface area biochar derived from brown algae: a case study for efficient adsorption of Cr(VI) in aqueous solution Cheng-Di Dong National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan
0920-0935	IL 33: Development of A Pneumatic Pressure-Driven Microphysiological Systems Shinji Sugiura National Institute of Advanced Industrial Science & Technology, Tsukuba, Japan	IL 34: Pyrolysis of lignocellulosic biomass: Case study from Industrial residues Bhavya Balagurumurthy CSIR-Indian Institute of Petroleum, Dehradun, India	IL 35: Latest Development in Microalgae Biorefinery Pau-Loke Show Khalifa University, Abu Dhabi, UAE	IL 36: Microbial dynamics and Effect of Hydraulic Retention time on communities, Nutrient removal and Settling characteristics in a Multimodal Algal-bacterial Bioprocess (MAB) for Treatment of Municipal Wastewater Ganti S Murthy Indian Institute of Technology, Indore, India
0935-0950	OP 9: *In silico* molecular docking studies on potential drug target NS2B/NS3 protease of dengue virus type 2 John J. Georrge Christ College, Rajkot, India	OP 10: A rapid chemical approach for xylitol production from biomass Bhuwan B Mishra Center for Innovative and Applied Bioprocessing, Mohali, India	IL 37: Carbon-neutral, eco-friendly polymer from microalgae and cyanobacteria Rishiram Ramanan Central University of Kerala, Kasaragod, India	IL 38: Biological nitrogen and phosphorus removal by aerobic granular sludge under tropical climate conditions Nancharaiah YV Homi Bhabha National Institute, Kalpakkam, India
0950-1005	OP 11: Starch chitosan crosslinked hydrogel nano formulation for wound healing and drug delivery applications	OP 12: Emphasizing the delignification studies of wood waste viz. sawdust from deodar (softwood) and Sal(hardwood) tree species for production of 2nd generation biofuel	IL 39: Microalgae Contribution to Bio-Circular-Green (BCG) Economy: Zero-waste Biorefineries for Sustainable Production and Applications of Microalgal Biomass	OP 13: The superior potential of carbon felt to establish direct interspecies electron transfer in a highly loaded thermophilic anaerobic bioreactor

	Vinay Kumar Saveetha Institute of Medical and Technical Sciences, Chennai, India	Preeti Sharma Shri Mata Vaishno Devi University, Kakriyal, Katra, J&K, India	Benjamas Cheirsilp Prince of Songkla University, Thailand	Yuriy V. Litti Research Centre of Biotechnology Moscow, Russia
1005-1020	OP 14: Nanocurcumin functionalized cream powder formulated using microfluidization & spray drying has bioavailable curcumin, anti-cancer activity, no cytotoxicity and is sensorially acceptable Prarabdh C. Badgujar National Institute of Food Technology Entrepreneurship and Management, Kundli, Sonipat, India	IL 40: Insight into the transcriptome of an entomopathogenic fungal endophyte for industrial enzyme production Suren Singh Durban University of Technology, Durban, South Africa	OP 15: Harnessing of freshwater algal strains from Ganges river between Kanpur- Prayagraj - Varanasi for bioenergy and pharmaceutical prospect Nand Kumar Singh Motilal Nehru National Institute of Technology, Prayagraj, India	IL 41: Conversion of indigenous crop residue to biochar and their application through innovative strategies for sustainable soil and water pollution management Sudhip Mitra Indian Institute of Technology, Guwahati, India
1020-1030	QA	QA	QA	QA
1030-1100	**TEA/COFFEE**			
1100-1250	Session VA The LUNA, Ground Floor	Session VB The NOVA, 1st Floor	Session VC The GALAXY, 2nd Floor	Session VD The PLANET, 3rd Floor
