Technical Schedule of VIII SEEC at MNIT Jaipur

4th December 2023 (Monday)

Time	Session A (Venue: VLTC-101) Track Owner: Dr. Atul Dhar, Prof. Sudarshan Kumar	Session B (Venue: VLTC-103) Track Owner: Prof. V. K. Garg, Dr. Swatantra P. Singh	Session C (Venue: VLTC-104) Track Owners: Prof. K K Dubey, Dr. Nidhi Pareek
09:00 AM Onwards	Registration (VLTC Front Entrance)		
10:00 AM to 12:00 Noon	Workshop on "Scientific Paper and Book Writing" Ms. Swati Meherishi, Executive Editor, Springer India Ltd. (Venue: VLTC-101)		
11:30 AM to 12:45 PM	Lunch (VLTC Ground Floor)		
01:00 PM to 03:00 PM	**Session A1** **Alternative Fuels for Sustainable Transport** Chair: Dr. PA Laxminarayanan	**Session B1** **Solid Waste Remediation** Chair: Prof. Raj Boopathy	**Session C1** **Sustainable Processing of Biomass** Chair: Prof. Susan Grace Karp
01:00 PM to 01:30 PM	**Keynote: Prof. Edgard Gnansounou** ***Ecole Polytechnique Fédérale de Lausanne*** *Sustainable Strategy for Transportation Renewable Fuels from Agricultural Residues: A 2050 Prospective Assessment with Application to the Case of West Africa*	**Keynote: Dr. Vivek Agrawal** ***CDC, Jaipur*** *Challenges And Opportunities in Municipal Solid Waste Management Projects in India*	**Keynote: Prof. Emmanuel M. Papamichael** ***University of Ioannina, Greece*** *Novel Viewpoints on the Catalyzed Esterifications by Immobilized Lipase, under Anhydrous Conditions, by Applying Factorial Experimental Design*
01:30 PM to 01:50 PM	**Keynote: Prof. Raja Banerjee** ***IIT Hyderabad*** *Development of a $NH_3/H_2/CH_4$/n-Dodecane Chemical Kinetics Mechanism and its Application in a Swirl Burner*	**Keynote: Dr. Anurag Garg** ***IIT Bombay*** *Hydrothermal Pretreatment – A Potential Method to Improve Resource Recovery Opportunities from Moisturized Solid Waste and Sludge*	**Prof. Manoj K. Sharma** ***JNU, New Delhi*** *Sorghum: A Sweet Sustainable Feedstock to meet Food, Feed and Energy Demand*
01:50 PM to 02:00 PM			**Dr. Rohidas Bhoi** ***MNIT Jaipur*** *Bio-Oil Produced from Plastic Waste Using Spent FCC*
02:00 PM to 02:10 PM	**Dr. Pravesh C. Shukla** ***IIT Bhilai*** *Ethanol as an Alternative Fuel for CI Applications*	**SEEC_2023_145** (Rutuben R. Gajera) *Treatment of Spent Caustic using Advanced Oxidation Process*	
02:10 PM to 02:20 PM		**SEEC_2023_166** (Vinayak Gupta) *Behavioural Insights into Municipal Waste Recycling: A Theory of Planned Behaviour Perspective*	**SEEC_2023_129** (Neha Jaiswal) *In Silico and In Vitro Exploration of Phytophenolic Compounds: Novel Antifungal Agents Against Candida Albicans Biofilm*
02:20 PM to 02:30 PM	**SEEC_2023_083** (Nidhish Thawarey) *Fuel Property Investigations of Pure Ethanol Doped with High Cetane Ignition Improving Additives*	**SEEC 2023_138** (Sneha Gupta) *Sensor-based Domestic Waste Management*	**SEEC_2023_109** (Amritesh Kumar) *Sustainable Thermo-chemical Synthesis of Pine Cone Biomass based Water Repellent Carbon Material*
02:30 PM to 02:40 PM	**SEEC_2023_082** (Pradeep P) *Naphtha Fuelled Gasoline Compression Ignition Engine: A Roadmap for Future*	**SEEC_2023_162** (Hari Ram Dhanetia) *Biogenic Fabrication of Metallic Oxide Nanocomposite: A Potent and Efficient Nano Photo Catalyst for the Photo Catalytic Degradation and Demineralization of Hazardous Persistent Organic Pollutants*	**SEEC_2023_051** (Anmol Kulshrestha) *Anti-biofilm Potential of 5-Hydroxyveratric Acid (5-HVA) Targeting Secreted Aspartyl Proteinase 5 (SAP5) of Candida Albicans: An In-Silico Approach*
