

Schedule of SEEC-2018

31st December 2018			
14:00 to 14:30	Inaugural Ceremony of SEEC-2018		
14:30 to 15:30	Award Ceremony and Induction Ceremony for Fellows		
15:30 to 16:00	High Tea		
16.00 to 17.00	Plenary Talk-1 (Speaker: To be Announced)		
20:00 to Midnight	Plenary Talk - 2 Conference Banquet-1 and New Year Celebrations (Sponsored by TSI) Venue: Jawaharlal Guest House Lawn, IISc Bangalore		
1st January 2018			
09.00 to 09.45	Plenary Talk-3 Dr. Gautam Kalghatgi , Principal Professional, Saudi Aramco <i>Is it Really the End of Combustion Engines and Petroleum?</i>		
09:50 to 11:20	Session A-1 Advances in IC Engines- I: SI Engines	Session B-1 Solar Energy-I: Storage	Session C-1 Award Lectures
11:20 to 11:50	Tea Break		
11:50 to 13:30	Session A-2 Fundamentals of Combustion	Session B-2 Environmental Protection and Sustainability	Session C-2 Environmental Biotechnology-I
13:30 to 15:00	Lunch and Poster Session-1		
15:00 to 16:30	Session A-3 Coal and Biomass Combustion/ Gasification	Session B-3 Air Pollution and Control	Session C-3 Biomass to Fuels/ Chemicals-I: Clean Fuels
16:30 to 17:00	Tea Break		
17:00 to 18:30	Session A-4 Advances in I.C. Engines-II: CI Engines	Session B-4 Solar Energy-II: Performance	Session C-4 Biomass to Fuels/ Chemicals-II: Production
18:30 to 19:30	General Body Meeting of ISEES (For ISEES members only)		
19.30 to 22.00	Dinner Talk-4 (Speaker: To be Announced) Conference Banquet-2 (Sponsored by Tesscorn) Hotel Movenpick, Bangalore		
2nd January 2018			
09.00 to 11.00	Session A-5 Advances in I.C. Engines-III: Fuels	Session B-5 Energy Sustainability-I	Session C-5 Environmental Biotechnology-II
11:00 to 11:30	Tea Break		
11:30 to 13:00	Session A-6 Atomization and Sprays	Session B-6 Combustion/ Gas Turbines/ Fluid Flow/ Sprays	Session C-6 Biomass to Fuels/ Chemicals-III
13:00 to 14:15	Lunch and Poster Session-2		
14:15 to 15:00	Book Launch Ceremony and Launch of the JEES, Vol. 4 Chief Guest: Dr. V K Saraswat , Hon. Member, NITI Aayog		
15.00-16.00	Plenary Talk-5 Dr. V K Saraswat , Hon. Member, NITI Aayog		

16:00 to 16:40	High Tea Break (Sponsored by Springer)		
16:40 to 18:20	Session A-7 Advances in I.C. Engines-IV: New Concepts	Session B-7 Energy Sustainability- II	Session C-7 Waste to Wealth
18:20 to 19:15	Plenary Talk - 6 Prof. Baldev Raj , Director, National Institute of Advanced Studies		
19:15	Closure for the day, Free time for delegates		
19.30 Onwards	Fellows Dinner (For Fellows of ISEES and Select Invitees only)		
3rd January 2018			
09:00-09:45	Plenary Talk-7 (Speaker: To be Announced)		
09:50 to 11:30	Session A-8 Conventional and Alternate Fuels	Session B-8 Solar Energy-III	Session C-8 Waste Water Remediation and Air Pollution
11:30 to 12:00	Tea Break		
12:00 to 13:30	Session A-9 Rapid Fire Poster Energy Engineering Presentation	Session B-9 Rapid Fire Poster Environment and Sustainability Presentation	Session C-9 Rapid Fire Poster Biotechnology Presentation
13:30 to 14:30	Lunch		
14:30 to 15.30	Panel Discussion on Challenges, Opportunities & Directions for Future Transportation Systems Panelists: Prof. Gautam Kalghatgi, Dr. Anirudh Gautam, Dr. Ravi Prashanth, Dr. Shankar Venugopal, Dr. P A Laxminarayanan		
15:30 to 16:00	Valedictory Session and Best Paper/ Poster Awards Ceremony		
16:00 to 17:00	Springer Author's Workshop For Potential Authors Swati Mehershi, Springer	Technical Writing Workshop For Students/ PhD Scholars	
17:00	Closure		

- Keynote Speech: 30 Minutes (25 Minute Presentation with max 30 slides + Max 3 Q&A)
- Invited Speech: 20 Minutes (16 Minute Presentation with max 20 Slides + Max 2 Q&A)
- Contributed Talks: 10 Minutes (8 Minute Presentation with max 12 Slides + Max 1 Q&A)
- Rapid-fire Poster Presentations: 3 Minutes (3 Minute Presentation with max 4 Slides, No Introduction, Literature Review + Max 1 Q&A)

January 1, 2018

Session A-1

Advances in IC Engines-I: SI Engines

09:50-10:20	Gautam Kalghatgi Principal Professional, Saudi Aramco, Saudi Arabia	Gasoline Compression Ignition (GCI) Approach to Efficient, Clean, Affordable Future Engines
10:20-10:50	M. Razi Nalim Indiana University Purdue University Indianapolis, USA	Pressure-Gain and Work-Producing Combustion for High-Efficiency Light-Weight Engines
10:50-11:00	Prashumn Wreckonge, Shivashish Kumar Gupta, Tushar Agarwal and Avinash Kumar Agarwal	SEEC-110: Development of 4-Stroke Single Cylinder Methanol Fuelled Port Fuel Injection Spark Ignition Engine
11:00-11:10	Santosh Kumar Hotta, Niranjana Sahoo, Kaustubha Mohanty and Pineswar Mahanta	SEEC-154: Effect of Compression Ratio on the Performance of a Constant Speed Spark Ignition Engine Operating on Raw Biogas
11:10-11:20	Mohammed Jaasim Mubarak Ali and Hong G IM	SEEC-149: Computational Study of Pre-Ignition and Super-Knock in SI Engines