	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	Synthetic Biology and Metabolomics	Lignocellulosic Biorefineries	Algal Biotechnology: Cultivation and application strategies	Circular Bioeconomy & Sustainable Development
	Chairs: Shinji Sugiura, National Institute of Advanced Industrial Science & Technology, Tsukuba, Japan & Rui Oliviera, NOVA University of Lisbon, Portugal	Chairs: Christian Larroche, Universite Clermont Auvergne, France & Manika D Kataki, Darrang College, Tezpur	Chairs: Thilini Ariaydasa, University of Moratuwa, Sri Lanka & Chiu-Wen Chen, National Kaohsiung University of Science and Technology, Taiwan	Chairs: Konrad Koch, Technical University of Munich, Garching & Shu-Ling Hsieh, National Kaohsiung University of Science and Technology, Taiwan
1100-1120	PL 25: CRISPRa/i based double-layered dynamic	PL 26: Multiple High-Value Bioproducts from Metabolically	PL 27: Application of algae in membrane bioreactors:	PL 28: Sustainable process development based on

	regulatory circuits enable growth-coupled autonomous control of metabolic fluxes for the synthesis of 2'-fucosyllactose Guocheng Du Jiangnan University, Wuxi, China	Engineered Transgenic Sugarcane 'Oilcane' Bagasse and Their Recovery Using Nanofiltration Vijay Singh University of Illinois, USA	advantages, challenges, future developments Huu Hao Ngo University of Technology, Sydney, Australia	biorefinery electrification and chemical recycling of post-consumer bioplastics Apostolis Koutinas Agricultural University of Athens, Athens, Greece
1120-1140	PL 29: Improving Bioplastic Yields from Lignin through a Synergistic Computational and Experimental Approach Mark Wilkins Kansas State University, USA	PL 30: Agave Bagasse for Biorefinery Concept: CO_2-water technology for biomass conversion Hector Ruiz Autonomous University of Coahuila, Mexico	PL 31: Bicarbonate-based Microalgal Cultivation for Efficient Carbon Fixation and Biorefineries Jo-Shu Chang National Cheng Kung University, Tainan, Taiwan	PL 32: Technological advances in Bio/Electrochemical carbon dioxide capture & utilization (CCU) Deepak Pant Vlaamse Instelling voor Technologisch Ondrzoek, Mol, Belgium
1140-1155	IL 42: High value tyrosine-derived chemicals using modular design and spent coffee ground in engineered Escherichia coli chassis I-Son Ng National Cheng Kung University, Tainan, Taiwan	IL 43: Current Developments of Biomass Pretreatments to Biobased Production Adenise Woiciechowski Federal University of Parana, Curitiba, Brazil	IL 44: Unveiling the Potential of Light-Emitting Diodes (LEDs) in Enhancing Microalgae Production Su Shuing Lam Universiti Malaysia Terengganu, Terengganu, Malaysia	IL 45: Agricultural waste management as a strategy for circular bioeconomy Rupam Kataki Tezpur University, Tezpur, India
1155-1210	IL 46: Plastome mining of selected small genome sized plants Latha Rangan Indian Institute of Technology, Guwahati, India	IL 47: Reductive Catalytic Fractionation for Lignin first biorefinery: Opportunities and Challenges Thallada Bhaskar CSIR-Indian Institute of Petroleum, Dehradun, India	IL 48: Utilization of defatted *Chlorella* biomass as a sole growth substrate for the heterotrophic production of *Chlorella* sp. HS2 in an integrated biorefinery: Bringing in composite fabrication perspective Jin-Ho Yun Korea Research Institute of Bioscience & Biotechnology, Seoul, Korea	IL 49: The most profitable methods of carbon sequestration Josef Maroušek Institute of Technology and Business in České Budějovice, Czech Republic