02:40 PM to 02:50 PM	**SEEC_2023_078** (Utkarsha Sonawane) *Influence of EGR and Injection Timing on Combustion and Emissions of a Diethyl Ether-Diesel Blend Fueled Compression Ignition Engine*	**SEEC_2023_118** (Niha M. Kulshreshtha) *Assessment of Chlorine Tolerance among Bacteria Isolated from Secondary Treated Sewage from BioKube Unit*	**SEEC_2023_090** (Avinash Anand) *Ultrasound-Assisted Hydrolysis of Food Waste using Glucoamylase: Statistical Optimization and Mechanistic Analysis with Molecular Simulations*
02:50 PM to 03:00 PM	**SEEC_2023_156** (Ankur Tripathi) *Development and Optimization of Reactivity Controlled Compression Ignition (RCCI) Combustion Engine Using Alternative Fuels*	**SEEC_2023_141** (Diwakar Kumar Singh) *Fate of Microplastics During Hydrothermal Pretreatment and Its Impact on Anaerobic Process*	**SEEC_2023_134 (**Priyanka Singh) *Large Scale Production of Bioethanol in Batch Bioreactor by Immobilized Beads of Aspergillus Terreus from Waste Cotton Fabrics*
03:15 PM to 04:00 PM	**Plenary Talk-1** **Prof. GD Yadav, Institute of Chemical Technology, Mumbai** *The Net Zero Goal & Sustainability: Green Hydrogen Technologies, CO_2 Refineries, Biomass Valorization & Waste Plastic Recycling* Venue: APJ Abdul Kalam Hall, VLTC, Chair: Prof. KK Pant		
04:00 PM to 04:30 PM	High Tea		
04:30 PM to 07:30 PM	Inaugural Function, Award, and Book Launch Ceremony Venue: APJ Abdul Kalam Hall, VLTC		
07:30 PM Onwards	Conference Banquet Venue: VLTC Multi-purpose Hall at Ground Floor		

5th December 2023 (Tuesday)

Time	Session A2 Advanced Engines and Fuels Chairs: Dr. Pravesh C. Shukla Dr. Amar Patnaik	Session B2 Wastewater Treatment Chair: Dr. Vivek Agarwal	Session C2 Biofuels & Biorefineries Chair: Prof Emmanuel M. Papamichael
09:00 AM to 10:50 AM			
09:00 AM to 09:30 AM	**Keynote: Dr. PA Laxminarayanan** ***IIT Kanpur*** *Basics and Development of Hydrogen Engine*	**Keynote: Dr. Gopala Krishna Darbha** ***IISER, Kolkata*** *The Microplastics of Indian Fresh and Coastal Waters: An Eco-friendly Approach for their Remediation*	**Keynote: Prof. Susan Grace Karp** ***Federal University of Paraná, Brazil*** *Biofuels from Alternative Bioresources: Perspectives for Brazilian Bioeconomy*
09:30 AM to 09:50 AM	**Mr. Anubhav Tyagi** ***Hero MotoCorp*** *New Engine Development Challenges*	**Dr. Yogalakshmi K N** ***Central Uni. of Punjab, Bathinda*** *Microbial Electrolysis Cell as Wastewater Biorefineries for Sustainable Energy and Value-Added Product Generation*	**Dr. Vinod Kumar** ***JNU, New Delhi*** *Exploration of Engineered SnO_2 Nanoparticles for Photocatalytic Hydrogen Generation using Water Splitting*
09:50 AM to 10:00 AM	**SEEC_2023_095** (Ankit Chaudhary) *Investigating the Impact of Blending Ferrocene Nanoparticles on a Diesel Engine Performance and Emissions*	**SEEC_2023_066** (Vishnuvardhan Mamidi) *Bio-electrochemical Treatment of Real-Field Industrial Wastewater*	**Prof. Jitendra Panwar** **BITS Pilani** *Unveiling the Potential of Phylloplanic Fungi for Degradation of Commercial Plastic*
10:00 AM to 10:10 AM	**SEEC_2023_079** (Ankur Kalwar) *Evaluation of CNG premix ratio in CNG-Gasoline Dual-Fuel Direct Injection Spark Ignition Engine*	**SEEC_2023_076** (Sampa Saha) *Anisotropic Colloidal Surfactants and their Application in Water Remediation*	
