

SECTION	ENGINEERING SCIENCES	
Sectional President	Professor (Dr) Swami Vedajnananda , Heritage Institute of Technology, Kolkata	
Sectional Recorder	Dr Pankaj Kumar Roy , Jadavpur University, Kolkata	
Sectional Secretary	Prof. Bhupinder Verma , Lovely Professional University, Phagawara	
January 04, 2019		
14:00 – 17:00		
SECTIONAL COMMITTEE MEETING		
Venue	:	Block 34, Room -213
Presidential Address	:	Professor (Dr) Swami Vedajnananda Engineering and Technology: Glorious Past and Bright Future of India
Platinum Jubilee Lecture	:	Dr Pradosh Prasad Chakrabarti, Principal Scientist, CSIR— Indian Institute of Chemical Technology <i>Greener Technologies for Utilization of an Indigenous Raw Material – Impact on Indian Rice Bran Oil Refining & Valorization of its By-products</i>
Invited Lectures	:	Dr Arunkanti Biswas, Former Dy Director, CSIR-- NEERI Former Member, SEAC& DST(WB), NABET, QCI <i>Sustainable Technology for Rejuvenation of River Ganga</i>
	:	Mr Vikram Swarup, CMD, Paharpur Cooling Towers <i>Facets of Paharpur Group in Service to the Nation</i>
	:	Mr Gyanesh Chaudhary, MD & CEO, Vikram Solar Ltd. <i>Role of Vikram Solar in making Future India</i>
	:	Mr Arvind Srivastava, Jt. Registrar, Heritage Institute of Technology <i>Sustainable Practices in Educational Institutions: A Case Study</i>
Young Scientist Award Presentations	:	Kaustav Chatterjee , IIT Roorkee, Roorkee, Uttarakhand. Pallabi Das , CSIR-Central Institute of Mining & Fuel Research, Barwa Road, Dhanbad, Jharkhand. Prosenjit Das , CSIR-Central Mechanical Engineering Research

	Institute, Mahatma Gandhi Avenue, Durgapur
17.00 – 17.30 SECTIONAL COMMITTEE ELECTION	
January 05, 2019	
Venue	Block 34, Room -213
14.00 – 16.00 Symposium: Sustainable Technologies for Future India	
Keynote Address-I	Dr Abhijit Dasgupta , Jt Managing Director, Dastur & Co. Ltd <i>Sustainable Technologies for Future India</i>
Keynote Address-II	Mr Sanjiv Singh , Chairman, Indian Oil Corporation Ltd. <i>The Petro Vision of IOCL and its Associates for Future India</i>
Invited Lectures	Mr A K Pandey , General Manager, CSR & Civil, Coal India Ltd. <i>Coal India's Vision for Rebuilding India</i>
	Mr V K Raizada , Executive Director, Panipat Refinery, Indian Oil Corporation Ltd. <i>Highlights of IOCL's Panipat Refinery and its Specialties</i>
	Mr Amitava Mukherjee , Associate Vice President and Head-Internal Development, M.N. Dastur & Company (P) Ltd <i>Multi-Dimensional Modelling for Collaborative Engineering and Beyond</i>
	Professor (Dr) Ramesh Kanwar , Vice Chancellor, Lovely Professional University <i>Water Challenges for India's Economic Growth in 21st Century - Engineering Solutions</i>
16.15 – 17.45 Symposium: Sustainable Technologies for Future India	
Invited Lectures	Professor Bhaskar Gupta , Former Chairman, WBJJEB and Professor, ETCE, Jadavpur University <i>Science & Technology: World Views: Oriental Versus Occidental</i>

	<p>Ms Sayani Thakur, Alumni, Heritage Institute of Technology</p> <p><i>Sustainability in Indian Psyche with its Innate Spirituality as a Foundation to Future Growth</i></p>
	<p>Mrs Mohua Basu, General Manager, Panipat Refinery, Indian Oil Corporation Ltd.</p> <p><i>Role of Women in Engineering Profession</i></p>
	<p>Dr Kalpana Roychowdhury, Former Director, Geological Survey of India</p> <p><i>Utilization of Green Energy for Developing India</i></p>
	<p>Dr Pankaj Kumar Roy, Professor, School of Water Resources Engineering, Jadavpur University</p> <p><i>Cost Effective Community Based Water and Waste Water Treatment System in Rural Villages of West Bengal Effected by Arsenic Contamination Hazards</i></p>
15.00 – 17.30	Concurrent Poster Session –I