Session A-2

Fundamentals of Combustion

11:50-12:20	Achintya Mukhopadhyay Jadavpur University, Kolkata	Numerical Simulation of Direct Contact Condensation
12:20-12:50	Ashoke De IIT Kanpur	Investigation of NO _x in Pilot Stabilized CH ₄ -Air Diffusion Flames
12:50-13:00	Anand Rao Patil TAFE R&D, Alwar	Review of Alternate Fuels for Transport Sector and Future Trends
13:00-13:10	Busigari Rajasekhar Reddy and Vinu Ravikrishnan	SEEC-138: Production of Carbon Nanostructures in Coal Char, Oil and Gases from Low and Medium Rank Indian Coals via Microwave Assisted Pyrolysis Using Fe as Susceptors
13:10-13:20	Sombuddha Bagchi, Sourav Sarkar, Uddalok Sen, Achintya Mukhopadhyay and Swarnendu Sen	SEEC-23: Numerical Investigation of Vortex Shedding From a Bluff Body Stabilized Flame With Cross Injection
13:20-13:30	Snehashish Panigrahy	SEEC-93: Soot Formation in Premixed C ₂ H ₄ Flame Within Highly Conducting and Radiating Porous Burner

Session A-3

Coal and Biomass Combustion/ Gasification

15:00-15:30	Franz Winter Technical University of Vienna, Austria	Waste Incineration in Austria: An Opportunity for Urban Mining
15:30-16:00	Kalyan Thakkolam Annamalai Texas A&M University, USA	Biomass Energy: Agricultural and Non-Agricultural Sources, Upgrading and Conversion Processes, Benefits and Problems
16:00-16:10	Barnali Bhui and Prabu Vairakannu	SEEC-27: Thermo-Gravimetric Analyzer Studies on Direct Coal Fuelled Chemical Looping Combustion Under N ₂ and CO ₂ Atmosphere
16:10-16:20	C C Sreejith and C Muraleedharan	SEEC-49: Process Simulation of Alloverall Air-Steam Gasification of Biomass in Aspen Plus
16:20-16:30	Krishna Kant Dwivedi, Pradip Kumar Chatterjee, Malay Kumar Karmakar and Achintya Kumar Pramanick	SEEC-114: Experimental Study on Pyrolysis of Coal by Thermo Gravimetric Analysis (TGA) Under Different Temperature Conditions

Session A-4

Advances in I.C. Engines-II: CI Engines

17:00-17:30	P. A. Lakshminarayanan Simpson Engines, Chennai	Two Cylinder and Single Cylinder Compact Engines for Off-Road Applications
17:30-17:50	N Saravanan Mahindra Research Valley, Chennai	Sustainability in Product Development – An Automotive Perspective
17:50-18:00	Mohit Raj Saxena, Rakesh Kumar Maurya and Geo Alex	SEEC-141: Comparative Study on Characteristics of Compression Ignition Engine in Dual Fuel Mode Employing Gasoline/ Butanol and Diesel
18:00-18:10	Sarthak Nag, Priybrat Sharma, Atul Dhar and Arpan Gupta	SEEC-76: Vibration Analysis of Hydrogen Fumigated Diesel Engine
18:10-18:20	Gaurav Tripathi, Priybrat Sharma and Atul Dhar	SEEC-125: Numerical Investigations of Effect of Methane Addition on Combustion and Emission Characteristics of Compression Ignition Engine in Dual Fuel Mode
18:20-18:30	Chetankumar Patel, Joonsik Hwang, Krishna Chandra, Choongsik Bae, Tarun Gupta and Avinash Kumar Agarwal	SEEC-36: In-Cylinder Spray and Combustion Investigations in a Heavy Duty Optical Diesel Engine Fueled With Waste Cooking Oil, Jatropha and Karanja Biodiesels

Session B-1

Solar Energy-I: Storage		
09:50-10:20	Anjaneyulu Krothapalli Florida State University, USA	Fluid Mechanics & Solar Energy
10:20-10:40	Himanshu Tyagi IIT Ropar	Use of Nanoparticles for Harnessing Solar Thermal Energy and Applications in Energy Efficient Buildings
10:40-10:50	Swapnil Salvi, Vikrant Khullar and Himanshu Tyagi	SEEC-26: Numerical Modeling of Solar Thermal Energy Storage with Phase Change Materials
10:50-11:00	Mohit Murarka, Biraj Kumar Kakati and Anandalakshmi R	SEEC-71: Energy Analysis of Multiphase Flow in Flat Plate Solar Collectors
11:00-11:10	Vivek Tiwari, Kedar Haradas Patil and P. Srinivasan	SEEC-69: Simulation and Experimental Investigation of Melting Process in Spherical PCM Capsules Used for Low-Temperature Thermal Energy
11:10-11:20	Kedar Patil, Vivek Tiwari and P. Srinivasan	SEEC-153: Investigations on Different Types of Fin Profiles by Simulation to Improve the Performance of PCM Materials Based Thermal Energy Storage System
Session B-2		
Environmental Protection and Sustainability		
11:50-12:20	Giridhar Madras IISc Bangalore	Topic Awaited
12:20-12:50	Gopalakrishnan Kumar University, Jillyang, Gyeongsan South Korea	Bioenergy Production from Micro and Macro (Marine) Algae Biomass: Trends and Views Towards Sustainability Along with the Integration of Bio-Refinery
12:50-13:00	Ashish Yewale, Ravi Methekar and Shailesh Agrawal	SEEC-129: Dynamic Analysis of Dual Chamber Continuous Microbial Fuel Cell
13:00-13:10	Akhilesh Tiwari, Dinesh Kumar and Kuldeep Srivastava	SEEC-65: An Investigation of the Alternative Source of Potable Water by Atmospheric Vapor Condensation and Its Quality
13:10-13:20	Kesava Chandra Varigonda	SEEC-2: Environmental Protection and Sustainability: A Case Study of the Sompeta Thermal Power Plant
12:20-13:30	Smitha J.S., Tejaswini D. Nalamutt and Shrikanth Charhate	SEEC-139: Embodied Energy of Materials in Building Envelope for Sustainable Buildings
13:30-13:40	Amit Yadav, Arindrajit Chowdhury, Atul Srivastava and Nandakumar K	SEEC-16: Combustion Characteristics of Isrosene Aluminum Nano-fluid
Session B-3		
Air Pollution and Control		
15:00-15:30	Nitin Labhassetwar NEERI Nagpur	Energy-Air Pollution Nexus: Need for More Effective Technological Solutions and Enforcement
15:30-15:50	Alok Kumar IISc Bangalore	Colloidal Streamer Formation in Micro-scale Flows
15:50-16:00	Sandeep Kumar Chaudhry, Anil Kumar and Suresh Pandian Elumalai	SEEC-24: Particles Exposure Level and Respiratory Deposition Dose While Cooking Using Different Fuels Type Under Different Scenarios
16:00-16:10	Biswajit Mohanty and Suresh Pandian Elumalai	SEEC-133: Effects of Excess Air Supply on Stack Emission for Major Air Pollutants in a Typical Indian Coal Fired Power Plant
16:10-16:20	Veerendra Sahu, Bholu Ram Gurjar and Komal Jayaswal	SEEC-102: Assessment of Indoor Particulate Pollution in a Lecture Hall Complex
16:20-16:30	Shweta Kumari, Elumalai Suresh Pandian and Jain Manish Kumar	SEEC-43: Characterization of Soot Particles from Vehicular Exhaust
Session B-4		
Solar Energy-II: Performance		
17:00-17:30	Rajendra Bordia Clemson University, USA	Hierarchical Porous Ceramics for Energy Conversion and Storage
17:30-17:50	Sandip Kumar Saha IIT Bombay	Moving Boundary Modeling for Working Fluid Phase Change Tracking and Advanced Control of Solar Thermal Systems
17:50-18:00	Prodyut Chakraborty IIT Jodhpur	Numerical Analysis of Fin Orientation to Enhance Thermal Performance in Latent Heat Storage Device for Concentrated Solar Cooker
18:00-18:10	Soma Sekhar Reddy, Vikram Soni and Arvind Kumar	SEEC-151: Performance Analysis of Phase Change Material Based Solar Air Heater
18:10-18:20	Balkrishna Mehta and Pradeep Kumar	SEEC-44: Study of Temperature Variations on Photo-Voltaic Module - A Numerical Experiment
18:20-18:30	Devanshu Nema and Anandalakshmi R	SEEC-74: Numerical Investigation on Thermal Performance of Trapezoidal Finned Flat Plate Solar Air Collectors
Session C-1		
Award Lectures		
9:50-10:05	YS-1: Pravesh C Shukla	Particle Emission from Diesel Engines and its Characterization
10:05-10:20	YS-2: Murali Banavoth	Organic and Perovskite PV: A Paradigm for Solar Future
10:20-10:35	YS-3: Sunita J. Varjani	Microbial Enhanced Oil Recovery and Bioremediation of