10:10 AM to 10:20 AM	**SEEC_2023_063** (Anand Shankar Singh) *A Comparative NOx Emission Assessment of Single and Fuel Staging (Full or Partial) from Ammonia/ Dimethyl ether- Air Mixture*	**SEEC_2023_087** (Dinesh Parida) *Washing Machine Wastewater: A Major Contributor to Environmental Microplastic Load*	**Dr. Surendra Nimesh** ***Central University of Rajasthan, Ajmer*** *Nanoparticles Mediated Sustainable Strategy for Degradation of Toxic Dyes*
10:20 AM to 10:30 AM	**SEEC_2023_163** (Vijay Shinde) *Laminar Burning Velocity Measurement of Ethane-Air Mixtures at Engine Relevant Conditions*	**SEEC_2023_089** (Mitil Koli) *Substrate Modified Low-Pressure Nanofiltration Membranes for Groundwater Contaminants Removal*	
10:30 AM to 10:40 AM	**SEEC_2023_155** (Bhargav Saikia) *Development of Gasoline Compression Ignition Engine for Reduction of NOx and PM Using Low Octane Fuels*	**SEEC 2023_147** (Dr. Vishal Tandel) *Social Cost-Benefit Analysis of Natural Treatment Systems in India: Implications for Institutional Arrangements and Business Models*	**SEEC_2023_140** (Saniya Zaidi) *Targeting the Quorum-sensing Controlled Pathogenicity of P. aeruginosa by Termite-nest Associated Nocardia sp. EMB27- an In vitro and in silico Approach*
10:40 AM to 10:50 AM	**SEEC_2023_148** (Javed Ahamad) *Numerical Investigation of Combustion, Performance, and Emissions Characteristics of Single and Dual Spark Assisted Highly Stratified Methanol Fuelled Multi-Injection DISI Engine*	**SEEC_2023_104** (Bhavana Kanwar) *Electro-oxidation of Amoxicillin Antibiotic in Simulated Wastewater*	**SEEC_2023_110** (Deeksha Gopaliya) *Integrated Fermentative Production and Downstream Processing of L-Malic Acid by Aspergillus Wentii using Cassava Peel Waste*
10:50 AM to 11:15 AM	Tea Break		
11:15 AM to 12:00 Noon	**Plenary Talk-2** **Prof. Norma A. Alcantar, University of South Florida, USA** *The Use of Functional Sustainable Materials to Solve Water Pollution and Medicine Grand Challenges* Venue: VLTC-101, Chair: Prof. GD Yadav		
12:00 Noon to 01:30 PM	**Session A3** **Sustainable Technologies** Chairs: Dr. Yogeshwar Nath Mishra, Dr. Sumit Sonkar	**Session B3** **Air Pollution and Control** Chair: Dr. Yogalakshmi KN	**Session C3** **Environmental Bioengineering** Chair: Prof. Manoj K. Sharma
12:00 Noon to 12:30 PM	**Keynote: Dr. D. Umamaheshwar** ***GE Aviation, Bangalore*** *Environmental Sustainability Strategy in Aerospace*	**Keynote: Dr. Virendra Singh** ***Rajasthan Hospital, Jaipur*** *Unmasking the Silent Threat: Air Pollution's Impact on Respiratory Health in India*	**Keynote: Prof. Meenu Chhabra** ***IIT Jodhpur*** *Sensing Bacteria in Water*
12:30 PM to 12:50 PM	**Dr. Shrutidhara Sarma** ***IIT Jodhpur*** *Flexible Nanocomposite Sensors Systems for Engineering Applications: Pushing Boundaries in Sensor Technology and Sustainable Engineering*	**Prof. T. I. Khan** ***Uni. of Rajasthan, Jaipur*** *Environmental Sustainability in the New Millennium*	**Prof. Arun Kharat** ***JNU, New Delhi*** *Biodegradation Potential of the Bacterial strain - Klebsiella pneumoniae and Enterobacter cloacae isolated from farmland against Dichlorvos pesticide in the Light of Vegetable Rhizospheric/Nonrhizosheric Microbiome*