1210-1225	IL 50: Metabolomics in Biotechnology: A viable technology to understand the solutions to Plant, Environment, Food and Human Health Mohana Reddy Mudiam CSIR-Indian Institute of Chemical Technology, Hyderabad, India	IL 51: Techno-economic analysis of lignin-first biorefinery using reductive catalytic fractionation of rice straw Panneerselvam Ranganathan National Institute of Technology, Kozhikode, India	IL 52: Utilizing carbon dioxide for microalgae production to reduce environmental pollution Ranjna Sirohi University of Petroleum and Energy Studies, Dehradun, India	IL 53: Yard Waste Biochar Applications in Hong Kong Daniel Tsang University of Science and Technolog, Hong Kong
1225-1240	IL 54: Systems metabolic engineering of microbial strain for the production of chemicals and bioplastics Jung Ho Ahn Korea Institute of Science and Technology, Korea	IL 55: Furan-based biofuels from lignocellulosic biomass as potential path towards sustainability Hoang A Tuan HUTECH University, Ho Chi Minh City, Vietnam	OP 16: Surfactant mediated cell wall weakening of macroalgal biomass for cost effective biological disintegration and biomethane recovery Rajesh Banu Jeyakumar Central University of Tamil Nadu, Thiruvarur, India	IL 56: Transition from linear to circular (bio)economy: The necessity for education Marina Tisma Josip Juraj Strossmayer University, Osijek, Croatia
1240-1250	QA	QA	QA	QA
1250-1350	**LUNCH**			
1250-1430	**POSTER SESSION II** **Coordinators: Thallada Bhaskar, CSIR-IIP, Dehradun & Ayon Tarafdar, ICAR-IVRI, Bareilly** **NIIST Coordinators: Pinaki Dey and Jedy Jose**			
1430-1605	Session VIA The LUNA, Ground Floor	Session VIB The NOVA, 1st Floor	Session VIC The GALAXY, 2nd Floor	Session VID The PLANET, 3rd Floor
	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	Agriculture and Plant Biotechnology	Biomass Conversion: Products, Processes and Catalysts	Algal/Health Biotechnology	Biotechnology for Diverse Applications
	Chairs: Latha Rangan, IIT, Guwahati & Cristobal Aguilar,	Chairs: Keshab C Mondal, Vidyasagar University,	Chairs: Benjamas Cheirsilp,	Chairs: José Luis Martínez Hernández, Autonomous

	Universidad Autónoma de Coahuila, Coahuila, México	Midnapore & Ananthakumar S, CSIR-NIIST, Trivandrum	Prince of Songkla University, Thailand & Xuan Thanh Bui, Ho Chi Minh City University of Technology, Viet Nam	University of Coahuila, Mexico & Nisha P, CSIR-NIIST, Trivandrum
1430-1450	PL 33: TBC Anandharamakrishnan CSIR-National Institute for Interdisciplinary Science and Technology, Trivandrum, India	PL 34: Pretreatment of sugarcane juice for the production of bioproducts Rekha Singhal Institute of Chemical Technology, Mumbai, India	PL 35: Development of Enhanced Algal Strains Assisted by Multi-Omics Analysis George Philippidis University of South Florida, Tampa, USA	PL 36: Innovative Optical Biosensor and Brewing Bioprocess Based on Cellulose Athanasious A Koutinas University of Patras, Patras, Greece
1450-1505	IL 57: Recent Results in Aflatoxin Research at the University of Debrecen István Pócsi University of Debrecen, Debrecen, Hungary	IL 58: Intensified production of biofuels from sustainable raw materials using ultrasonic reactors Parag R Gogate Institute of Chemical Technology, India	IL 59: Antimicrobial Activity of Selected Indigenous Microalgae against Common Bacteria Causing Diseases in Fish and Shellfish Helena Khatoon Chattogram Veterinary & Animal Sciences University, Khulshi, Bangladesh	IL 60: *In silico* culture media design to increase biologics yields in Chinese Hamster Ovary (CHO) production platforms: merging machine learning with genome-scale networks Rui Oliviera NOVA University of Lisbon, Portugal