		Petroleum Hydrocarbon Pollutants
10:35-10:50	PhD-1: Nikhil Sharma	Spray, Combustion, Emissions and Particulate Investigations of a Gasohol Fuelled Gasoline Direct Injection Engine
10:50-11:05	PhD-2: Kuntal Jana	Polygeneration as a Future Sustainable Energy Solution
11:05-11:20	PhD-3: Vishnu R Unni	Complex Systems Theory to Study the Dynamic Transitions in a Turbulent Combustor
Session C-2		
Environmental Biotechnology-I		
11:50-12:20	Michael Sauer University of Natural Resources & Life Sciences, Vienna, Austria	Synthetic and Diverse - Microbiology on Duty in Industry
12:20-12:50	Ganti S Murthy Oregon State University, USA	A Systems Perspective on Emerging Bio economy in the Context of Food-Energy-Water Nexus
12:50-13:20	Xuan-Thanh Bui Ho Chi Minh City University of Technology, Vietnam	Membrane Bioreactor Versus its Removal of Antibiotics
13:20-13:30	Rajeshwar Dayal Tyagi, Patrick Drogui and Bhagyashree Tiwari	SEEC-111: Removal of Pharmaceuticals in SMBR at Varying HRT and Dynamics and Diversity of the Bacterial Community.
Session C-3		
Biomass to Fuels/ Chemicals-I: Clean Fuels		
15:00-15:30	Keat Teong Lee Universiti Sains Malaysia, Pulau Pinang, Malaysia	Bioethanol Production from the Microwave Acid Hydrolysate of Red Macroalgae <i>Eucheuma denticulatum</i>
15:30-16:00	Suzana Yusup Universiti Teknologi PETRONAS, Perak, Malaysia	Natural Low Transition Temperature Mixtures (LTTMS) as Next Generation Green Solvents for Biomass Delignification
16:00-16:10	Sanjukta Subudhi	SEEC-105: Harnessing Microbes for Generation of Clean Fuel and Green Chemical
16:10-16:20	Ashwin Gaikwad	SEEC-112: Experimental and Modeling Studies on the Degradation of Lignin and Enzymatic Hydrolysis of Cellulose to Fuel Products
16:20-16:30	Ranjeet Kumar Mishra and Kaustubha Mohanty	SEEC-11: Thermal and Catalytic Pyrolysis of Madhuca Indica Seeds: A Possible Route for Production of Clean Fuel and Valuable Chemicals
Session C-4		
Biomass to Fuels/ Chemicals-II: Production		
17:00-17:30	Daniel CW Tsang Hong Kong Polytechnic University	Green Solvents for Valorisation of Starch-Rich Food Waste into Value-Added Chemicals
17:30-17:50	Saravanamurugan Shunmugavel Center of Innovative and Applied Bioprocessing, Mohali	Zeolite-Catalysed Glucose Isomerisation and its Direct Conversion to Alkyl Levulinate
17:50-18:00	Nagendranatha Reddy Chintakunta and Booki Min	SEEC-61: Influence of Trace Metals on Methane Formation from Inorganic Carbon in Microbial Electrochemical Systems
18:00-18:10	Sindhu Raveendran, Antony Athira, Binod Parameswaran, Gnansounou Edgard, Pandey Ashok, Mathew Anil and Abraham Amith	SEEC-46: Development of an Integrated Dilute Acid-Lime Pretreatment of Chili Post-Harvest Residue for Bioethanol Production
18:10-18:20	Velvizhi G, Manupati Hemalatha, Shanthi Sravan J., Shravani R S and Venkata Mohan S	SEEC-104: External Resistance Regulates Lactic Acid Production in Microbial Catalyzed Electrochemical Systems
18:20-18:30	Attada Yerrayya, Agrawal Nikunj, S R Chakravarthy and R Vinu	SEEC-160: Optimization of Bio-crude Production from Bagasse by Hydrothermal Liquefaction Using Factorial Model
January 2, 2018		
Session A-5		
Advances in I.C. Engines-III: Fuels		
09:00-09:30	Sibendu Som Argonne National Laboratory, USA	High Performance Computing Accelerating Fuel-Engine Co-Optimization
09:30-10:00	Kalyan Kumar Srinivasan University of Alabama, USA	Strategies to Achieve High Brake Thermal Efficiencies with Low Temperature Dual Fuel Combustion
10:00-10:30	S L Soni NIT Uttarakhand/ MNIT Jaipur	Emission Reduction Techniques in Automobiles
10.30-10:40	Ahfaz Ahmed, Mehl Marco, William Pitz, Mani Sarathy, William Roberts, Henry Curran, Alexander Konnov, Elna Heimdal, Scott Wagnon and Nitin Lokachari	SEEC-96: Kinetic Modeling and Experimental Study of Small Esters: Methyl Acetate and Ethyl Acetate
10:40-10:50	Sanguk Lee, Sangjae Park and	SEEC-135: LPG Combustion Phase Control in Lean Stratified