12:50 PM to 01:00 PM	**SEEC_2023_059** (Surya Kanta De) *Development of a Model for Integrated Two-Stage Process of Gasification after Fast Pyrolysis of Biomass in a Fixed Bed Reactor Using Aspen Plus*	**SEEC_2023_0168** (Parv Goel) *Review of Laser Ignition Technology for Sustainable Transportation*	**Prof. *Suneel Kateriya*** ***JNU, New Delhi*** *Molecular Basis of Algal Optobiotechnology and its Role in Sustainable Biomanufacturing of Value-added Products*
01:00 PM to 01:10 PM	**SEEC_2023_149** (Pushpam Dayal) *Numerical Simulation and Emissions Performance of a Gasoline Compression Ignition Engine at High Idle and Low-Load Conditions*	**SEEC_2023_084** (Vikas Kumar Sahu) *$PM_{2.5}$ and $PM_{10.0}$ Monitoring in Non-Attainment Cities in Chhattisgarh*	
01:10 PM to 01:20 PM	**SEEC_2023_102** (Subrat Garnayak) *A Numerical Study on Hydrogen Enrichment of Ethylene Fuel for Soot Formation in Counterflow Diffusion Flames*	**SEEC_2023_092** (Dr. Ruchi Sharma) *Human Health Risk Assessment of Particulate Matter (PM) During Gymnasium Activities*	**Prof. Pradeep Verma** ***Central Uni. of Rajasthan, Ajmer, Rajasthan*** *Valorization of Organic Solvents by Sterile Mixotrophic Cultivation of Methylotrophic Tetraselmis Indica for Enhanced Biomass and Biomolecules*
01:20 PM to 01:30 PM	**SEEC_2023_119** (Richie Shaji Mathew) *Computational Modeling of Ammonia-Hydrogen Combustion in a Swirl Burner*	**SEEC_2023_114** (Shobhna Shankar) *Insights Into Seasonal-Variability of PAHs, TEQ, and OC-EC Of PM2.5 Collected at Faridabad: A Rapidly Emerging Industrial Site in India*	
01:30 PM to 02:15 PM	Lunch (VLTC Ground Floor)		
02:30 PM to 04:30 PM	**Session A4** **New Energy** Chairs: Dr. D. Umamaheshwar, Dr. Harlal Singh Mali	**Session B4** **Natural Treatment System** *(Session Sponsored by Rebound Enviro Tech Pvt. Ltd. and BlueDrop Enviro.),* Chair: Prof. T.I. Khan	**Session C4** **Microbial Processes** Chair: Prof. Arun Kharat
02:30 PM to 03:00 PM	**Keynote: Prof. K. S. Reddy** ***IIT Madras*** *Energy Storage for Reliable Standalone Integrated Renewable Energy Systems*	**Keynote: Prof. Raj Boopathy** ***Nicholls State University, USA*** *Use of Natural Wetlands in Mitigating Antibiotics in the Environment*	**Keynote: Prof. Adenise Woiciechowski** ***UFPR, Brazil*** *Current Developments of Biomass Pretreatments to Biobased Production*
03:00 PM to 03:20 PM	**Dr. Satvasheel Powar** ***IIT Mandi*** *End-of-Life Management of Crystalline Silicon Photovoltaic Modules using Life Cycle Assessment*	**Keynote: Prof. AB Gupta** ***MNIT Jaipur*** *Modifications in CW Technology for Enhanced Organics and Nutrients Removal Exploiting Specialized Bacteria*	**Keynote: Dr. Sudhir Pratap Singh** ***CIAB, Mohali*** *Genes to Gene Products and Their Benevolence to Society*

03:20 PM to 03:30 PM	**Dr. Sunanda Sinha** ***MNIT Jaipur*** *Performance and Degradation of Solar PV*		
03:30 PM to 03:40 PM		**Dr. Dinesh Poswal** ***Rebound Enviro Tech Pvt. Ltd.*** *Application of Integrated Natural Treatment Systems to Meet India's Contemporary and Future Water Demands*	**Dr. Nitesh Kumar** ***Manipal University, Jaipur*** *Nano-osmolytes: A New Insight on the Mechanism of Protein Folding using Biophysical Tools*
03:40 PM to 03:50 PM	**SEEC_2023_064** (Aldo Ronald) *Study of Flame Dynamics in a Mesoscale Diverging Channel*		