January 05, 2019	
Venue	Block 36, Room -409
14.00 – 17.30	Symposium: Green Energy Engineering & Technology for Rebuilding India
Invited Lectures	<p>Professor (Dr) Sudip K Das, Head , Department of Chemical Engineering, University of Calcutta & Honorary Secretary, Indian Institute of Chemical Engineers</p> <p><i>Bioactive Glass Ceramics - the Wonder Biomaterial</i></p>
	<p>Dr Subhabrata Sengupta, Former Director Grade Scientist, CSIR—Indian Institute of Chemical Biology</p> <p><i>Crude Glycosidases of the Shrub Tinospora Cordifolia Immobilised on Bagasse Saccharify Starch into Glucose and Hydrolyse Sucrose</i></p>
	<p>Dr Pinaki Sarkar, Senior Principal Scientist CSIR- Central Institute of Mining and Fuel Research</p> <p><i>Advanced Futuristic Technological developments for</i></p>

	<i>coal based Clean-Energy/ Green-energy production</i>
Invited Lectures	<p>Dr Ateet Dutt, Assistant Professor, Instituto de Investigaciones en Materiales, Universidad Nacional Autónoma de México</p> <p><i>Smart semiconductor materials for their use in the photovoltaic industry</i></p>
	<p>Dr Ramanuj Narayan, Principal Scientist, Polymers and Functional Materials, CSIR—Indian Institute of Chemical Technology</p> <p><i>Materials Engineering for Third Generation Solar Cell and Coatings</i></p>
	<p>Dr Amitava Majumdar, Head, Research & Development, Vikram Solar Ltd.</p> <p><i>Role of Reliability of Photovoltaic Modules for Sustainable Renewable Energy Technology</i></p>
	<p>Prof. S.P. Khatkar, Head, Department of Chemistry, Director, University Industry Liaison Cell, M.D. University, & Convener, ISCA, Rohtak Chapter</p> <p><i>Luminescent Nanomaterials for Energy Saving Display Applications</i></p>
	<p>Mr Tapotanay Pal, Director, Terrae Green Technologies Ltd.</p> <p><i>Ongoing Problems of Solid Waste Management and its Solutions</i></p>
	<p>Mr Chandra Rajwar, Product Manager- Molecular and Atomic Spectroscopy, Agilent Technologies Ltd</p> <p><i>Solar cell characterization using UV-Vis-NIR Spectroscopy</i></p>
	<p>Prof. Ashok Kumar Jha, Department of Chemistry, Tilaka Majhi Bhagalpur University</p> <p><i>Removal of Arsenic and Chromium from aqueous medium by Bentonites</i></p>
Oral Presentation	<p>Mr Ashanendu Mandal, Department of Chemical Engineering, University of Calcutta</p> <p><i>Removal of Phenol from Aqueous Solution using</i></p>

	<i>Activated Carbon from Coconut Coir</i>
15.00 – 17.30	Concurrent Poster Session –I

January 06, 2019	
Venue	: Block 36, Room -409
14.00 – 16.00	Symposium: Green Energy Engineering & Technology for Rebuilding India
Keynote Address-I	Dr Asit K Das , Head, Refinery R & D, Reliance Industries Ltd. <i>Green Energy for India: Some Facts, Some Dreams</i>
Keynote Address-II	Mr B V Ramagopal , Director, Refineries, Indian Oil Corporation Ltd. <i>Refinery Operations in IOCL and its Specialties</i>
Invited Lectures	Mr N C Pandey , Director (T & FS), ONGC Ltd. <i>ONGC's Initiative for Rebuilding India</i>
	Dr S Venkata Mohan , Principal Scientist & Head, Bioengineering and Environmental Sciences, CSIR-Indian Institute of Chemical Technology <i>Retrofitting Waste Remediation for Renewable Energy and Chemicals</i>
	Prof. Chiranjib Bhattacharjee , Registrar & Dean, Engineering & Technology, Jadavpur University <i>Advanced technologies for wastewater treatment leading to sustainable development: A case study on dairy waste</i>
	Mr Sitendu Mandal , Chief Scientist and Head Specialty Glass Technology Division and Head, Publicity and Public Interface Division, CSIR- Central Glass and Ceramic Research Institute <i>Recent Achievements on Manufacturing Specialty Glasses at CSIR-CGCRI for Strategic Application</i>
16.15 – 17.45	Symposium: Sustainable Technologies for Future India
Session Chair:	
Invited Lectures	Dr Sudarsan Dash , Senior Program Officer, United States-India Educational Foundation <i>Fulbright-Nehru and other Fulbright Fellowship</i>