1505-1520	IL 61: Harnessing the potential of biotechnological approaches in understanding the origin, biology, genome and applications of Saffron Manoj Kumar Dhar CSIR- Academy of Scientific & Innovative Research, Ghaziabad, India	IL 62: Integrated Bioprocess for the Valorization of Olive Oil Extraction Residues: Production of Bioactive Compounds and Biofuel Suzana Ferreira-Dias Universidade de Lisboa, Lisboa, Portugal	OP 17: Carbon Capture and Storage by Microalgae: A strategy to combat climate change Kiran Bala Indian Institute of Technology, Indore, India	IL 63: Sustainable Beauty: Leveraging Microbial Biotechnology for Natural Ingredient Innovation in Cosmetics Hyung-Gwan Lee Korea Research Institute of Bioscience & Biotechnology, Daejeon, Republic of Korea
1520-1535	IL 64: Bioactivated fertilizers starting from solid fraction of digestate and microbial consortia	IL 65: Enzymatic conversion of biomass: A sustainable approach of biorefinery	IL 66: Environmental impact and techno-economic analysis of agar recovery from agarophytes using novel processing techniques	IL 67: Rational design of natural deep eutectic solvents for life since applications

	Fabrizio Adani Università degli Studi di Milano, Milan, Italy	Reeta Rani Singhania National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan	José A. Teixeira University of Minho, Braga, Portugal	Ivana Radojčič-Redovniković University of Zagreb, Zagreb, Croatia
1535-1550	IL 68: Closing the circle for urban food waste anaerobic digestion: The use of digestate as fertilizer for tomato plant cultivation Yen Wah Tong National University of Singapore	IL 69: Development of cellulolytic enzymes and cell factories for conversion of renewable carbon to functional biochemicals Verawat Champreda National Centre for Genetic Engineering & Biotechnology, Pathum Thani, Thailand	IL 70: Structural interpretation of Virus and Human protein Interactions: A Computer Aided Drug Design Studies Sanjeev Kumar Singh Alagappa University, Karaikudi, India	IL 71: Resource Recovery Approaches for Conversion of Organic Waste in to value-added products for Sustainable Environment Mukesh Kumar Awasthi Northwest A&F University, Yangling, China
1550-1605	IL 72: Can biochar avoid a transfer of toxic metals from paddy soils to crops? Agriculture & Plant Biotech Soil bioremediation Rinklebe Jörg University of Wuppertal, Wuppertal, Germany	OP 18: Metabolic engineering of *Escherichia coli* for biological production of poly(3-hydroxypropionate-co-3-hydroxybutyrate) copolymer Vivek Kumar Gaur Ulsan National Institute of Science and Technology, Ulsan, South Korea	OP 19: Proteomics Approach to understand Host-Pathogen Interaction dynamics using *Caenorhabditis elegans* as a model system Krishnaswamy Balamurugan Alagappa University, Karaikudi India	OP 20: Analysis of FAME and PHA production along with wastewater contaminant removal using sewage sludge bacteria Asmita Gupta Daulat Ram Colllege, New Delhi, India
1605-1615	QA	QA	QA	QA
1615-1630	**TEA/COFFEE**			
1630	**TRANSFER TO KOVALUM BEACH BY BUS**			
1715-1900	**ARRIVAL AT HOTEL SEA FACE- FREE TIME ON BEACH**			
1900-2000	**DINNER**			
2000	**TRANSFER TO HOTELS BY BUS**			

29th November 2023

0900-1100	Session VIIA The LUNA, Ground Floor	Session VIIB The NOVA, 1st Floor	Session VIIC The GALAXY, 2nd Floor	Session VIID The PLANET, 3rd Floor

