VII International Conference on Sustainable Energy & Environmental Challenges (16th-18th December 2022) Technical Schedule at a Glance

Idia December 2022 Lunch Venue Conference Room-1 (ABLT1) Conference Room-2 (ABLT2) Conference Room-3 (ABLT3) Conference Room-4 (ABL 01:00-02:50 PM Session A-1: Advanced Engine Technologies Session B-1: Air Pollution Monitoring Session C-1: Anaerobic Digestion ISEES Awardees Presentat 02:50-03:10 PM Technologies Monitoring Session C-2: Biodegradation of Toxic Chemicals ISEES Awardees Presentat 03:10-05:00 PM Session A-2: Combustion and Flames Session B-2: Air Pollution Control Session C-2: Biodegradation of Toxic Chemicals ISEES Awardees Presentat 05:00-05:30 PM Inaugural, Award and Book Release Function; Plenary Talk by Dr. Ajay Kumar, Former Union Defense Secretary, MoD Gol 07:30 PM Onwards Conference Banquet Dinner 17 th December 2022 09:00-09:45 AM Plenary Talk by Dr. SSV Ramakumar, Director (R&D), Indian Oil Tea Break 09:045-10:15 AM Conference Banquet Dinner Tea Break
Venue Conference Room-1 (ABLT1) Conference Room-2 (ABLT2) Conference Room-3 (ABLT3) Conference Room-4 (ABL Onference Room-4 (ABL Onference Room-4 (ABL Onference Room-4 (ABL Onference Room-4 (ABL Onference Room-4 (ABL Session C-1: Anaerobic Digestion ISEES Awardees Presentat 01:00-02:50 PM Session A-1: Advanced Engine Technologies Session B-1: Air Pollution Monitoring Session C-1: Anaerobic Digestion ISEES Awardees Presentat 02:50-03:10 PM Session A-2: Combustion and Flames Session B-2: Air Pollution Control Session C-2: Biodegradation of Toxic Cohemicals Cohemicals 05:00-05:30 PM Inaugural, Award and Book Release Function; Plenary Talk by Dr. Ajay Kumar, Former Union Defense Secretary, MoD GoI Of: 07:30 PM Onwards Conference Banquet Dinner 09:00-09:45 AM Plenary Talk by Dr. SSV Ramakumar, Director (R&D), Indian Oil Tea Break 09:45-10:15 AM Session PO Poly Poly Session PO Poly
O1:00-02:50 PM Session A-1: Advanced Engine Technologies Session B-1: Air Pollution Monitoring Session C-1: Anaerobic Digestion ISEES Awardees Presentate 02:50-03:10 PM Technologies Monitoring Tea Break 03:10-05:00 PM Session A-2: Combustion and Flames Session B-2: Air Pollution Control Session C-2: Biodegradation of Toxic Chemicals 05:00-05:30 PM Flames Control Tea Break 05:30-07:30 PM Inaugural, Award and Book Release Function; Plenary Talk by Dr. Ajay Kumar, Former Union Defense Secretary, MoD GoI 07:30 PM Onwards Conference Banquet Dinner 17 th December 2022 09:00-09:45 AM Plenary Talk by Dr. SSV Ramakumar, Director (R&D), Indian Oil 09:45-10:15 AM Tea Break
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05:30-07:30 PM Inaugural, Award and Book Release Function; Plenary Talk by Dr. Ajay Kumar, Former Union Defense Secretary, MoD GoI 07:30 PM Onwards Conference Banquet Dinner 17th December 2022 09:00-09:45 AM Plenary Talk by Dr. SSV Ramakumar, Director (R&D), Indian Oil 09:45-10:15 AM Tea Break
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Session R 0: Pollution on
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10:15 AM-12:15 PM Session A-3: Energy and Exergy Session B-3: Desalination and Wastewater Treatment Session C-3: Environmental Bioengineering Climate Change: Challenges Priorities.
19.15 01.20 DM
12:13-01:30 PM Session A-4: Alternative Transportation Fuels and Materials Session B-4: Emerging Environmental Contaminants Session C-4: Sustainable Processing of Biomass Session C-9: Human Health Environmental Sustainabil
03.30-04.00 PM Tea Break
04:00-06:00 PM Session A-5: Sprays and Atomization Session B-5: Solid Waste Management Session C-5: Solid Waste Management Session C-10: Sustainable Fo
06:00-07:00 PM General Body Meeting of ISEES (For ISEES Members only)
07:30 PM Onwards Onwards Fellows Dinner (By invitation only)
18 th December 2022
09:00-11:00 AMSession A-6: Modelling and simulationsSession B-6: Renewable Energy TechnologiesSession C-6: BioremediationSession C-11: Biofuels an Biorefineries-II
11:00-11:30 AM Tea
11:30 AM-01:00 PM Session A-7: Engine Emissions and Control Session B-7: Cleaner Technologies for Pollution Mitigation Session C-7: Microbial Processes Session B-10: Energy and Environment 01:00-02:00 PM Lunch
02.00-04:00 PM Session A-8: Coal & Biomass Session B-8: Environmental Session C-8: Biofuels and Biorefineries-I
Gasification Challenges Mitigation
02.00-04:00 PM Gasification Challenges Mitigation Session C-8: Bioruels and Biorefineries-1 04:00-04:30 PM Valedictory & Best Paper Presentation Awards 04:30 PM onwards High Tea and Closure of the Conference

*Keynote Speaker: 25+5 min, Invited Speaker: 15+5 min, Contributed Speaker: 8+2 min, all timing includes Q&A Session

VII International Conference on Sustainable Energy & Environmental Challenges (16-18th December 2022) Detailed Technical Schedule

01:00-01:10 PM	Best Master Thesis: Ayush Tripathi, IIT Kanpur	Dimethyl Ether Fuelled Single Cylinder Compression Ignition Engine Prototype Development and Experimental Evaluation
01:10-01:20 PM	Best Master Thesis: Aaishi Ashirbad, IIT Kanpur	Laser Plasma Assisted Combustion of Gasoline Direct Injected Spray in a Constant Volume Combustion Chamber
01:20-01:30 PM	Best Master Thesis: Deepak Kumar, IIT Kanpur	Comparative Total Cost of Ownership Analysis of Two and Four Wheelers Battery Electric Vehicles and Internal Combustion Engine Powertrain Vehicles
01:30-01:40 PM	Best PhD Thesis: Dr. Karishma Maheshwari, MNIT Jaipur	Experimental Studies on Treatment of Ro Reject & Dye Contaminated Water by Capacitive Deionization Through Development of Biomass Derived Activated Carbon Composite Material
01:40-01:50 PM	Best PhD Thesis: Dr. Rohit Kumar, IIT Bombay	Measurement of Laminar Burning Velocity of Surrogate Fuels at Elevated temperatures with Kinetic Analysis
01:50-02:00 PM	Best PhD Thesis: Dr. Avnish Kumar, CSIR- IIP, Dehradun	Catalytic Oxidative Conversion of Lignin to Value-Added Chemicals
02:00-02:10 PM	Best PhD Thesis: Dr. Sarthak Nag, The University of Tokyo	Mechanistic insights into nanobubble dynamics through in-situ liquid-phase electron microscopy
02:10-02:20 PM	YSA: Dr. Anshul Yadav, CSMCRI, Bhavnagar	Membrane distillation process for high saline and wastewater treatment
02:20-02:30 PM	YSA: Dr. M. Krishnamoorthi, IIT Kanpur	Gasoline Compression Ignition (GCI) engine performance with G70 over the full operating range
02:30-02:40 PM	YSA: Dr. Manabendra Saharia	Physics- and Data-Driven Modeling for Sustainable Water Management
02:40-02:50 PM	Best Master: Jitendra Choudhary, IISER Bhopal*	Modelling of Thermal and Hybrid Advanced Oxidation Reaction Kinetics for Degradation of Organic Pollutants
02:50-03:00 PM	Best PhD: Dr. Rajesh Kona, ACSIR – New Delhi*	Gene Expression Analysis, Process Optimization and CRISPR-Cas9 Genome Engineering using Isolated Photosynthetic Organisms for Nutraceuticals Production12ploi0p
Video presentatio	n made available by Awardees.	