	<i>opportunities to the U.S.</i>
	Dr Y A Haque , Representative, UNICEF, India <i>Activities of UNICEF for Sustainable Goal in India</i>
	Mr Ravi Srivastava , First Secretary for Environment, Science and Technology Affairs (EEST) US Embassy, New Delhi <i>Contribution towards Sustainable Technological Growth of India</i>
	Prof.- Dr Lovi Raj Gupta , Executive Dean, Faculty of Technology and Sciences, Lovely Professional University <i>Bharat 4.0</i>
	Mr Samiran Ghosh , Deputy Chief Engineer (Roads Dept.), The Kolkata Municipal Corporation <i>Off Street Parking Need for Densely Populated Urban Setting to offset Vehicular Pollution</i>
15.00 – 17.30	Concurrent Poster Session –I

January 06, 2019	
Venue	Block 34, Room -213
14.00 – 17.30	Symposium: Sustainable Technologies for Future India
Invited Lectures	Dr Nilangshu Bhusan Basu , Chief Technical Advisor, The Kolkata Municipal Corporation & Former General Secretary, ISCA & Former Sectional President, Engineering sciences <i>Critical Issues of Megacities- Kolkata</i>
	Mr Prabir Kumar Raychaudhuri , Former Sectional President, Engineering Sciences, ISCA <i>Sustainable Energy --- Challenges Ahead</i>
	Mr Arindam Chakraborty , Process Specialist, Fluor Daniel India Pvt. Ltd. <i>Sulphate Removal Plant for Injection Water –</i>

	<i>Technological Grace for O&G Industry</i>
Invited Lecture	<p>Prof. Bhupinder Verma, Additional Dean, School of Electronics and Electrical Engineering, Lovely Professional University</p> <p><i>Issues Related to Sustainable Development</i></p>
Oral Presentations	<p>Dr E. Bhaskaran, Deputy Director of Industries and Commerce, Govt. of Tamil Nadu</p> <p><i>Industry 4.0 in Chennai Automotive Industry Cluster</i></p>
	<p>Dr Ranjana Das, Department of Chemical Engineering, Jadavpur University</p> <p><i>Photo-membrane Reactor: A Sustainable Approach for Environmental Pollution Control</i></p>
	<p>Dr Manju Pandey, Solidstate Electronics Research Laboratory, Faculty of Engineering and Technology, Jamia Millia Islamia University</p> <p><i>Highly Sensitive RH Sensor Developed by Alumina Thin Film</i></p>
	<p>Prof. Sudip Basack, Head, Department of Civil Engineering, Kaziranga University</p> <p><i>Mathematical Analysis of Prefabricated Vertical Drains for Soft Ground Improvement</i></p>
	<p>Ms Srila Banerjee, Ceramic Membrane Division, CSIR-Central Glass and Ceramic Research Institute, Kolkata</p> <p><i>Treatment of Tannery Wastewater using Ceramic Membrane Based MBR Process</i></p>
	<p>Mr Govind Singh Patel, Lovely Professional University, Phagwara</p> <p><i>An Information Model for Developing a Smart City by Internet of Things</i></p>
	<p>Mr Krishna K. Agrawal, Consultant</p> <p><i>Holistic & Comprehensive Rural Development of India</i></p>
15.00 – 17.30 Concurrent Poster Session –I	

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January 07, 2019	
14:00 – 15:00	
Venue	Block 34, Room -213
14.00 – 15.00	Symposium Lecture & Oral Presentation
Symposium Lecture	<p>Prof (Dr) Yumnam Jayanta Singh, Director, NIELIT, Kolkata</p> <p><i>Possible ways of Green Computing and ICT</i></p>
Oral Presentations	<p>Mr Gajendra Kumar Mourya, Assistant Professor, Department of Biomedical Engineering, School of Technology, North Eastern Hill University, Shillong</p> <p><i>3D Simulation for Computer Guided Liver Biopsy and Needle Path Planning from CT Image</i></p>
	<p>Mr Shamik Chatterjee, Department of Electrical Engineering, Lovely Professional University, Phagwara</p> <p><i>LQR based PID² controller for Automatic Voltage Regulator</i></p>
	<p>Mr Cherry Bhargava, Research Scholar, ECE Department, IKG Punjab Technical University, Jalandhar</p> <p><i>Health Monitoring and Reliability Prediction of Electrolytic Capacitor</i></p>
GENERAL DISCUSSION AND RECOMMENDATIONS	