03:50 PM to 04:00 PM	**SEEC_2023_069** (Mohammad Kalamuddin Ansari) *Influence of High Pressure on Combustion Characteristics of Flameless Combustion*	**Mr. Ganges Reddy** ***BlueDrop Enviro.*** *Hybrid Nature-Based Solutions*	**Prof. Chandra S Gahan** ***Guru Ghasidas Vishwavidyalaya, Chhattisgarh*** *Influence of Elevated Concentration of Sulphates and Fluoride Ions on Ferrous Iron Oxidation Growth Kinetics in a Leptospirilum Dominated Chemostat Culture*
04:00 PM to 04:10 PM	**SEEC_2023_142** (Sandeep Yadav) *Experimental Investigation of Combustion Properties of Ammonia in Constant Volume Combustion Chamber*		
04:10 PM to 04:20 PM	**SEEC_2023_080** (Ashutosh Jena) *Role of Swirl Momentum and Swirl Center Precession on Cyclic Variation of Ignition Properties Under Lean Combustion of Diesel*	**SEEC_2023_152** (Niha Mohan Kulshreshtha) *Can deep CWs be a Sustainable Solution for Sewage Treatment?*	**Dr. Anjali Awasthi** ***University of Rajasthan, Jaipur*** *Nanostructured ZnO for Environmental Application*
04:20 PM to 04:30 PM	**SEEC_2023_070** (Amardeep Fulzele) *Measurement of Laminar Burning Velocity of Ternary Gasoline Surrogate (BPRF 95) at Elevated Mixture Temperatures*	**SEEC_2023_153** (Abhishek Soti) *Can Aerated CWs be the Next-Gen Technology for Sewage Treatment?*	
04:30 PM to 04:45 PM	**Tea Break**		
04:45 PM to 06:15 PM	**Session A5** **Biomass and Gasification** **Chair: Prof. Himanshu Chaudhary**	**Session B5** **Pollution Mitigation** **Chair: Prof. Anurag Garg**	**Session C5** **Bioremediation** **Chair: Dr. Sudhir Pratap Singh**
04:45 PM to 05:15 PM	**Keynote: Prof. Alain Brillard** ***Université de Haute-Alsace, France*** *Is It Possible to Simulate in an Efficient Way the Thermal Degradation of Biomass?*	**Keynote: Prof. Manpreet Singh Bhatti** ***GNDU, Punjab*** *Electrocoagulation and Anodic Oxidation for the Treatment of Real Textile Effluent*	**Keynote: Dr. Deepak Pant** ***CUHP, Dharmshala*** *Role of Biosurfactant for the Recovery of Metals from E-waste in Hybrid Leaching*
05:15 PM to 05:35 PM	**Dr. Jeevan Vachan Tirkey** ***IIT BHU, Varanasi*** *Valorisation of Waste Biomass by Gasification for Use in IC Engine*	**Er. Abhay Shrivastava** ***Textile Consultant, Jaipur*** *Managing Sustainable Processes in Textile Wet Processing*	**Dr. Jaydeep Bhattcharya** ***JNU, New Delhi*** *Ultra-sensitive Optical and Electronic Sensing of Abiotic and Biotic Contaminants using Nanostructures*
05:35 PM to 05:45 PM	**SEEC_2023_053** (Rakesh Saini) *A Detailed Characterization Study of a Commercial Coal Gasification Ash Sample and its Potential Utilization*	**SEEC_2023_133** (Vishal Choudhary) *Fly Ash-Based Foamed Concrete Elements: A Sustainable Building Material for the Future*	**Prof. Satarudra Prakash Singh** ***MGCU, Motihari*** *Environmental Impact Assessment of Bioinformatics Studies in Terms of Carbon Footprint*
05:45 PM to 05:55 PM	**SEEC_2023_124** (Saurabh Singh Chauhan) *Parametric Evaluation to Establish the Potential of Stable Methanol-Diesel Blends for Heavy-Duty Non-Road CI Engines Using 1-Dodecanol and Iso-Butanol as A Co-Solvent*	**SEEC_2023_136** (Basudev Mahato) *Permeability and Effectiveness of the Xylem Tissue of Himalayan Trees for Sustainable Water Filtration Applications*	