	vanced Engine Technologies (Session C	hair: Prof. P A Laxminarayan, Sympsons) (Venue: ABLT1, Time: 01:00-02:50 PM, Date: 16 th December 2022)
01:00-01:30 PM	Keynote: Dr. D. Uma Maheshwar GE Aerospace	GE Aerospace – Sustainability Strategy and Technologies
01:30-01:50 PM	Invited: Prof Jacek Hunicz, Lublin University of Technology, Poland	Waste Polymer Pyrolytic Oil Blends as Valuable Fuels for Modern Compression Ignition Engine
01:50-02:00 PM	Vikram Kumar, Avinash Kumar Agarwal	SEEC2022_058: Effect of Injection Timing on The Performance and Emissions from Dual-Fuel Engine
02:00-02:10 PM	Ankur Tripathi, Bhargav Saikia, RR Sahoo, AP Singh	SEEC2022_080: Reactivity Controlled Compression Ignition Engine: - As Solution for Emissions Reduction Leading to Alternative Fuel
02:10-02:20 PM	Bhargav Saikia, Ankur Tripathi, AP Singh	SEEC2022_083: Gasoline Compression Ignition for Simultaneous Reduction of Oxides of N2 And PM
02:20-02:30 PM	Shanti Mehra, Avinash Kumar Agarwal, Hardikk Valera, Vikram Kumar	SEEC2022_081: Applicability of Dimethyl Ether (DME) As A Replacement for Conventional Diesel Fuel in a Tractor Engine
02:30-02:40 PM	Tomesh Kumar Sahu, Pravesh Chandra Shukla	SEEC2022_124: Gaseous and Particulate Emissions Investigation of Higher Alcohol Blends in A Modified CI Engine
02:40-02:50 PM	Saurabh Yadav, Binita Pathak	SEEC2022_188: Characterization of A Dental Spray Using High-Speed Shadow Imaging to Examine the Spray Morphology
ession B-1: Air	Pollution Monitoring (Session Chair: I	Dr. Kirpa Ram, IESD BHU) (Venue: ABLT2, Time: 01:00-02:50 PM, Date: 16 th December 2022)
01:00-01:30 PM	Keynote: Dr.Sayantan Sarkar,IIT Mandi	Sources And Climate Forcing of Aerosol Brown Carbon in The Eastern Indo-Gangetic Plain
01.00 01.00 1 11		Estimation of Wind Energy Potential Through Weibull Statistics Integrated with Meso-Micro Scale Coupling Approach
	Invited: Dr. Arnab Sarkar, IIT (BHU) Varanasi	
01:30-01:50 PM 01:50-02:10 PM		Energy Consumption of Academic Buildings and Strategies to Reduce the Cooling Demand

Kokat 02:40-02:50 PM Anush Biniwa Session C-1: Anaerobio Invite 01:00-01:20 PM Invite 01:20-01:40 PM Invite 01:20-01:40 PM Invite 01:40-02:00 PM Invite 01:20-01:40 PM Invite 01:20-01:40 PM Invite 01:20-01:40 PM Invite 01:40-02:00 PM Invite 02:00-02:20 PM Invite 02:20-02:30 PM Pushp 02:30-02:40 PM J Sant Session A-2: Combustion Invite	tte, Anirban Middey, Roshan Wathore hri Vaidya, Hemant Bherwani, Rajesh vale ic Digestion (Session Chair: TBD) (ic Digestion (Session Chair: TBD) (ic d: Dr. Josef Maroušek, Institute of nology and Business, Czech Republic ic d: Dr. V Vivekanand, Malaviya onal Institute of Technology, Jaipur ic d: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ic d: Dr. Abha Kumari, Amity Institute otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	Mechanism SEEC2022_144: Design of Cost Effective Aq Data Acquisition Module for Urban Environment SEEC2022_115: Connecting Midpoint Impacts to Endpoint Impacts: A Case Study of Building Infrastructure from LCA Approach (Venue: ABLT3, Time: 01:00-02:50 PM, Date: 16 th December 2022) Valorization of Biogas Fermentation Residues Solid-State Anaerobic Digestion of Agricultural Stubble and Its Simultaneous Treatment for Improved Methanogenesis Natural Adsorbents in The Process of Biogas Upgrading to Biomethane Quality Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
02:40-02:50 PM BiniwaAnush BiniwaSession C-1: AnaerobioInvite Techn01:00-01:20 PMInvite Nation01:20-01:40 PMInvite Nation01:40-02:00 PMLabora Poland02:00-02:20 PMInvite of Biot02:20-02:30 PMPushp Lepak02:30-02:40 PMJ SantSession A-2: CombustionInvite Session	hri Vaidya, Hemant Bherwani, Rajesh vale ic Digestion (Session Chair: TBD) (ic Digestion (Session Chair: TBD) (ic d: Dr. Josef Maroušek, Institute of nology and Business, Czech Republic ted: Dr. V Vivekanand, Malaviya onal Institute of Technology, Jaipur ted: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ted: Dr. Abha Kumari, Amity Institute otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	(Venue: ABLT3, Time: 01:00-02:50 PM, Date: 16 th December 2022) Valorization of Biogas Fermentation Residues Solid-State Anaerobic Digestion of Agricultural Stubble and Its Simultaneous Treatment for Improved Methanogenesis Natural Adsorbents in The Process of Biogas Upgrading to Biomethane Quality Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
Session C-1: Anaerobic 01:00-01:20 PM Invite 01:20-01:40 PM Invite 01:20-01:40 PM Invite 01:40-02:00 PM Labora 01:40-02:00 PM Invite 01:20-02:20 PM Invite 02:00-02:20 PM Invite 02:20-02:30 PM Pushp Lepak 02:30-02:40 PM J Sant Session A-2: Combustion Santa	ic Digestion (Session Chair: TBD) (ted: Dr. Josef Maroušek, Institute of nology and Business, Czech Republic ted: Dr. V Vivekanand, Malaviya onal Institute of Technology, Jaipur ted: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ted: Dr. Abha Kumari, Amity Institute otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	Valorization of Biogas Fermentation Residues Solid-State Anaerobic Digestion of Agricultural Stubble and Its Simultaneous Treatment for Improved Methanogenesis Natural Adsorbents in The Process of Biogas Upgrading to Biomethane Quality Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
01:00-01:20 PM Techn 01:20-01:40 PM Invite Nation Invite 01:40-02:00 PM Labora 02:00-02:20 PM Invite 02:20-02:30 PM Pushp Lepak 02:30-02:40 PM J Sant Session A-2: Combustion Invite	nology and Business, Czech Republic ted: Dr. V Vivekanand, Malaviya onal Institute of Technology, Jaipur ted: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ted: Dr. Abha Kumari, Amity Institute otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	Solid-State Anaerobic Digestion of Agricultural Stubble and Its Simultaneous Treatment for Improved Methanogenesis Natural Adsorbents in The Process of Biogas Upgrading to Biomethane Quality Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
01:20-01:40 PM Nation 01:40-02:00 PM D2:00-02:20 PM 02:20-02:30 PM 02:20-02:30 PM Pushp Lepak 02:30-02:40 PM J Sant Session A-2: Combustion	ted: Dr. V Vivekanand, Malaviya onal Institute of Technology, Jaipur ted: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ted: Dr. Abha Kumari, Amity Institute otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	Natural Adsorbents in The Process of Biogas Upgrading to Biomethane Quality Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