	Choongsik Bae	Spark Ignition Engine
10:50-11:00	Saurabh Kumar Gupta and Anand Krishnasamy	SEEC-53: Evaporation Rate Analysis of Different Fuel Blends for Low Temperature Combustion Engine Applications
Session A-6		
Atomization and Sprays		
11:30-12:00	Mahesh V. Panchagnula IIT Madras	Temporal and Spatial Microstructure of a Spray
12:00-12:30	Debasis Chakraborty Defence Research & Developmental Laboratory, Hyderabad	Assessment of Droplet Breakup Models in High Speed Cross Flows
12:30-12:50	Gaurav Tomar IISc, Bangalore	Secondary Breakup of Droplets
12:50-13:00	Aditya Potnis, Kuppuraj Rajamanickam and Saptarshi Basu	SEEC-166: Influence of Exit-Expansion Angle on Global Flow-Field of a Dual- Swirl Injector
Session A-7		
Advances in I.C. Engines-IV: New Concepts		
16:40-17:10	Anirudh Gautam SRESTHA, RDSO, Lucknow	Technology Directions for Self-Powered Locomotives and Train-sets Development on Indian Railways
17:10-17:30	Dhananjay Kumar Srivastava IIT Kharagpur	Development of Variable Valve Control System for Spark Ignition Engine
17:30-17:40	Srinibas Tripathy, Sridhar Sahoo and Dhananjay Kumar Srivastava	SEEC-7: Development of a Computational Model for Direct Injection Spark Ignition Engine Using CFD Approach
17:40-17:50	Rajesh Kumar Prasad and Avinash Kumar Agarwal	SEEC-35: Effect of Spark Timing on Combustion, Performance and Emissions Parameters of SI as well as LI Single Cylinder Engine Fuelled With HCNG
17:50-18:00	Nikhil Sharma and Avinash Kumar Agarwal	SEEC-32: Optimization of Fuel Injection Timing of Gasoline Direct Injection (GDI) Engine in Homogeneous Mode of Combustion
18:00-18:10	Uthanda Ganesh Uthandan and Anand Krishnasamy	SEEC-47: Effect of EGR in HCCI Mode of Combustion in a Flexible LTC Engine
18:10-18:20	Vikram Kumar, Sujeet K. Sinha and Avinash Kumar Agarwal	SEEC-39: Epoxy Composite Coatings for Engine Applications
Session B-5		
Energy Sustainability-I		
09:00-09:30	Anjan Ray CSIR-IIP, Dehradun	Non-Fossil Carbon Sources and Conversion Pathways to Fuels for Reduction of Fossil Fuel Imports and GHG Emissions in India
09:30-10:00	Suren Singh Durban University of Technology, South Africa	Integrative Enzymatic Bioremediation Approaches for Environmental Sustainability
10:00-10:20	Binod Parameswaran CSIR-NIIST, Trivandrum	Lignocellulosic Biomass for a Sustainable Bio-Based Economy
10:20-10:30	Santosh Saraswat and Abhijeet K Digalwar	SEEC-17: Identification of Sustainable Energy Source for Indian Climatic Conditions: A MCDM Approach
10.30-10:40	Vignesh S, Mahesh M and Thangaraja J	SEEC-21: Life Cycle Sustainability Analysis of Jatropa Biodiesel
10:40-10:50	Anasuya Nagaraju and Sasidhar Jangam	SEEC-134: Electrical Energy From the Gravitational Energy
10:50-11:00	Biswapriya Deb, Vijayakumar Nair, T. P. Yuvaraj, Jaivinder Singh, I Vijitha, P Arjun and Neethu Mukundan	SEEC-162: Polymer Based Nano-composite Materials and Devices for Practical Thermoelectric Applications
Session B-6		
Combustion/ Gas Turbines/ Fluid Flow/ Sprays		
11:30-11:50	Santanu De IIT Kanpur	Large Eddy Simulation of a Hydrogen-Fuelled Scramjet
11:50-12:00	Sanjeev Kumar Ghai and Santanu De	SEEC-117: Stochastic MMC Modeling of Turbulent Piloted Jet Diffusion Flame
12:00-12:10	Swapneel Roy, Kuppuraj Rajamanickam and Saptarshi Basu	SEEC-168: A Qualitative Study of Hybrid Effervescent-Air Blast Atomizer
12:10-12:20	Bhanu Mahesh, Awanish Pratap Singh and Ratan Joarder	SEEC-136: Study of Nozzle With Different NPR And Their Effect on IR Signatures
12:20-12:30	Lav Kumar Kaushik, Sunita Deb and Palanisamy Muthukumar	SEEC-87: Life Cycle and Techno-Economic Assessments of Domestic and Commercial LPG Cook-Stove with Porous Radiant Burner
12:30-13:00	Amit Agrawal IIT Bombay	Search for Higher-Order Continuum Transport Equations
Session B-7		
Energy Sustainability-II		