05:55 PM to 06:05 PM	**SEEC_2023_071** (Khokan Sahoo) *Pyrolysis Kinetics of Petroleum Pitch using Thermogravimetric Analysis*	**SEEC_2023_065** (J Santhosh) *Bio-H_2 Production using Municipal Solid Waste - Flow Rate Optimizations*	**Prof. Arvind P Singh** ***JNU, New Delhi*** *One Health Risk of Environmental-Origin E. coli: A WHO Global Priority Bacterial Pathogens*
06:05 PM to 06:15 PM	**SEEC_2023_154** (Dr. Suman Dey) *Potential of Biodegradable Waste to Biogas Production for Diesel Engine Power Generation: An Indian Perspective*	**SEEC_2023_057** (Kirtiman Singh) *In-Situ Study of the Solar-Induced Photo-Catalytic Dye-Degradation on Filter Element Substrate using UV-VIS, HPLC Coupled to MCR-ALS*	
06:15 PM to 07:00 PM	**GBM of ISEES *(Only for ISEES Members)* Venue: VLTC-102**		
07:30 PM Onwards	**Fellows Dinner *(Only by Invitation)***		

6th December 2023 (Wednesday)

09:00 AM to 10:50 AM	**Session A6** **Advanced Diagnostics and Optical Techniques** **Chair: Dr. Parveen S. Goel**	**Session B6** **Environmental Sustainability: Challenges & Priorities** **Chair: Prof. VK Garg**	**Session C6** **Human Health & Environmental Sustainability** **Chair: Prof. Deepak Pant**
09:00 AM to 09:30 AM	**Keynote: Dr. Yogeshwar Nath Mishra** ***KAUST, Saudi Arabia*** *Soot Diagnostics using Structured Illumination and Ultrafast Photography*	**Keynote: Prof. Kiran Bala** ***IIT Indore*** *Metabolomic Outlook to Delineate the Impacts of Environmental Perturbations on Microalgae*	**Keynote: Prof. Ravi Tandon** ***JNU, New Delhi*** *Effect of Environmental Changes on Infectious Diseases*
09:30 AM to 09:50 AM	**Dr. Gajendra Singh** ***IIT Mandi*** *Simultaneous Measurement of Laser-Induced Flourescence (LIF) of OH-CH_2O and Mie Scattering for Heat Release Measurement*	**Dr. Pritam Sangwan** ***DRDO, New Delhi*** *Development of Microbial Technology for an Explosive Manufacturing Industry*	**Dr. Kamlendra Awasthi** ***MNIT Jaipur*** *Functionalized Polymer Membranes for Gas Separation Application*
09:50 AM to 10:00 AM	**Representative** ***Dynomerk Controls*** *Integrated Solution for All the Vehicle/Engine/Component Testing Facilities in the Automobile Industry*	**SEEC_2023_061** (Ami Sharma) *Stacked Microbial Fuel Cells for Improved Bioenergy Generation from Wastewater Treatment*	**Prof. Gyan Singh Shekhawat** ***JNVU, Jodhpur*** *Salinity/Cd Induced Oxidative Stress in Plants: An Insight in the Cyto-Protective Role of $HO^{\cdot 1}$ in the Changing Scenario of Climate Change*
10:00 AM to 10:10 AM		**SEEC_2023_093** (Ashish Kumar) *In-situ fabrication of Titanium Suboxide-Laser Induced Graphene Composites with Enhanced Electrochemical Activity for Environmental Remediation*	
10:10 AM to 10:20 AM	**SEEC_2023_125** (Md Shadab Reza) *A Review on Emerging Trends in Exhaust After-Treatment Technologies for Diesel Engines*	**SEEC_2023_112** (Akanksha Sharma) *Efficient Harvesting of >1000 nm Photons to Hydrogen via Plasmon-Driven Si–H Activation in Water*	**Dr. Pratap Chandra Mali** ***Uni. of Rajasthan, Jaipur*** *Uses and Applications of Nanomaterial to Save Environment, Energy, and Economy for Sustainable Development in Future*
10:20 AM to 10:30 AM	**SEEC_2023_127** (Jitendra Dixit) *Morphological Characterization of Soot from a Compression Ignition Engine*	**SEEC_2023_115** (Rimjhim Sangtani) *Unlocking the Potential of Microalgal Metabolomics in Biorefinery Development for Carbon Dioxide Mitigation*	