Invite 01:40-02:00 PM Labora Poland Poland 02:00-02:20 PM Invite 02:20-02:30 PM Pushp 02:30-02:40 PM J Sant Session A-2: Combustion Sant	ted: Dr. Grzegorz Piechota*, Gpchem ratory of Biogas Research and Analysis, nd ted: Dr. Abha Kumari, Amity Institute btechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	Strategic Potential of Flower Waste as A Feedstock for Biogas Production SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
02:00-02:20 PM of Biot 02:20-02:30 PM Pushp Lepak 02:30-02:40 PM J Sant Session A-2: Combustic	otechnology, Noida pita Das, Prof. Vs Moholkar, Dr. kshi Barbora nthosh, Dr. S Venkata Mohan	SEEC2022_123: Biodesulfurization of Recalcitrant Organo-Sulfur Compounds in Model Oil by Rhodococcus Rhodochrous (MTCC 3552)
Lepak 02:30-02:40 PM J Sant Session A-2: Combustion	kshi Barbora nthosh, Dr. S Venkata Mohan	3552)
02:30-02:40 PM J Sant Session A-2: Combustion	nthosh, Dr. S Venkata Mohan	
Session A-2: Combusti		SEEC2022_126: Biohythane (Bio-H-CNG) Production from Food Waste in Continuous Mode Operation
		r. D. Uma Maheshwar, GE Aerospace) (Venue: ABLT1, Time: 03:10-05:00 PM, Date: 16th December 2022)
	note: Prof. Michal Petru, Technical ersity of Liberec	Approach of Development of The Lightweight Structures for Modular Platform for Autonomous Chassis of Specialized Electric Vehicles for Freight and Equipment Transportation
	ted: Dr. Paramvir Singh, NIT Agartala	Effects of Aromatics in Fuel on Emissions
	ya Berwal, Sudarshan Kumar	SEEC2022_093: Effect of Ammonia Cracking on The Laminar Burning Velocity of Methane-Air Mixtures At Elevated Temperatures
04:10-04:20 PM Vijay S Kuma		SEEC2022_094: Measurements of Laminar Burning Velocity of Ethane-Air Mixtures at Elevated Temperatures
04:20-04:30 PM Amarc	rdeep Fulzele, Subhankar Mohapatra, rshan Kumar	SEEC2022_119: Measurements of Laminar Burning Velocity of N-Dodecane/Air Mixture at Elevated Temperature
	osh Deb Barma, Rakesh Saini, Danda vas Rao, R Sathish	SEEC2022_120: Thermogravimetric Analysis of Petroleum Pitch in An Inert Atmosphere
	ammad Kalamuddin Ansari, Dr. rshan Kumar, Saran Solagar, Mudit	SEEC2022_097: Effect of Hydrogen Addition on Emissions in Flameless Combustion with Liquid Fuel
04:50-05:00 PM Kuma	ar Saurabh, Rudrodip Majumdar	SEEC2022_072: Projection of Two-Wheeler Vehicle Fleet In India Using Road Density Per Capita for Accurate Emission Estimation
Session B-2: Air Pollut		A.B. Gupta, MNIT Jaipur) (Venue: ABLT2, Time: 03:10-05:00 PM, Date: 16th December 2022)
	note: Dr. Anjan Ray, CSIR-Indian tute of Petroleum Dehradun	Decentralized Approaches to Greenhouse Gases and Pollutant Emissions Mitigation
	t ed: Prof. Swarnendu Sen, Jadavpur	Mitigation of Air Pollution-Challenges and Strategies
		Developing Vehicular Fleet Emission Factors and Prediction of Super-Emitters Through Real-World Studies
04:20-04:40 PM Invite	t ed: Dr. Snehasish Panigrahy, IIT Delhi	Understanding Auto-Ignition of Light Hydrocarbons and Their Interactions with Nitrogen Oxides
04:40-04:50 PM Ankur Powar	ur Kaundal, Dr. Atul Dhar, Satvasheel ur	SEEC2022_079: Numerical Investigation of Wood Combustion to Predict the Temperature Profile and Concentration of Emitting Species for Varying Air Supplies
04:50-05:00 PM Adrija Goyal,	a De, Viksit Singh Padam,Sukhda l, Dr. Akhilendra Pratap Singh	SEEC2022_084: A Novel Photobioreactor for Carbon Dioxide Sequestration

03:10-03:25 PM	Invited: Dr. Vivek K Gaur, Ulsan National Institute of Science and Technology, Republic of Korea	Engineering Escherichia Coli for Production of Polyhydroxy propionate Homopolymer
03:25-03:45 PM	Invited: Dr. Nidhi Pareek, Central University of Rajasthan, Kishangarh, Ajmer	Combinatorial Process Development for Rationalized Recycling of Nutrients for Environment Clean-Up and Waste-Management
$03:45-04:05 \ \mathrm{PM}$	Invited: Dr. Jaydeep Bhattacharya, School of Biotechnology, JNU, New Delhi	TBD
04:05-04:15 PM	Dharmendra Singh Ken, Alok Sinha	SEEC2022_125: Electrochemical Advanced Oxidation of Cod and Ammonical Nitrogen from Laboratory-Prepared Coke-Oven Wastewater
04:15-04:25 PM	Azhagu Saravana Babu Packirisamy, Vajiha Aafrin Basheer, Sai Nandhini Ravi, Sugumari Vallinayagam, Sukumar Muthusamy	SEEC2022_131: Potential Therapeutic Application of Polyphenols from Juice Industry Waste: A Novel Approach On Waste To Wealth
04:25-04:35 PM	Sushmita Tiwari, Ramakrishnan Parthasarathi	SEEC2022_077: Biopolymer Based Composite Membrane: Demethoxylated Lignin Based Porous Film for Heavy Metal Ion Filtration
Session A-3: En December 2022)		chintya Mukhopadhyay, Jadavpur University) (Venue: ABLT1, Time: 10:15 AM-12:15 PM, Date: 17 th
December 2022)		Enougy Stange Methods
10:15-10:45 AM	Keynote: Prof. P A Laxminarayan, Sympsons	Energy Storage Methods
10:45-11:05 AM	Invited: Dr. Ramadhas Arumugam Sakunthalai, Indian Oil R&D Centre	Fuel Economy through Fuels and Lubricants
11:05-11:25 AM	Invited: Mr. Ayush Pant, FEV	Investigations of Emission Reduction Potential of Diesel-Methanol Blends in A HD-Diesel Engine
11:25-11:45 AM	Invited: Dr Saket Verma, BITS Pilani	Comparative Exergy Analysis for the Utilization of Alternative Fuels in Dual Fuel Engines
11:45-11:55 AM	Bipin G. Vyas	SEEC2022_167: Energy, Exergy Analysis, And Optimizations of Paddle Wheel Operated Portable Model for Enhanced Brine Evaporation
11:55 AM-12:05	Srijit Biswas, Avinash Kumar Agarwal	SEEC2022_055: Parametric Optimization of the CNG/Ethanol-Induced RCCI Profiles in Biodiesel Combustion Through a Robust
\mathbf{PM}		Design Space Foray
12:05-12:15 PM	Ankur Kalwar, Avinash Kumar Agarwal	SEEC2022_062: Emissions Assessment from M15 Fuelled BSVI SI Engine
Session B-3: Des December 2022)		Session Chair: Prof. Alok Sinha, IIT (ISM) Dhanbad) (Venue: ABLT2, Time: 10:15 AM-12:15 PM, Date: 17 th
10:15-10:45 AM	Keynote: Prof. A.B. Gupta, MNIT Jaipur	Energy Consumption and Cost Optimization in Community Ro Plants (CROPs) for Rural Drinking Water Supplies