	Coordinators: Harsha Bajaj, NIIST, Trivandrum & Sindhu Raveendran, TKMIE, Kollam	Coordinators: Ramesh Kumar, NIIST, Trivandrum & Bhavya Balagurumurthy, IIP, Dehradun	Coordinators: Rajeev Kumar Sukumaran, NIIST, Trivandrum & Archana Tiwari, AU, Noida	Coordinators: M Arumugam, NIIST, Trivandrum & V Vivekanand, MNIT, Jaipur
	Agriculture & Plant Biotechnology and Environmental Bioengineering	Food Technology	Microbes & Environment Processes	Machine Learning Applications in Biotechnology
	Chairs: Verawat Champreda, National Centre for Genetic Engineering & Biotechnology, Pathum Thani, Thailand & Kashyap Kumar Dubey, Jawaharlal Nehru University, New Delhi	Chairs: Pratyoosh Shukla, Banaras Hindu University, Varanasi & Venugopal VV, CSIR-NIIST, Trivandrum	Chairs: Mark Wilkins, Kansas State University, USA & Reeta Rani Singhania, National Kaohsiung University of Science and Technology, Kaohsiung, Taiwan	Chairs: Sangeeta Srivastava, Godavari Biorefineries, Mumbai & Marina Tisma, Josip Juraj Strossmayer University, Osijek, Croatia
0900-0920	PL 37: Biochar production in agroforestry systems: new applications based on microbial electrochemistry towards carbon storage and water-nutrients nexus Andrea Schievano University of Milan, Italy	PL 38: The impact of various immobilization protocols of proteases, in chitosan, on the clarification and quality of white wines Emmanuel M Papamichel University of Ioannina, Ioannina, Greece	PL 39: Microbiome of Wetlands in Removing Antibiotics and Antibiotic Resistance Genes Raj Boopathy Nicholls University, Thibodaux, USA	PL 40: Machine learning application in Bio-H2 and organic acid production from waste Sang-Hyoun Kim Yonsei University, Seoul, Korea
0920-0940	PL 41: Application of Biochar and Nanobubble Technology in Aquaponic System Samir Khanal University of Hawai, USA	PL 42: Potential impact of valorization of coffee waste in the reduction of neurodegenerative disorders through condensed tannins biodegradation Cristobal Aguilar Universidad Autónoma de Coahuila, Coahuila, México	PL 43: Genome-Centric Analysis Evidences Heterotrophic Denitrification in a Hydrogen-Based Membrane Biofilm Reactor Hee-Dueng Park Korea University, Seoul, Korea	PL 44: Environmental Footprints of Bioenergy Production/Waste Management and Application of Machine Learning Methods Siming You University of Glasgow, Glasgow, UK
0940-0955	OP 21: Site Specific practices for the management of foliar yellowing in coconut palms (*Cocos nucifera* L.) grown in a root (wilt) disease tract Jeena Mathew	IL 73: Exopolysaccharides produced by lactic acid bacteria and their food and health applications Prathap Kumar Shetty	IL 74: Floating Treatment Wetland for Diffuse Pollution Control in Tropical Countries Xuan Thanh Bui	OP 22: A Time Series Approach to Forecasting Biogas Production Using Advanced Algorithms Karthik Rajendhran

	ICAR-Central Plantation Crops Research Institute, Regional Station, Kayamkulam, India	Pondicherry University, Pondicherry, India	Ho Chi Minh City University of Technology, Viet Nam	SRM University-AP, Amaravati, India
0955-1010	OP 23: *In Silico* Evaluation of Synergistic Effect of Bioactive Compounds in the Rhizome of Anaphyllum wightii in Apoptosis Induction Swapna TS University of Kerala, Trivandrum, India	IL 75: Unraveling the Metabolic Functions of Yeast and Lactic Acid Bacteria in Coffee Fermentation: A Journey Through the Distinctive Flavors of Brazil and India Gilberto Vinícius de Melo Pereira, Universidade Federal do Paraná, Curitiba, Brazil	OP 24: Sustainable bioplastics production by *Lysinibacillus* sp. utilizing glycerol: Exploring the effects of supplementation of VFAs and coffee waste Ganesh Dattatraya Saratale Dongguk University-Seoul, Republic of Korea	IL 76: Machine learning revealing the overlooked conjunction of working volume and mixing intensity in anammox optimization Tianwei Hao University of Macau, Taipa, Macau