10:30 AM to 10:40 AM	**SEEC_2023_137** (Rahul Kumar Singh) *Life Cycle Assessment of Battery Electric, Hybrid Electric, and Internal Combustion Engine-Powered Cars in India*	**SEEC_2023_172** (Aparna Upadhyay) *Arsenic contamination mapping in groundwater and development of community-based arsenic removal unit: A case study of district Khagaria, Bihar, India*	**SEEC_2023_161** (Surajbhan Sevda) *Microbial Fuel Cells for Sustainable Energy Generation and Nutrient Reclamation from Human Urine*
10:40 AM to 10:50 AM	**SEEC_2023_150** (Sahil Rana) *Experimental Investigation on the Characterization of Solid Soot Particle Emissions using in-situ Developed Thesrmodesorption System from RCCI Engine*	**SEEC 2023_106** (Subodh Kumar) *Anaerobic Co-Digestion of Waste Microalgae and Hydrothermally Pretreated Rice Husk: Evaluation of Mass and Energy Balance on a Pilot Scale Digester*	**SEEC_2023_171** (Prabudh Morya) *Experimental Performance Investigation of a Medium-Scale Greenhouse Solar Dryer for Drying Handmade Papers at Jaipur, India*
10:50 AM to 11:15 AM	**Tea Break**		
11:15 AM to 01:35 PM	**Session A7** **Policies for Environmental Sustainability** **Chair: Prof. Manpreet S. Bhatti**	**Session B7** **Energy & Environment** **Chair: Mr. Ganges Reddy**	**Session D1** **Assorted Topics** **Chairs: Dr. Gajendra Singh**
11:15 AM to 11:35 AM	**Keynote: Prof. Bharat Maheshwari** **UW, Canada** *Community Wellness Index: Managing sustainable development and growth in First Nation fly-in communities Northern Canada*	**Prof. Seema Mishra** ***Nalanda University, Rajasthan*** *Dark Septate Endophyte (DSE): Bioindicators of Stressed Environmental Conditions*	**Dr. Aneesh Prabhakar** ***MNIT Jaipur*** *Lithium-Ion Battery Thermal Runaway*
11:35 AM to 11:45 AM		**Dr. Manabendra Saharia** ***IIT Delhi*** *India Water Model (IWM): A Transboundary Water Modeling System for Water Sustainability*	**Dr. Rajeev Agrawal** ***MNIT Jaipur*** *Energy Efficiency in Last-mile Fulfillment*
11:45 AM to 11:55 AM	**SEEC_2023_159** (Srajan Gupta) *Understanding the Venturi Flow in an Optical Carburettor of Motorcycle Engine*		
11:55 AM to 12:05 PM	**SEEC_2023_128** (Md Shadab Reza) *Classification of Emission Control Technologies for Diesel Engines*	**SEEC_2023_060** (Harishakar Kopperi) *One-Pot Chemo-bioprocess of Waste Polyethylene Terephthalate (PET) Depolymerization and Upcycling to Alcohols/Fuels in Circular Economy Framework*	**SEEC_2023_135** (Maaz Ahmad Khan) *Barriers and Drivers to Circular Economy in Agribusiness: A Systematic Review and Conceptual Framework*
12:05 PM to 12:15 PM	**SEEC_2023_151** (Mahima Bhatnagar) *Total Cost of Ownership Analyses of Battery Electric Powertrains and Internal Combustion Engine Powertrains fuelled with Natural Gas*	**SEEC_2023_068** (Sabil Hasan) *Biomaterial Walls for Reducing Building Energy Consumption in Different Climatic Conditions of India*	**SEEC_2023_056** (Ankit Parmar) *A Technological Approach to Energy Conservation: Smart Dimmer Street Lights for Urban Settings*
12:15 PM to 12:25 PM	**SEEC_2023_121** (Vaibhav Singh) *Comparative Spray Characteristics of Methanol, Ethanol, and Gasoline under PFI Engine-Like Condition*	**SEEC_2023_100** (Pushkar Singh) *Theoretical and Experimental Analysis of Triangular Finned Solar Air Heater*	**SEEC_2023_169** (Ajay Kumar) *Review of R&D Activities of Laser Ignited Hydrogen Engine Development at Engine Research Laboratory IIT Kanpur*