10:45-11:05 AM	Invited: Prof. Munish Chandel, IIT Bombay	Sustainable Urban Water System: Water-Energy-Greenhouse Gas Nexus
11:05-11:25 AM	Invited: Dr. Archana Sarkar, National Institute of Hydrology, Roorkee	Water Security in A Changing Climate: Challenges and Way forward with Special Emphasis to Indian Water Resources
11:25-11:45 AM	Invited: Prof. Bhabani K Satapathy, IIT Delhi	Sustainable electrospun mats as microplastic-free control release fertilizer systems
11:45-11:55 AM	Kirti Rajvanshi, Muktesh Bhatt, Munish Kumar Upadhyay, Johan Goemets, Paul Campling, Abhas Singh	SEEC2022_185: Impact of Treated Wastewater Agricultural Reuse on Groundwater Quality: A Case Study in Kanpur, India
11:55 AM-12:05 PM	Utkarsh Misra, Nandini Dixit, Swatantra Pratap Singh	SEEC2022_078: Optimized Laser-Induced Graphene Based Surfaces for Desalination and Wastewater Treatment
12:05-12:15 PM	Komal Saini, Amrita Kumari, Abhisek Sahoo, Kamal Kishore Pant, Thallada Bhaskar	SEEC2022_085: Hierarchical Lignin Carbon Using Eggshell as Activating Agent for Wastewater Treatment
Session C-3: En		hair: V Vivekanand, Malaviya National Institute of Technology, Jaipur) (Venue: ABLT3, Time: 10:15 AM-
	17 th December 2022)	
10:15-10:45 AM	Keynote: Dr. Indu Shekhar Thakur, Amity University, Gurugram	Biological Looping Mechanisms for Decarbonization of Carbon Dioxide for Production of Biofuel and Biomaterials by Microorganism
10:45-11:05 AM	Invited: Dr. Keshab Mondal, Vidyasagar University, Midnapur	Fungal Laccase-Mediated Detoxification of Laboratory Dyes
11:05-11:25 AM	Invited: Dr. Akhilesh Tiwari, Indian Institute of Information Technology, Prayagraj	Condensation of Atmospheric Water Vapour Its Feasibility as Active Potable Source and Physicochemical Analysis

11:25-11:45 AM	Invited: Dr. Preeti Chaturvedi, CSIR-Indian Institute of Toxicology Research, Lucknow	Effective Elimination of Toxic Azo Dyes Using Biochar-Microbial Composite Hybrid Technology
11:45-11:55 AM	Thara M V, Indumati M Nambi	SEEC2022_074: Patterns of Antimicrobial Resistance in The Major Waterways of Chennai
11:55 AM-12:05	Arpita Das, Dr. Samuel Lalthazuala Rokhum	SEEC2022_106: Microwave Assisted Synthesis of Glycerol Carbonate from Glycerol with Dimethyl Carbonate Transesterification
PM		Using Terminalia Arjuna Bark Calcined Ash as Catalyst
Session A-4: Alte	ernative Transportation Fuels and Mat	erials (Session Chair: Prof. HSN Murthy, IIT Madras) (Venue: ABLT1, Time: 01:30-03:30 PM, Date: 17 th
December 2022)		
01:30-02:00 PM	Keynote: Prof Achintya Mukhopadhyay,	Active and Passive Techniques for Mitigation of Thermal Runaway in Lithium-Ion Batteries
01:30-02:00 PM	Jadavpur University	
02:00-02:20 PM	Invited: Prof Dilip Sharma, NIT Jaipur	Feasibility of HHO Fueled CI Engines
02:20-02:40 PM	Invited: Ms. Prakrati Sethi, Methanol Institute	Methanol; The Future-Proof Fuel
02:40-03:00 PM	Invited: Prof Shailendra Sinha, Lucknow	Effect of Nano particles as additives in biodiesel in CI engine
03:00-03:20 PM	Invited: Prof Srinibas Karmakar, IIT KGP	Combustion Characteristics of Alternative Aviation Fuels
03:20-03:30 PM	Ashish Nayyar, Chandan Kumar	SEEC2022_075: Experimental Analysis of Blended Fuel with EGR on Agriculture Based Diesel Engine
	erging Environmental Contaminants (S	Session Chair: Prof. Swarnendu Sen, Jadavpur University) (Venue: ABLT2, Time: 01:30-03:30 PM, Date: 17 th
December 2022)		
01:30-01:50 PM	Invited: Dr. Ramesh Dharavath H N, IIT (ISM) Dhanbad	Optimal Allocation of Surface Water and Groundwater Resources for Crop Production
01:50-02:10 PM	Invited: Dr. Ambika S, IIT Hyderabad	Photocatalytic Membrane for The Treatment of Emerging Contaminants in Agricultural Run-Off
02:10-02:30 PM	Invited: Dr. Bijay P. Tripathi, IIT Delhi	Nanostructured Responsive Microgel Membranes for Separation and Purification Applications
02:30-02:40 PM	Nishant Kumar, Shravan Kumar Singh, Nikhil Chander	SEEC2022_127: Performance Comparison of Vertical Bifacial Solar PV Module in East-West and North-South Facing Configuration in Summer Season at An East-Central Indian Location
02:40-02:50 PM	Najmul Haque Barbhuiya, Utkarsh Misra, Bhavana Kanwar, Swatantra P. Singh	SEEC2022_071: Advanced Oxidation Process in Combination with Electroconductive Membranes for Removing Emerging Contaminant
02:50-03:00 PM	Priyansha Gupta,Mahua Saha, Suneel Vasimalla, Chayanika Rathore	SEEC2022_090: Vertical Distribution and Characterization of Microplastics in The Sediment Core Samples from The Eastern Arabian Sea
03:00-03:10 PM	Aniket Desai, Mandar Nanajkar	SEEC2022_092: Risk Assessment of Plastic Additive (Dehp) On Pearl Spot (Etroplus Suratensis)
03:10-03:20 PM	Subhashini, Dr. Tarak Mondal	SEEC2022_176: Catalytic Pyrolysis Of Plastic Waste Over Synthesized Hzsm-5 To Obtain Fuel Grade Hydrocarbons
Session C-4: Sustainable Processing of Biomass (Session Chair: Akhilesh Tiwari, Indian Institute Of Information Technology, Prayagraj) (Venue: ABLT3, Time:		
	Date: 17 th December 2022)	
01:30-01:50 PM	Invited: Dr. Thallada Bhaskar, CSIR-Indian Institute of Petroleum, Dehradun	Role of Feedstock and Process
01:50-02:10 PM	Invited: Dr. Bhuwan B Mishra,CIAB Mohali	Valorisation of Spent Aromatic Waste to Platform Chemicals
02:10-02:30 PM	Invited: Dr. Ashish N. Sawarkar*, MNIT Allahabad, Prayagraj	A Case Study of Finger Millet Straw
02:30-02:50 PM	Invited: Dr. Ashutosh Pandey, AKS University, Satna	Carbon dioxide fixation and lipid production using Scenedesmus sp. ASK22: a sustainable approach for carbon sequestration and biofuel production
02:50-03:00 PM	Mahendra Tiwari, Vinu R.	SEEC2022_073: Resource and Energy Recovery Through Microwave Assisted Co-Pyrolysis of Rice Straw Pellets and Multi-Layered Packaging Waste
03:00-03:10 PM	Madhava Anil Kumar, Tarini Prasad Sahoo, Shreya Sadukha, Ramalingam Dineshkumar, Gurunathan Baskar	SEEC2022_110: Pre-Treated Biomass of Chlorella Variabilis for The Adsorptive Removal of Water Colorant: Phase Transfer And Thermodynamic Modelling
03:10-03:20 PM	Ranaprathap Katakojwa, Dr. S Venkata Mohan	SEEC2022_118: Biorefining of Surplus Agri-Waste Biomass Through Hydro-Catalyzed Valorisation for Energy-Dense Chemicals And Fuels
Session A-5: Spr	ays and Atomization (Session Chair: Pi	of Srinibas Karmakar, HT Kharagpur) (Venue: ABLT1, Time: 04:00-06:00 PM, Date: 17 th December 2022)