16:40-17:10	Teodora Emilia Motoasca KU Leuven, Belgium	Aiming at Sustainable Energy: How Sustainable are the Renewable Energy Sources?
17:10-17:40	Venugopal Shankar Mahindra Research Vally, Chennai	Creating Sustainable Mobility Technologies - Opportunities and Challenges
17:40-18:10	D Uma Maheshwar GE Aviation, Bangalore	Advanced Propulsion Concepts for Future Flight
18:10-18:20	Narasinha J. Shurpali	SEEC-51: Forest and Agricultural Biomass for Clean Energy in Europe and India
Session C-5		
Environmental Biotechnology-II		
09:00-09:30	S. Venkata Mohan CSIR-IICT Hyderabad	Sustainable Waste Management Through Closing the Loop Approach
09:30-10:00	Ibrahim Che Omar Universiti Malaysia Kelantan, Malaysia	Entrepreneurial Creation of Wealth Through the Sustainable Exploitation of Bio-Waste Materials and the Bio-Business Management
10:00-10:20	Rajeev Sukumaran CSIR-NIIST, Trivandrum	Challenges in the Development of Enzymes for Biomass Hydrolysis
10:20-10:30	M V Rohith and S Venkata Mohan	SEEC-79: Influence of Photosynthetic Efficiency and Quantum Yield on Lipid Profile of Chlorella Sorokiniana SVM BIOEN2
10:30-10:40	Aradhana Singh and Anubha Kaushik	SEEC-98: Niacin Pretreatment of Anode for Increased Power Generation in MFC
10:40-10:50	Jagdeep Kumar Nayak and Uttam Kumar Ghosh	SEEC-19: An Approach for Bioremediation of Distillery Spent Wash and Biomass Production Using Microbial Fuel Cell
10:50-11:00	Ki-Bum Park and Joo-Sik Kim	SEEC-14: Pyrolysis of PE and PVC in a Two-Stage Pyrolysis
Session C-6		
Biomass to Fuels/ Chemicals-III		
11:30-12:00	Edgard Gnansounou Ecole Polytechnique Fédérale de Lausanne, Switzerland	Comparative Sustainability Assessment of Bio-refineries: An Integrated Framework
12:00-12:30	Vijayanand S Moholkar IIT Guwahati	Investigations in Sonication-Induced Intensification of Crude Glycerol Fermentation to Dihydroxyacetone by Free and Immobilized Gluconobacter Oxydans
12:30-12:50	Jayeeta Bhaumik Center of Innovative and Applied Bioprocessing, Mohali	Biomass Derived Nano-Lignin Complexes: Best Out of the Waste for Versatile Applications
12:50-13:00	P. Radha, Jiny George, S.L. Deepika, V. Sindhu, P. Muthamilselvi and K. Ramani	SEEC-130: Kinetics, Isotherm and Thermodynamic Studies for Immobilised Lipase from Yarrowia Lipolytica MTCC 9520 Using Chicken Tallow Oil on Surface Functionalized Mesoporous Activated Carbon
Session C-7		
Waste to Wealth		
16:40-17:10	Prof. Ashok Pandey Indian Institute of Toxicological Research, Lucknow	Waste to Energy Production Using Biotechnology Interventions
17:10-17:40	Jong M Park Pohang University of Science and Technology, South Korea	Microbial Lipid Production from Low-Cost Organic Wastes
17:40-17:50	Naresh Kumar Amrati and Venkata Mohan S	SEEC-78: Sustainable Valorization of Organic Municipal Solid Waste to Bio-based Products
17:50-18:00	Panjanathan Radha and Kandasamy Ramani	SEEC-152: Production of Microbial Lipid from Yarrowia Lipolytica MTCC 9520 by Valorizing Chicken Tallow for Biodiesel Production: A Mechanistic Study
18:00-18:10	Mullai P. and Sambavi S.M.	SEEC-157: Axial Dispersion in a Hybrid Upflow Anaerobic Sludge Blanket Reactor Treating Penicillin G Wastewater
18:10-18:20	Nidhi Malik and Suresh Pandian Elumalai	SEEC-60: Study on Importance of SO _x , NO _x & Hg Control in Thermal Power Plants and Their Impacts on Ecosystems: A Review
January 3, 2018		
Session A-8		
Conventional and Alternate Fuels		
09:50-10:20	Bharat Bhargava, ONGC Energy Center, Delhi	Thermochemical Splitting of Water to Produce Hydrogen
10:20-10:50	Roger Sierens Ghent University, Belgium	Hydrogen "The" Fuel for Internal Combustion Engines
10:50-11:10	Atul Dhar IIT Mandi	Synergetic Application of Hydrogen in Internal Combustion Engines
11:00-11:10	Dev Prakash Satsangi, Nachiketa Tiwari and Avinash Kumar Agarwal	SEEC-33: Role of Miscibility Additives on Combustion and Noise Characteristics of a Diesel Engine Fuelled with Diesel/ Methanol