1010-1025	OP 25: Exploring the potential of bio-based method for efficient removal of emerging organic contaminants from wastewater Preeti Chaturvedi CSIR-Indian Institute of Toxicology Research, Lucknow, India	IL 77: Unraveling Sustainable Bioprocessing to Health-Enhanced Bioproducts: Integrated Approaches of Enzyme-Based Platforms and Biofunctional Materials Maria H Ribeiro Universidade de Lisboa, Lisboa, Portugal	OP 26: Combinational bioactive metabolites from algae and their role in cancer therapy Poornachandar Gugulothu Central University of Tamil Nadu, Thiruvarur, India	IL 78: Microfluidized sugarcane juice: Quality characteristics and process modelling through neural network Ayon Tarafdar ICAR-Indian Veterinary Research Institute, Izatnagar, India
1025-1035	OP 27 Performance and dispersion prediction in an UASB-AF hybrid reactor for treating textile wastewater P. Mullai Annamalai University, Annamalai Nagar, India	IL 79: Challenges and Future Perspective of mycoprotein as a meat alternative Rachma Wikandari Gadjah Mada University, Bulaksumur Yogyakaarta, Indonesia	IL 80: Biotechnology in the extraction and recovery of critical elements from secondary resources Sara Magdouli University of York, Toronto, Canada	IL 81: Deep-learning optimized pipeline for accurate ChIP-exo peak calling Donghyuk Kim Ulsan National Institute of Science and Technology, Ulsan, South Korea
1035-1050	OP 28: Carbon enhanced biochar supported nano (TiO2/ZnFe2O4) for wastewater treatment	OP 29: Greek Functional Dairy products: Quality assurance and Safety with incorporated	IL 82: Biomineralization of Te and Se nanoparticles by the white-rot fungus *Phanerochaete chrysosporium*: Experimental	OP 30: A Novel Perspective for Exploring the Bioenergy potential of Rice husk using

	Sultan Alomairy Taif University, Taif, Saudi Arabia	Probiotic cells characterized for their Anti-Cancer Activity Antonia Terpou National and Kapodistrian University of Athens, Greece	results and practical perspectives Eldon Raj Rene IHE-Institute of Water Education, Delft, Netherlands	Master Plot-based Mechanism and its Kinetic Interpretation, Tanveer Rasool National Institute of Technology, Srinagar, India
1050-1110	PL 45: Sucrase inhibitor from sugarcane is used for controlling calorie Intake Ram Rajashekharan Central University of Tamil Nadu, Thiruvarur, India	PL 46: Biotechnological approaches for the production of high value functional molecules Sudesh Kumar CSIR- Institute of Himalayan Bioresource Technology, Palampur, India	PL 47: Bacterial GEMs of India Ch. Sasikala Jawaharlal Nehru Technological University Hyderabad, Hyderabad, India	PL 48: Machine Learning and Artificial intelligence (AI-ML) based tools in cyanobacterial metabolites Pratyoosh Shukla Banaras Hindu University, Varanasi, India
1110-1120	QA	QA	QA	QA
1120-1140	**TEA/COFFEE**			
11:40-13:10	**Industry –Young Researcher Interactive Session (GALAXY, 2nd Floor)** **Chair & Moderator: Raghavendra Gaikaiwari, Hi-Tech Biosciences Ltd, Pune, India** **Panelists: Sangeeta Srivastava, Godavari Biorefineries, Mumbai**			
13:10-13:45	**Closing Session (BEST POSTER AWARDS DECLARATION, DECLARATION OF VENUE of XXI BRSI Convention), GALAXY, 2nd Floor**			
13:45-14:30	**LUNCH**			