04:00-04:20 PM	Invited: Dr. Yogeshwar Nath Mishra, Department of Physics, University of Gothenburg	SLIPI-Based Techniques for 2D and 3D Imaging of Sprays and Combustion Species
04:20-04:40 PM	Invited: Dr. Chaitanya Kumar Rao, IIT Kanpur	Application of Liquid Fuel Atomization for Medical Diagnostics

04:40-05:00 PM	Invited: Dr. Venugopal, IIT Bhubaneswar	Pulsed Jets for Flow Control and Mixing
	Invited: Dr. Rajesh Kumar Prasad, UIET	Development of Laser Ignited Hydrogen Fueled Supercharged Engine
05:00-05:20 PM	Kanpur	
07 00 07 00 DM	Utkarsha Sonawane, Avinash Kumar	SEEC2022_053: Experimental Study on Spray Characteristics of Diesel and Diethyl Ether Blends Under Split Injection Strategy
05:20-05:30 PM	Agarwal	
05:30-05:40 PM	Ashutosh Jena, Avinash Kumar Agarwal	SEEC2022_066: Investigation of Spray Wall Impingement of Gasoline and Methanol Using Port Fuel Injector Under Crossflow
		Condition
05:40-05:50 PM	Swarnendu Sen, Sabyasachi Mondal, Sourav	SEEC2022_133: Investigation on Downstream Mixing Behavior Due to Fuel Injection from Bluff Body Embedded Fuel Port
	Sarkar, Achintya Mukhopadhyay	
05:50-06:00 PM	Rahul Kumar Singh, Avinash Kumar	SEEC2022_063: Impact of Methanol Addition into Gasoline on BS-VI Port Fueled Si Engine's Combustion and Performance
	Agarwal	Characteristics
Session B-5: Sol	id Waste Management (Session Chair: F	Prof. Munish Chandel, IIT Bombay) (Venue: ABLT2, Time: 04:00-06:00 PM, Date: 17th December 2022)
04:00-04:30 PM	Keynote: Prof. Alok Sinha, IIT (ISM)	Economic Evaluation of Anaerobic Hybrid Membrane Bioreactor (AnHMBR) Treating Leachate at Mesophilic Temperature
	Dhanbad	
04:30-04:50 PM	Invited: Prof. Priya Chandran, NIT Calicut	Some exemplary initiatives at NIT Calicut on Solid Waste Management
04:50-05:10 PM	Invited: Dr. Manoj Kumar Tiwari, IIT	Waste To Wealth: Circular Economy in Solid Waste Management
	Kharagpur	
05:10-05:20 PM	Shivani Singh, Dr. Preeti Chaturvedi	SEEC2022_111: Effect of Seasonal Variations on Dissemination of Args in Community Landfill Sites
07 00 07 00 DM	Bhargava Di la Kangara	
05:20-05:30 PM	Diwakar Kumar Singh, Anurag Garg	SEEC2022_134: Mitigation of Ecological Risk Due to Presence of Heavy Metals in Sewage Sludge Through Thermal Hydrolysis
05:30-05:40 PM	Hemant Thakur, Atul Dhar, Satvasheel	SEEC2022_61: Anaerobic Co-Digestion of Food Waste and Primary Sewage Sludge Towards Bio-Methane Production: A Comparative
05 40 05 50 DM	Powar	Analysis
05:40-05:50 PM	Roshan Vilasrao Mankhair, Munish Kumar	SEEC2022_161: Estimating Resource Recovery Potential of Legacy Waste Excavated from An Indian Dumpsite
07 70 00 00 DM	Chandel Rohit, Munish K. Chandel	SEEC2022_163: Modeling and Evaluating a Small-Scale Solar Pyrolysis System for Treating Municipal Solid Waste Using A Lumped
05:50-06:00 PM	Konit, Munish K. Chandel	SEEC2022_163: Modeling and Evaluating a Small-Scale Solar Pyrolysis System for Treating Municipal Solid Waste Using A Lumped Approach
Question Q F. Q.1	$1 \text{ W}_{1} \text{ (} 1 \text{ W}_{2} \text{)} \text{ (} 1 \text{)} \text{ (} 1 \text{)} \text{ (} 1 \text{)} \text{)} \text{ (} 1 \text{)} \text{ (} 1 \text{)} \text{)} \text{ (} 1 \text{)} \text{ (} 1 \text{)} \text{)} \text{)} \text{ (} 1 \text{)} \text{)} \text{)} \text{ (} 1 \text{)} \text{)} \text{)} \text{)} \text{)} \text{ (} 1 \text{)} $	Approach Dr. Ashish N. Sawarkar, Motilal Nehru National Institute of Technology Allahabad, Prayagraj) (Venue:
ABLT3, Time: 04	4:00-06:00 PM, Date: 17 th December 2022	
04:00-04:30 PM	Keynote: Dr. Sunil Kumar Khare, Indian	Assessment And Evaluation of Microplastic Particles from Gorai Beach of Arabian Sea
	Institute of Technology Delhi, New Delhi	
04:30-04:50 PM	Invited: Dr. Abhilash, CSIR-National	Circular Economy in Solid Waste Management
	Metallurgical Laboratory, Jamshedpur Invited: Dr. Vinod K. Garg, Central	Vieweisenen die Merchenden fer Neu Meric Die beweiselste Wester
04:50-05:10 PM		Vermicomposting Technology for Non-Toxic Biodegradable Wastes
	University of Punjab, Bathinda Invited: Dr. Manoj K. Sharma, Jawaharlal	Multipurpose Sorghum Feedstock for Biofuel Production: A Sustainable Solution
05:10-05:30 PM	Nehru University, New Delhi	Multipurpose Sorghum reedstock for Bioluei Froduction. A Sustainable Solution
	Phurailatpam Sujata Devi, Meena	SEEC2022_101: The Abundance and Diversity of Invertebrates in Vegetable Waste During the Pile Composting
05:30-05:40 PM	Khwairakpam	ShEC2022_101. The Abundance and Diversity of Invertebrates in Vegetable waste During the The Composing
05:40-05:50 PM	Nishant Ranjan, Sandeep Kumar	SEEC2022_132: Plastic and Agro Wastes Co-Gasification Using Aspen Plus: A Restricted Equilibrium Model
		: Prof Dilip Sharma, NIT Jaipur) (Venue: ABLT1, Time: 09:00-11:00 AM, Date: 18 th December 2022)
Session A-0. MO	denning and Simulations (Session Chair).	The bing Sharma, All Salpur) (venue. ABETT, Time, 05,00-11,00 AM, Date. 16 December 2022)
09:00-09:30 AM	Keynote: Prof Raja Benerjee, IIT Hyderabad	Combustion of Ammonia as A Carbon-Neutral Fuel
09:30-09:50 AM	Invited: Dr. Chetan Kumar Patel, IIT Patna	Effect of exhaust gas recirculation composition on soot in ECN spray A conditions
09:50-10:10 AM	Invited: Dr. Rajesh Mishra, Czech Republic	Numerical Modeling and Experimental Analysis of Light-Weight Composite Structures for Automotive Applications
10:10-10:30 AM	Invited: Dr. Anirudha Ambekar, IIT Goa	Alternative Fuels for Aviation
10:30-10:40 AM	Chandan Kumar, Mukesh Kumar, Umesh	SEEC2022_068: Experimental and Numerical Study of Diesel-Diethyl Ether-2-Methoxy Ethyl Ether Blends in Ci Engines
	Kumar Das, K. B. Rana, Ashish Nayyar	
10:40-10:50 AM	Rajeeb Kumar Upadhyay, Pushpendra K	SEEC2022_102: Numerical Investigation on Thermal Response of a Separator
	Vishwakarma, Kirti Bhushan Mishra	
10:50-11:00 AM	Priyaranjan Jena, Jeewan Vachan Tirkey,	SEEC2022_147: Mathematical Simulation of Si Engine Performance Using Sewage Sludge Derived Producer Gas with Methane Blend
	Reetu Raj, Deepak Kumar Singh	

09:00-09:30 AM	Keynote: Prof. Sudipta De, Jadavpur	'Is Optimized Distributed Hybrid Renewable Systems a Future Sustainable Energy Solution for India?'