		Blends
11:10-11:20	Ranjit Kumar TA and Shashi Kanth N	SEEC-10: An Effective Approach to Predict the Occurrence of Column Separation Leading to Potential Cavitation Erosion in Diesel Pumps
11:20-11:30	Fabiyan Angikath, Nimal Nazer and Mani Sarathy	SEEC-18: Investigating the Antagonistic Blending Effects on DCN Of Gasoline-Alcohol Mixtures
Session B-8		
Solar Energy-III		
09:50-10:20	Kamania Chattopadhyay IISc Bangalore	The Influence of Environmental Pollution on Performance of Photovoltaic Solar Cell Under Urban Condition: A Case Study of City of Bangalore
10:20-10:50	Pradip Dutta IISc Bangalore	Supercritical Carbon Dioxide Brayton Cycle for Power Generation: Major R&D Efforts and Directions
10:50-11:00	Tushar Sharma and Pankaj Kalita	SEEC-97: Performance Evaluation of Solar Powered VCRS Based Cold Storage
11:00-11:10	Rudrodip Majumdar and Sandip K. Saha	SEEC-119: Quasi-Steady State Reduced Order Moving Boundary Model of ORC Heat Exchanger for Medium Temperature Solar-Thermal Systems
11:10-11:20	Advait S, Ambuj Punia and Saptarshi Basu	SEEC-120: Stability Analysis of an Oil Based Thermocline Energy Storage System
11:20-11:30	Prashant Saini, Satvasheel Powar and Atul Dhar	SEEC-143: Parametric Study of Variation in Heat Flux in Solar Parabolic Trough Collector
Session C-8		
Waste Water Remediation and Air Pollution		
09:50-10:20	Indu Shekhar Thakur JNU, Delhi	Biological Nutrient Removal from Wastewater Along with Exopolymeric Substance Production by a Denitrifier Paracoccus Denitrificans ISTOD1
10:20-10:50	Tarun Gupta IIT Kanpur	A Story Revealed by Ambient PM ₁ : Enhancement of Wintertime Pollution in IGP Due to High Moisture Content
10:50-11:10	Shantanu Bhattacharya IIT Kanpur	Novel Photo-Catalytic Solution Through Nano-Technology for Industrial Water Remediation
11:10-11:20	Swathi Kuchi, Sai Kishore Butti, Omprakash Sarkar And Dr. Venkata Mohan S	SEEC-81: Continuous Mode Operation with Wastewater: Influence on MFC Performance with Membrane Variation
11:20-11:30	Swati Dubey, Madhu Agarwal, A. B. Gupta And Yogendra Solanki	SEEC-116: Performance of Alum & Polyaluminum Chloride as Efficient Coagulants for Fluoride Removal in Batch and Continuous Reactors
Session A-9 (12:00-13.30)		
Rapid Fire Poster Session -1 (4 Minutes each including Q&A)		
Sub-Track: Biofuels		
SEEC-5	Debabrata Barik, Madhavan R. and Susmita Samal	Combustion Analysis of a Direct Injection Diesel Engine Fueled with Waste Chicken Fat Derived Fuel-Diesel Blend
SEEC-30	Akhilendra Pratap Singh, Tushar Agarwal and Avinash Kumar Agarwal	Methanol Utilization in Reactivity Controlled Compression Ignition Combustion Engine
SEEC-55	Sushant Satputaley, Bhoopendra Rajpoot, Geo John, Chetan Barapatre, Dhananjay Zodpe and Nishikant Deshpande	Comparison of Performance and Emission Characteristics of Double Cylinder Four Stroke CI Engine Between Diesel And Neem Biodiesel Blend
SEEC-57	Deepak Singh, Sarbjot Singh Sandhu and Anil Kumar Sarma	An Experimental Investigation of Non-Edible Prunus Armeniaca (Bitter Apricot) Oil Based Biodiesel Fueled in CI Engine
SEEC-58	Mandeep Singh and Sarbjot Singh Sandhu	Effect of Argemone Biodiesel/ Diesel Blends on Performance and Emission Characteristics of Multi-Cylinder Compression Ignition Engine
SEEC-70	Vipasha Bihone and Shanmathi Sridharan	Performance and Compatibility Test of Biodiesel from Waste Cooking Oil in IC Engine A Noble Transesterification Approach
SEEC-77	Mukesh Kumar, Himansh Saxena, M.P. Sharma, Pramod Kumar and A.K. Sarma	Effect of Cetane Improver on Performance, Combustion and Emission of CI Engine Fuelled With Eucalyptus oil Based Hybrid Micro-Emulsion Biofuel
SEEC-99	Gokul Raghavendra Srinivasan, Shalini Palani, Ranjitha Jambulingam and Anand Manohanam	Production of Beef Tallow Based Biodiesel Using Non Catalytic Supercritical Transesterification
SEEC-107	Menelik Walle Mekonen, Niranjana Sahoo and Santosh Kumar Hotta	Effects of Intake Air and Fuel Preheating for Improving Diesel Engine Operation Parameters Running with Methyl Ester Biodiesel Blends
SEEC-121	Ankit Kumar Chauhan and Kirti Bhushan Mishra	Experimental Study of Performance and Emission Characteristics of Biodiesel With DTBP Additive
SEEC-164	Bijit Sarma, Dilip Bora and Bichitra Bikash	Biodiesel Production and Utilization From Guizotia Abyssinica (Niger) Seed Oil Using Bio-Alcohol Produced from Eichhornia Crassipes as Reactant
Sub-Track: Spray and Injection Diagnostics		
SEEC-29	Akhilendra Pratap Singh, Deepak Mishra and Avinash Kumar Agarwal	Biodiesel Spray Characteristics and its Correlation with Engine Performance, Combustion and Emission Characteristics
SEEC-37	Chetankumar Patel, Joonsik Hwang, Choongsik Bae, Tarun Gupta and Avinash	Spray Atomization Characteristics for Biodiesel at Varying Injection Pressure and at Different Locations After Breakup Length