12:25 PM to 12:35 PM	**SEEC_2023_081** (Shanti Mehra) *Spray and Atomization Characteristics of Dimethyl Ether (DME) in a Constant Volume Spray Chamber*	**SEEC_2023_120** (Dr. Srijit Biswas) *Global Warming Potential of Cow Dung-Based Compressed Biogas*	**SEEC_2023_099** (Gaurav Mishra) *Cooling Performance Assessment of Thermoelectric Modules with Water-Based Heat Sinks*
12:35 PM to 12:45 PM	**SEEC_2023_131** (Jaideep Shukla) *Investigation of Atomization and Evaporation Characteristics of Ethanol-Diesel Blended Fuels*	**SEEC_2023_105** (Amit Kumar) *Numerical Investigation of Nanofluid-based Solar Photovoltaic Thermal Collector with Grooved Tubes*	**SEEC_2023_111** (Manoj Kumar Thakur) *Pollution Mitigation from Thermal Power Plants: Challenges and Opportunity for Flue Gas Desulphurization in India*
12:45 PM to 12:55 PM	**SEEC_2023_164** (Sam Joe Chintagunti) *Effect of Ambient Pressure on Microscopic and Macroscopic Spray Characteristics of Gasoline-Diesel Blends*	**SEEC_2023_143** (Srinivasan Priaswamy) *Technological Solution to Overcome the Economic Barriers of Commercial Implementation of Solar Thermal Power Generation-Indian Scenario*	**SEEC_2023_126** (Prashant Gupta) *Recent Progress in the Preparation of Fuel Additives using Butyl Palmitate*
12:55 PM to 01:05 PM	**SEEC_2023_165** (Dhananjay Kumar) *Comparative Study of Laser Ignition and Spark Ignition for HCNG Air Mixture in Constant Volume Combustion Chamber*	**SEEC_2023_117** (Amit Chaturvedi) *Increasing Sustainable Power using Nanostructures of Bimetals Supported on Nanotubes as Cathode Electrocatalyst in MFCs*	**SEEC_2023_130** (Shoaib Akhtar) *Study on the Solketal-based Novel Additive for Pour Point Depression in Middle Distillates Fuel*
01:05 PM to 01:15 PM	**SEEC_2023_146** (Vishnu Agrawal) *Comprehensive Assessment of Combustion, Performance, and Emission Analysis of Methanol-Gasoline Blends*	**SEEC_2023_157** (Ankur Kaundal) *Numerical Investigation of Biomass Combustion to Optimize the Design of Biomass Space Heater with an Objective of Maximizing the Surface Temperature*	**SEEC_2023_072** (Subhankar Mohapatra) *A Computational and Chemical Kinetic Study on a Newly Developed Reduced Mechanism of N-Decane and 2-Butanone Mixture*
01:15 PM to 01:25 PM	**SEEC_2023_139** (Gaurav Kumar) *Investigation of Performance and Emissions of PHEVs under Different Driving Conditions Through a Data-Driven Approach*	**SEEC_2023_116** (Palak Saket) *Fate of Detoxification of Toxic Textile Dye in an Affordable and Eco-Friendly Way*	**SEEC_2023_170** (Amol Dhande) *Quality Analysis and Drying kinetics of Justica Adhatoda (Adulsa) Leaves in Movable Small Scale Greenhouse Solar Dryer*
01:25 PM to 01:35 PM	**SEEC_2023_144** (Sonu Kumar) *Biogas Enrichment by using Biogas Atomization Technique*	**SEEC_2023_173** (Nidhi Sehrawat) *Drinking water crisis in Bundelkhand region of India: A Case Study with special reference to water sustainability*	**SEEC_2023_158** (Hardikk Valera) *Retrofit-Kits for a Small Spark Ignition Engine for Adapting Methanol (M15): A Comparison of Technical Feasibility using Engine and Chassis Dynamometers*
01:35 PM to 02:25 PM	**Lunch (VLTC Ground Floor)**		
02:30 PM to 03:30 PM	**Valedictory Session and Best Paper Award Ceremony (Venue: VLTC-101)**		
03:30 PM Onwards	**High Tea and Closure of the Conference**		