	University Invited: Dr. Shihabudheen M. Maliyekkal,	Nanotechnology-Enabled Point-of-Use Sustainable Water Treatment Systems
09:30-09:50 AM	IIT Tirupati	Nanotechnology-Enabled Point-of-Ose Sustainable water Treatment Systems
00 70 10 10 134	Invited: Dr. Om Prakash Singh, IIT (BHU)	Solar Energy: Opportunity for Design Innovations
09:50-10:10 AM	Varanasi	
10:10-10:30 AM	Invited: Dr. Balkrisna Mehta, IIT Bhilai	Cooling of Solar PV Panels for Enhanced Efficiency
10:30-10:40 AM	Rupam Nandan, Rashmi Ranjan, Swatantra Pratap Singh	SEEC2022_159: Lig Based Polyamide Reverse Osmosis Membrane for Water Purification and Desalination
10:40-10:50 AM	Kapil Pareek, Jayesh Sharma	SEEC2022_069: Non-Contact Testing Using Infrared Thermography in Renewable Energy Sector
10:50-11:00 AM	Anubhav Kumar, Bijay P. Tripathi	SEEC2022_087: A Neutral PH Aqueous Organic Redox-Flow Battery for Renewable Energy Storage and Management
Session C-6: Bio	premediation (Session Chair: Dr. Asha (Chaube, CSIR-Indian Institute of Integrative Medicines, Jammu) (Venue: ABLT3, Time: 09:00-11:00 AM, Date:
18 th December 2	2022)	
09:00-09:20 AM	Invited: Dr. Pratyoosh Shukla, Banaras Hindu University, Varanasi	Integrated Approaches for Microbial Bioremediation: Future Scope and Applications
00.00 00.40 AM	Invited: Dr. Balendu Shekhar Giri, Indian	Biochar-Based Catalysts for The Abatement of Toxic Pollutants from Water Via Advanced Oxidation Processes
09:20-09:40 AM	Institute of Technology, Guwahati	
09:40-10:00 AM	Invited: Dr. Kashyap Dubey, Jawaharlal Nehru University, New Delhi	How to Treat Cancer Hospital Aqueous Waste?
10.00 10.90 AM	Invited: Dr. Priyangshu M Sarma, Innotech	Integrated Bio-Electrochemical System for Treatment of Produced Water: Concept to Commercialization
10:00-10:20 AM	Interventions Pvt Ltd, Guwahati, India	
10:20-10:30 AM	Jyoti, Meena Khwairakpam	SEEC2022_096: Disease Suppressiveness in Tomato Plants Post Vegetable Waste Compost and Vermicompost Application.
10:30-10:40 AM	Boda Ravi Kiran, Dr. S. Venkata Mohan	SEEC2022_145: Photosystems and Pigment Profiling of Tetradesmus Sp. Svmiict4 in In Response To High Light Irradiance
Session A-7: Eng	gine Emissions and Control (Session Ch	nair: Prof Amitava Dutta, Jadavpur University) (Venue: ABLT1, Time: 11:30 AM-01:00 PM, Date: 18 th
December 2022))	
11:30 AM-12:00 PM	Keynote: Prof. HSN Murthy	Insitu-hydrogen generation from aluminum water combustion
12:00-12:20 PM	Invited: Prof Kirti Bhushan Mishra, IIT Roorkee	Implication in measurement techniques for vehicular emission
12:20-12:30 PM	Dr. Suman Dey, Akhilendra Pratap Singh, Madhujit Deb, Pankaj Kumar Das	SEEC2022_150: Effect of Nanoparticle Additives in Performance-Emission Characteristics Of Higher Biodiesel Blends In A Single Cylinder Diesel Engine
12:30-12:40 PM	M. Krishnamoorthi, Avinash Kumar Agarwal	SEEC2022_056: Emissions Performance of A Gasoline Compression Ignition Engine At Idle And Low-Load Conditions
12:40-12:50 PM	Harmanpreet Singh, Sandeep Kumar, Saroj Kumar Mohapatra	SEEC2022_135: Investigation of The Characteristic Parameters of A Producer Gas Fired Dual Fuel Engine
12:50-01:00 PM	Shashank Shekhar, Avinash Kumar Agarwal	SEEC2022_157: Prototype Development of Methanol (MD95) Powered Compression Ignition Engine
		ession Chair: Dr. Shihabudheen M. Maliyekkal) (Venue: ABLT2, Time: 11:30 AM-01:00 PM, Date: 18th
December 2022)		
11:30 AM-12:00	Keynote: Prof. Shantanu Bhattacharya, IIT	A Novel AOP Based Effluent Treatment Methodology: Perspectives of Working in An Industrial Setup
PM	Kanpur	
12:00-12:20 PM	Invited: Dr. Sandeep Kumar, IIT Bombay	Biomass Gasification - Sustainable Technology for Waste to Energy
12:20-12:40 PM	Invited: Dr. Parmod Kumar, IIT Mandi	Performance Enhancement of Methanol Reforming Reactor Utilizing Engine Exhaust Heat for Hydrogen Generation
12:40-12:50 PM	Sumona Koley, Siddhant Dash, Ajay S. Kalamdhad, Meena Khwairakpam	SEEC2022_128: Advanced Oxidation Processes: An Approach Towards the Removal of Disinfection By-Products' Precursor
12:50-01:00 PM	Kirtiman Singh, Shantanu Bhattacharya	SEEC2022_155: Design and Development of Improved Wastewater Treatment Plant Using Advanced Oxidation Process
Session C-7: Mic 18 th December 2		uresh Kumar Dubey, Banaras Hindu University, Varanasi) (Venue: ABLT3, Time: 11:30 AM-01:00 PM, Date:
11:30 AM-12:00	Keynote: Dr. Ramakrishnan Parthasarathi,	Deriving Adverse Outcome Pathway Framework for Environmental Persistent Chemicals Through Computational Approaches

12:00-12:20 PM	Invited: Dr. Nagendra Thakur, Sikkim University, Tadong	Comparative Study of Microbial Diversity and Antibiotic Resistance Profile at Various Temperature Gradients in The Vicinity Of High-Altitude Himalayas
12:20-12:40 PM	Invited: Dr. Archana Tiwari, Amity Institute of Biotechnology, Noida	Impact of Carbon Sources on Enhancing Lipid Productivity in Marine Diatoms
12:40-12:50 PM	Sathya Narayanan V, Mugesh S, Nandakumar Arumugam, Jagadeeswaran K S, Pritam Raj, Bharathiraja B	SEEC2022_116: Process Development for The Enhanced Vitamin-B12 Synthesis from A Novel Microorganism
12:50-01:00 PM	Shikha Singh, Kamlesh Singh Yadav	SEEC2022_156: Enzymatic Transformation of Rutin to Quercetin and Rutinose
Session A-8: Coa	ll & Biomass Gasification (Session Chai	ir: Prof Raja Benerjee, IIT Hyderabad) (Venue: ABLT1, Time: 02:00-04:00 PM, Date: 18 th December 2022)
02:00-02:20 PM	Invited: Prof Jeewan V Tirkey, IIT BHU	Gasification of waste biomass and application to IC engine