	Kumar Agarwal	
SEEC-126	Raju Murugan and Pankaj Kolhe	Numerical Simulation of Twin Fluid Flow Blurring Atomization Concept Using Large Eddy Simulation
SEEC-159	Jai Gopal Gupta and Deeksha Kanwar Kanwar	Development of Injection Technology for Diesel and Gasoline Engines
SEEC-165	Khushboo Pandey and Saptarshi Basu	Combustion Dynamics of Nanoparticle Laden Jet Fuel
SEEC-167	Sandeep Hatte, Bhaswati Gohain Barua, Vinod Srinivasan and Saptarshi Basu	Resilience of Thermocline to Flow Disturbances in a Thermal Energy Storage System
Sub-Track: Gaseous Fuels and Alternative Ignition Sources		
SEEC-34	Rajesh Kumar Prasad, Dhananjay Kumar and Avinash Kumar Agarwal	H ₂ Enriched CNG as Alternative Fuel for Internal Combustion Engine
SEEC-64	Shrimantini Patil and Milankumar Nandgaonkar	Review Laser Ignition with Liquid Fuels
SEEC-67	Sanket Mulye and Milankumar Nandgaonkar	Laser Ignition for Internal Combustion Engines A Review
SEEC-75	Priybrat Sharma and Atul Dhar	Effect of Hydrogen Substitution in Dual Fuel CI Engine on Engine Performance and Particulate Emissions
SEEC-101	Gokul Raghavendra Raghavendra and Lakshmanan Thangavelu	Performance, Combustion and Emission Characteristics of Alkyl Ester Blended Diesel in Air-Acetylene Based Compression Ignition Engine
SEEC-109	Shivashish Kumar Gupta, Prashum Wreckkonge, Tushar Agarwal, Vishal Kumar and Avinash Kumar Agarwal	Development of 4-Stroke Single Cylinder Methanol Fuelled Direct Injection Spark Ignition Engine
SEEC-144	Dhananjay Singh Yadav and Bireswar Paul	Feasibility Study of Biogas Interchangeability
Session B-9 (12:00-13.30)		
Rapid Fire Poster Session –II (4 Minutes Each Including Q&A)		
Sub-Track: Solar Energy		
SEEC-3	Hitesh Panchal, Kamlesh Pansal, Hitesh Bhargav and Anuradha Awasthi	Performance Analysis of Triple Effect Solar Still with Evacuated Tubes
SEEC-9	Rajesh Kumar and Prabha Chand	Performance Analysis of Solar Air Heater with Fins and Perforated Twisted Tape Inserts
SEEC-62	Rama Rao Nidamanuri, Ramiya A M and Vinay K Dadhwal	3D Laser Scanning for Estimation of Large Scale Building Rooftops Based Solar Energy in Urban Environments
SEEC-66	Minakshi Chakraborty, Bedotroyee Chowdhury, Debabrata Bera and Lakshmishri Roy	An Indigenously Designed Solar Drier for a Novel Ready to Eat Cheese Variant Processing
SEEC-84	Lakshmi Durga, Muthukumar P and Apurba Layek	Drying of Moringa Olefera Leaves in Mixed Mode and Indirect Forced Convection Solar Dryers
SEEC-94	Geleta Fekadu and Sudhakar Subudhi	Non-Conventional Energy Sources Used in Liquid Desiccant Dehumidification and Regeneration
SEEC-115	Gaurav Singh and Ranjan Das	Performance Analysis of Solar and Natural Gas Based Building Cooling System
SEEC-146	Vishal Bhalla, Kapil Garg, Swapnil Salvi, Venkataramana Badarla, Deepak Fulwani, Vikrant Khullar, Madhukar Rao, Chakrapani A, Navaneeth Krishnan and Himanshu Tyagi	Utilization of Nanoparticle-Based Solar Energy Systems for Improving the Overall Energy Efficiency of Buildings
SEEC-148	Sudheer R and K Narayan Prabhu	Heat Transfer Characteristics of Nanoparticle Dispersed Nitrate Salt-PCM for Thermal Energy Storage Applications
SEEC-161	Prakash Pratik, Ankit Agarwal and Kunal Ghosh	The Effect of Wind Speed on the Thermal Profile of Photovoltaic Module Under Cloudy Sky Condition
Sub-Track: Air Pollution		
SEEC-31	Nikhil Sharma, Manish Trivedi and Avinash Kumar Agarwal	Air Pollution in Delhi A Major Environmental and Public Health Challenge
SEEC-54	Gangamma S	Air Pollution, Respiratory Infections and Innate Immunity
SEEC-50	Mridusmita Barooah and Bishnupada Mandal	High Performance Cross-Linked Poly (Vinyl Alcohol)/ Piperazine Glycinate Polymer Membrane for CO ₂ Gas Separation
SEEC-80	Annie Modestra Jampala and Venakta Mohan S	Sustainable Bio-sequestration Of CO ₂ Capacitive Biocathodes Influence on Regulation of Microbial Electrosynthesis
SEEC-163	Ankur Kaundal, Satvasheel Powar and Atul Dhar	CFD Analysis of Gasification Based Cook Stove to Predict the Temperature Variation and Local Concentration of Various Emitting Species
Sub-Track: Coal and Biomass Combustion/ Gasification		
SEEC-15	Amit Yadav, Rafeeqe TA, Shibu Mathew, G Mahesh and Nandakumar K	Computational and Experimental Investigation of Fluid Flow Behavior in Film Cooling Orifice of Liquid Rocket Engine Under Back Pressure Conditions
SEEC-95	Darshit Upadhyay, Krunal Panchal, Anil Kumar Sakhiya and Rajesh Patel	Thermodynamic Analysis of Lignite Gasification in the Downdraft Gasifier
SEEC-142	Tushar Kant Swain and P Anil Kishan	Analysis of Flow in the Dump Combustion Chamber with Varied Step Angle
SEEC-145	Ankit Kumar, A.S.K. Sinha and J. P. Chakraborty	Sustainable Hydrogen Production from Catalytic Steam Reforming of Acetic Acid as Model Compound of Bio-Oil Using MOF Derived Nano Ni/AIC Catalyst
Session C-9 (12:00-13.30)		
Rapid Fire Poster Session - III (4 Minutes Each Including Q&A)		
Sub-Track: Waste Water Remediation		
SEEC-59	Rinki Singh and Sudeshna Chattopadhyay	Removal of Methylene Blue Dye from Waste Water by pH Sensitive Hydrogel

SEEC-73	Mriganka Saha, Arup Jyoti Borah and Vijayanand S. Moholkar	Extraction & Characterisation of Lignin and Biofuel Production from Paper Mill Waste
SEEC-89	Mahalakshmi Karnad and Meenakshi Dhote	Sustainable Urban Storm Water Management A Case for Tumakuru Local Planning Area, Karnataka, India
SEEC-90	Vishal Kumar Verma, Senthilmurugan Subbiah and Puja Singh	Removal of Micro-Pollutants from Water Using Modified UF-Membrane
SEEC-118	Yogendra Singh Solanki, Madhu Agarwal, Sanjeev Gupta, Pushkar Shukla and A.B. Gupta	Defluoridation of Drinking Water by Inorganic Polymer Coagulant
SEEC-137	Fasil Mir, Babar Ahmad and Anupam Shukla	Influence of Concentration and Temperature on Transport Properties in Cation-Exchange Membrane
Sub-Track: Waste to Wealth		
SEEC-12	Abhishek Sharma, Utkarsh Dixit, Vishal Gupta and S Murugan	Influence of Compression Ratio on the Combustion Characteristics of a Diesel Engine Running with Tyre Pyrolysis Oil Blend
SEEC-72	Puja Mukherjee, Debabrata Bera and Lakshmeshri Roy	Distillery's By-product in Production of Cost Effective Bakery Items
SEEC-131	Radha Panjanathan, Priya Suhazsini, Keerthana Prabhu, Anjali J. and Ramani K.	Chicken Tallow Oil, an Economical Substrate for Biosurfactant Production Using Yarrowia Lipolytica MTCC 9520 Production and Characterization
SEEC-140	Neha Pandey and Chandrakant Thakur	Adsorptive Removal of Acid Red 3BN by Coconut Shell Activated Carbon
SEEC-147	Zahoor Alam, Bhawna Verma and A.S.K. Sinha	Synthesis of Reduced Graphene Oxide Supported Cadmium Sulphide A Potential Photocatalyst for Hydrogen Evaluation by Splitting of Water Under Visible Light
SEEC-156	Sambavi S.M. and Mullai P.	Effect of Nanoparticles on Bioelectricity Generation in Microbial Fuel Cell
Sub-Track: Energy Sustainability		
SEEC-28	Kishant Kumar and Amit Kumar	Molecular Simulation of Adsorptive CO ₂ Capture Using Zr-Based Metal-Organic Frameworks
SEEC-38	Vikram Kumar, Sujeet K. Sinha, Vishnu Singh Solanki and Avinash Kumar Agarwal	Tribological Investigation of Hard Coating on Steel
SEEC-63	Ghanshyam Lalpurwala and Dilip Jani	A Critical Review on Heat Transfer Enhancement in a Car Radiator by Use of Nano-fluid
SEEC-122	Vikash Chauhan and Dushyant Singh	Numerical Study of Mist Jet Impingement Cooling of an Isothermal Flat Plate at Low Superheat
SEEC-128	Sandeep Anwani and Ravi Methekar	Parametric Study and Phase Analysis of Cathodic Active Materials of Spent Lithium-Ion Battery
SEEC-150	Veena Chaudhary	A Detail Review Study on the Application of Exergy to Diesel Engine
Sub-Track: Environmental Biotechnology		
SEEC-22	Akshaya Verma	Textile Wastewater Treatment by Electrocoagulation Employing Fe-Al Composite Electrode
SEEC-41	Shankaranarayanan Balaji, Naga Vignesh Selvaraj and Nakkeeran Ekambaram	Extraction of Chitin from Shrimp Exoskeleton Using 2K Full Factorial Method
SEEC-56	Shweta Singh and Arun Goyal	Strain Improvement of Bacillus Amyloliquefaciens SS35 by UV and Chemical Mutagenesis for Producing Hyperactive Mutant Strain for Improved B-Glucanase and Xylanase Activities
SEEC-82	Amulya K and Venkata Mohan S	Bio-based Succinic Acid Production Strain Isolation and Optimization of Process
SEEC-83	J Shanthi Sravan Kumar, Manupati Hemalatha and Venkata Mohan S	Cyano-Photo Bacterial Synergistics for Self-Sustained Multiple Biofuels Production
SEEC-92	Sanjam Chandna, Aman Bhardwaj and Jayeeta Bhaumik	Biomass Directed Development of Noble Metal Nano-scaffolds for Applications in Biotechnology

Schedule of Posters for 1st January 2018, 13.30-15.00 Hrs

Poster Track: Solar Energy

SEEC-3	SEEC-84	SEEC-146
SEEC-9	SEEC-94	SEEC-148
SEEC-62	SEEC-115	SEEC-161
SEEC-66		

Poster Track: Coal and Biomass Combustion/ Gasification

SEEC-15	SEEC-95	SEEC-142
SEEC-145		

Poster Track: Air Pollution

SEEC-31	SEEC-80	SEEC-54
	SEEC-163	SEEC-50

Poster Track: Gaseous Fuels and Alternative Ignition Sources

SEEC-34	SEEC-101	SEEC-67
SEEC-64	SEEC-109	SEEC-75
SEEC-144		

Poster Track: Biofuels

SEEC-5	SEEC-99	SEEC-57
SEEC-30	SEEC-107	SEEC-58
SEEC-55	SEEC-121	SEEC-70
SEEC-164		SEEC-77

Poster Track: Spray and Injection Diagnostics

SEEC-29	SEEC-167	SEEC-159
SEEC-37	SEEC-126	SEEC-165

Schedule of Posters for 2nd January 2018, 13.00-14.15 Hrs

Poster Track: Waste Water Remediation

SEEC-59	SEEC-90	SEEC-118
SEEC-73	SEEC-89	SEEC-137

Poster Track: Waste to Wealth

SEEC-12	SEEC-140	SEEC-156
SEEC-72	SEEC-147	SEEC-131

Poster Track: Energy Sustainability

SEEC-28	SEEC-122	SEEC-128
SEEC-38	SEEC-63	SEEC-150

Poster Track: Environmental Biotechnology

SEEC-22	SEEC-82	SEEC-92
SEEC-41	SEEC-83	SEEC-56

Oral Presentation Award Matrix

Track	Session Code	SEEC Oral Presentation No.
IC Engines and Fuels (4 Awards)	A-1, A-4, A-5, A-7	SEEC-110, SEEC-154, SEEC-149, SEEC-141, SEEC-76, SEEC-125, SEEC-36, SEEC-96, SEEC-135, SEEC-53, SEEC-7, SEEC-35, SEEC-32, SEEC-47, SEEC-39
Solar Energy (2 Awards)	B-1, B-4, B-8	SEEC-26, SEEC-71, SEEC-69, SEEC-153, SEEC-151, SEEC-44, SEEC-97, SEEC-74, SEEC-119, SEEC-120, SEEC-143
Combustion (2 Awards)	A-2 A-3 A-8	SEEC-23, SEEC-93, SEEC-138, SEEC-27, SEEC-49, SEEC-114 SEEC-33, SEEC-10, SEEC-18
Energy and Environmental Sustainability (2 Awards)	B-2 B-5, B-7	SEEC-129, SEEC-65, SEEC-2, SEEC-16, SEEC-139, SEEC-17, SEEC-21, SEEC-134, SEEC-162, SEEC-51
Air Pollution (1 Award)	B-3	SEEC-24, SEEC-133, SEEC-102, SEEC-43
Environmental Biotechnology (1 Award)	C-2, C-5	SEEC-111, SEEC-105, SEEC-112, SEEC-11, SEEC-79, SEEC-98, SEEC-19, SEEC-14
Biomass to Fuel Conversion (2 Awards)	C-3, C-4, C-6	SEEC-11, SEEC-112, SEEC-105, SEEC-61, SEEC-46, SEEC-104, SEEC-160, SEEC-130
Sprays and Atomization (1 Award)	A-6 B-6	SEEC-166, SEEC-117, SEEC-168, SEEC-136, SEEC-87
Waste Remediation (1 Award)	C-7 C-8	SEEC-152, SEEC-157, SEEC-81, SEEC-116, SEEC-60, SEEC-78