02:20-02:40 PM	Invited: Dr Tushar Sharma, RGIPT Amethi	Utilisation of Carbon Dioxide for Oilfield Applications
02:40-03:00 PM	Invited: Prof. Satyajit Gupta, IIT Bhilai	2G Bioethanol Production from Organic Waste: An Overview of The Pre-Treatment Process and Case Studies
03:00-03:10 PM	Shruti Vikram, Sandeep Kumar	SEEC2022_112: Sensitivity Analysis of Biomass Gasification for Syngas Generation Under Varying Reactive Media
03:10-03:20 PM	Edin Michael, Santosh Kumar Sriramoju, Saptarshi Majumdar, Debaprasad Shee, Raja Banerjee	SEEC2022_169: Droplet combustion study of reclaimed coal water slurry
03:20-03:30 PM	Reetu Raj, Jeewan Vachan Tirkey, Deepak Kumar Singh	SEEC2022_146: Producer Gas Derived from Co-Gasification of Low-Grade Coal and Waste Mahua Biomass: Engine Application and Optimization
03:30-03:40 PM	Anurag Mishra, Sayak Banerjee, Raja Banerjee	SEEC2022_170: Optimization of Operating Parameters for Biomass Gasification in A Fixed-Bed Downdraft Gasifier
03:40-03:50 PM	Saumitra Thakur, Saket Verma, Saumitra Thakur, Dev Anand Gupta	SEEC2022_143: Effect of Ethanol Blending in A Gasoline-Fueled Si Engine Based on Exergy Analysis
03:50-04:00 PM	Rajneesh Kumar Yadav, R Santhosh, Arun Pattanshetti	SEEC2022_179: Experimental and Numerical Study of Biogas/Air Flames in A Non-Premixed Atmospheric Coaxial Combustor
Session B-8: Env December 2022)	vironmental Challenges Mitigation (Ses	ssion Chair: Prof. Sudipta De, Jadavpur University) (Venue: ABLT2, Time: 02:00-04:00 PM, Date: 18 th
02:00-02:20 PM	Invited: Dr. Dhiraj V Patil, IIT Dharwad	On The United Nations Sustainable Development Goal 7: Affordable and Clean Energy
02:20-02:30 PM	Pramod Kumar; Tabish Nawaz; Swatantra Pratap Singh	SEEC2022_86: Evaluation and Optimization of Electrocoagulation Process for Drill Site Wastewater Treatment
02:30-02:40 PM	Ankit Kumar, Meena Khwairakpam	SEEC2022_129: Vermifiltration: A Decentralized Treatment System for Low Strength Domestic Wastewater Treatment
02:40-02:50 PM	Muktesh Bhatt, Kirti Rajvanshi, Munish Kumar Upadhyay, Johan Gemoets, Paul Campling, Abhas Singh	SEEC2022_186: An Impact Assessment of Agricultural Soil Irrigated with Treated Tannery Wastewater
02:50-03:00 PM	Rashmi Ranjan, Swatantra Pratap Singh	SEEC2022_158: Fabrication of Thin Film Composite Membrane for Desalination: Effect of Parameters On Membrane Performance
03:00-03:10 PM	Syed Arwa A. Balkhi, Shaik Mahamad Allabakshi, P S N S R Srikar, Reetesh Kumar Gangwar, Shihabudheen M. Maliyekkal	SEEC2022_172: Atmospheric Pressure Non-Thermal Plasma: A Chemical-Free Approach for Antibiotics Degradation in Wastewater
03:10-03:20 PM	Prajakta Ramteke, Asmita S. Jadhav Sunit K. Singh and Nitin K. Labhsetwar	SEEC2022_109: Aluminium-Iron Oxide Based Adsorbent for Effective Selenium Remediation Form Drinking Water: Batch and Column Adsorption Studies
03:20-03:30 PM	Abins Aziz, Bijily Balakrishnan, M. Nityadharan, And Shihabudheen M. Maliyekkal	SEEC2022_136: Calcium-Doped Chitosan-Go Nanocomposite Film with Enhanced Tensile Strength and Flexibility
03:30-03:40 PM	Sanjay Singh, Ayushi Khare, Sanjeev Chaudhari	SEEC2022_99: Mechanistic Aspects of Temperature Effect on Fluoride Uptake by Un-Calciend Synthetic Hydroxyapatite
03:40-03:50 PM	Shaik Mahamad Allabakshi, P S N S R Srikar, Reetesh Kumar Gangwar, Shihabudheen M. Maliyekkal	SEEC2022_175: Energy Efficient Degradation of Dye in Wastewater by A Novel Photo-Plasma Reactor
	fuels and Biorefineries (Session Chair: Date: 18 th December 2022)	Grzegorz Piechota, Gpchem Laboratory of Biogas Research and Analysis, Poland) (Venue: ABLT3, Time:

02:00-02:20 PM	Invited: Dr. Samuel L Rokhum, National Institute of Technology, Silchar	Sustainable Production of Biodiesel Using Functional Material as A Heterogeneous Catalyst
02:20-02:40 PM	Invited: Dr. Baskar Gurunathan, St. Joseph's College of Engineering, Chennai	Production of Biodiesel from Food Waste Using a Citrus Fruit Peel Biochar Catalyst
02:40-03:00 PM	Invited: Dr. Asha Chaubey, CSIR-Indian Institute of Integrative Medicines, Jammu	Rare Streptomyces Spp. From NW Himalayas and Their Therapeutic Applications
03:00-03:20 PM	Invited: Dr. Dipesh S Patle, Motilal Nehru National Institute of Technology Allahabad	Simultaneous Optimization of Economic, Environmental, And Safety Criteria for Algal Biodiesel Process Retrofitted Using Dividing Wall Column and Multistage Vapor Recompression for Sustainable Development
03:20-03:30 PM	Tamilarasan K, Aswin Sidhaarth Kr	SEEC2022_051: Biohydrogen Production from Macroalgae Via Sonic-Biosurfactant Disintegration - An Energy-Efficient Approach
03:30-03:40 PM	Indrajeet Yadav, Sanjay Kumar	SEEC2022_180: Photosynthetic Production of Isoprene by Genetically Engineered Cyanobacteria for Biofuel Application
03:40-03:50 PM	Sourav Khanra, Anuradha, Muthu Kumar	SEEC2022_088: Deep Eutectic Solvents for The Pretreatment of Lignocellulose Feedstocks As Bio Refinery Process
	Sampath	

Parallel Session of Track-B And Track-C

Session B-9: Pollution and Climate Change: Challenges and Priorities. (Session Chair: Dr. Harish Phuleria, IIT Bombay) (Venue: ABLT4, Time: 10:15 AM-12:15 PM,		
Date: 17 th December 2022)		
10:15-10:35 AM	Invited: Dr. Niraj Sah, FEV India Pvt Ltd	Current Trends in Hydrogen Internal Combustion Engine
10:35-10:55 AM	Invited: Dr. Kirpa Ram, IESD BHU	Chemistry As a Sustainable Solution to Curb Environmental Pollution: Challenges and Way Forward
10:55-11:05 AM	Ravindra Singh, Alok Sinha	SEEC2022_139: Phthalate Pollution in The Aqueous Environment and Their Removal Technologies.
11:05-11:15 AM	Sadichha Jagadale, Dr. Hemant Bherwani, Hemant Bherwani, Amit Bansiwal,	SEEC2022_114: Role of CCUS Technologies in The Implementation of Circular Economy Strategies in India
11:15-11:25 AM	Kartik Srivastava, Rr Sahoo	SEEC2022_154: Thermoelectric Generators for Waste Heat Utilization: Means to Reduce Fossil Fuel Consumption and Produce Electricity
11:25-11:35 AM	Anshul Yadav	SEEC2022_166: UV-Cleaning PVDF-CO-HFP Tio2 Incorporated Membranes for Effective Removal of Dyes from Textile Industry Wastewater
11:35-11:45 AM	Raj Vardhan Patel, Anshul Yadav	SEEC2022_165: Experimental Study and Numerical Optimization for Removal of Methyl Orange Using Polytetrafluoroethylene Membrane in Vacuum Membrane Distillation Process
11:45-11:55 AM	Shivani Singh, Dr. Rahul Dev	SEEC2022_171: Design and Assessment of Solar Photovoltaic System: A Case Study
11:55 AM-12:05 PM	Shweta Rawat, Sanjay Kumar	SEEC2022_178: Investigations on Thermochemical Conversion of Wastewater Grown Microalgae Residue to Assess Bioenergy Potential
12:05-12:15 PM	Ayush Singh, Roshan Vilasrao Mankhair, Munish Kumar Chandel	SEEC2022_183: Determining Material Recovery Potential of Dumpsites in A Developing Country
Session C-9: Human Health & Environmental Sustainability (Session Chair: Dr. Kamlesh Choure, AKS University, Satna) (Venue: ABLT4, Time: 01:30-03:30 PM, Date: 17 th December 2022)		
01:30-01:50 PM	Invited: Dr. Jay Shankar Singh, Babasaheb Bhimrao Ambedkar University, Lucknow	Microbial Services in Energy and Environmental Sustainability
01:50-02:10 PM	Invited: Dr. Suresh Kumar Dubey, Banaras Hindu University, Varanasi	Cellulose Degradation Using Bacteria Isolated from Agro-Ecosystem
02:10-02:30 PM	Invited: Dr. Prabhanshu Tripathi, CSIR- Indian Institute of Toxicology Research, Lucknow	Artificial Sweetener Induced Modulation of Gut Microbiota Compromises Intestinal Barrier Functions
02:30-02:50 PM	Invited: Dr. Budhi Sagar Tiwari, Institute of Advanced Research, Gandhinagar, India	Requirement of Active Chloroplast for The Salinity Induced and Photo-Modulated Programmed Cell Death in Rice
02:50-03:00 PM	Yamini Javvadi, Dr S Venakata Mohan	SEEC2022_108: Deciphering the Dynamics Patterns of Microbial Antibiotic Resistance Genes (Args) Through Long-Term Wastewater Based Epidemiological Study
03:00-03:10 PM	Sai Nandhini R1, Mugesh S, Ajay G1, Sathya Narayanan V1, Bharathiraja B2	SEEC2022_117: Effect of Cofactor Engineering On 3-Hp Synthesis from Glycerol Using Recombinant Escherichia Coli

03:10-03:20 PM	Pallavi Shukla, Dr. Aradhana Mishra, Priya Verma, Ashutosh Tripathi, Ved Prakash Giri, Navinit Kumar, Vinita Tiwari	SEEC2022_070: Potential of Herbal Nanoemulsion for Disruption of Methicillin Resistant Staphylococcus Aureus
Session C-10: Su		Session Chair: TBD) (Venue: ABLT4, Time: 04:00-06:00 PM, Date: 17 th December 2022)
04:00-04:20 PM	Invited: Dr. Aradhana Mishra, National Botanical Research Institute, Lucknow	Biotransformation of the Phytopathogen Fusarium Sp. Regarding Substrate Utilization Pattern by The Intervention of Biocontrol Pbe-8 During Wilt Disease in Tomato
04:20-04:40 PM	Invited: Dr. Dev Mani Pandey, Birla Institute of Technology, Mesra, Ranchi	Impact of Soil Acidity Stress in Rice: A Computational and Molecular Approach
04:40-05:00 PM	Invited: Dr. Vinod Sangwan, CCS Haryana Agricultural University, Hisar	Potential of Biofortified Crop Varieties Towards Food Quality and Sustainable Agriculture
05:00-05:20 PM	Invited: Dr. Sapna Sharma, Shri Ram Swaroop Memorial University, Lucknow	Phytochemicals Modulate Membrane Integrity in Metabolic Disorders
05:20-05:40 PM	Invited: Dr. Kamlesh Choure, AKS University, Satna	Role of Microbial Consortia for Making Quality Compost to Reduce the Load of Spent Mushroom Substrate
05:40:05:50 PM	Kumar Saurabh, Rudrodip Majumdar	SEEC2022_098: Conceptualizing Integrated Life-Cycle Management for Sustainable and Optimal Utilization of Used Cooking Oil (UCO)
05:50-06:00 PM	Karan Kumar, Vijayanand S. Moholkar	SEEC2022_149: Unravelling the Genomic Differences Between Solventogenic Species Clostridium Acetobutylicum Atcc824 and Clostridium Pasteurianum Atcc6013
Session C-11: Bi	ofuels and Biorefineries (Session Chair	r: TBD) (Venue: ABLT4, Time: 09:00-11:00 AM, Date: 18 th December 2022)
09:00-09:20 AM	Invited: Dr. Ajay Kumar Pandey, Chhatrapati Shahu Ji Maharaj University, Kanpur:	Integrated Biorefinery Process Design for Co-Production of Bioethanol and Biogas Using Molasses and Lignocellulosic Biomass
09:20-09:40 AM	Invited: Dr. R. Praveen Kumar, Arunai Engineering College, Tiruvannamalai	Current Trends and Progress of Heterogenous Nano Catalysts for The Production of Biodiesel from Microalgae
09:40-10:00 AM	Invited: Dr. N Stalin, Anna University, Tiruchirapalli	Enhancement of Bioreactor Activities by Operating Parameters Optimization Methods in Biofuel Production
10:00-10:20 AM	Invited: Dr. Anjana Pandey, Motilal Nehru National Institute of Technology Allahabad, Prayagraj	Algal Feedstock as Potential Biowaste for Mitigation of Organic Carbon and Generation of Bioenergy and Useful Products: A Solution for Circular Bio Economy
10:20-10:30 AM	Kankana Saikia, Samuel Lalthazuala Rokhum	SEEC2022_105: Transesterification of Jatropha Curcas Oil for The Sustainable Production of Biodiesel by A Sulphonated Cellulose Derived Catalyst
10:30-10:40 AM	Viksit Singh Padam, Kancharana Venkata, Krishna Chaitanya	SEEC2022_067: Production of Biodiesel Using Microalgae
Session B-10: E1 2022)	nergy and Environment (Session Chair:	Prof. Swatantra Pratap Singh, IIT Bombay) (Venue: ABLT4, Time: 11:30 AM-01:00 PM, Date: 18 th December
11:30-11:50 AM	Invited: Dr. Nikhil Sharma, MNIT Jaipur	Particulate Emission Characterization for Automotive Applications
11:50 AM-12:00 PM	Shweta Singh, Atul Dhar, Satvasheel Powar	SEEC2022_187: Cradle to Gate Life Cycle Assessment of Mono-Crystalline Silicon Technology Considering Manufacturing in India
12:00-12:10 PM	Kunwar Abhishek Singh, Manoj Kumar Tiwari	SEEC2022_138: Analyzing Long-Term Surface Water Changes In Uttar Pradesh Utilizing Google Earth Engine
12:10-12:20 PM	Jitendra Panchiwala, Dilip Swami, B. R. Andharia	SEEC2022_190: A Review on Salt Yield Improvement Techniques and Applicability of Heat Exchangers: In the Context of The Salt Production
12:20-12:30 PM	Shweta Chaubey, Anshul Yadav, Vinod K Shahi	SEEC2022_160: Antifouling and Antibacterial Properties of Curcumin-Enriched Surfactant Nanoparticles Modified Polysulfone Membranes
12:30-12:40 PM	Ankita Singh, Onkar Singh	SEEC2022_184: Parametric Study of SOFC-HAT-ORC Based Combined Power System
12:40-12:50 PM	Dev Anand Gupta, Saket Verma, Saumitra Thakur	SEEC2022_107: Exergy Analysis Based Optimization Technique Applied to A Spark Ignition Engine
12:50-01:00 PM	Vasudev D. Chaudhari, D Deshmukh	SEEC2022_148: High compression ratio and extended load operation of gasoline-diesel and methanol-diesel fueled reactivity- controlled compression ignition (RCCI) engine