



**Indo-German Conference on Sustainability**  
Exploring planetary boundaries and their challenges and opportunities

Organized by  
**Indo-German Centre for Sustainability (IGCS)**  
**27 – 28 February 2016**  
IC&SR Building,  
**Indian Institute of Technology Madras**

# **TECHNICAL PROGRAM**



## **Indo-German Conference on Sustainability**

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**IC&SR Building,**

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### **Programme**

#### **February 27 , 2016**

**Registration: 8:30 to 9:00 am**

#### **Inaugural Session**

Venue: ICSR Auditorium

**09.00 am-10.45 am**

**(Details of Inaugural Session will be provided in due course)**

<p align="center"><b>February 27, 2016</b>  <b>Auditorium: Key Note Address-1</b>  <b>10.45 am -11.30 am</b>  <b>Moderator: Prof. B.S. Murty, IIT Madras</b></p>		
10.45-11.30 am Noon	Keynote Address	Prof P.P. Mujumdar, Chairman, Interdisciplinary Centre for Water Research, IISc, Bangalore.
<b>Time Slot</b>	<p align="center"><b>Technical Session-1.1</b>  <b>Topic: Energy and Power (3 Papers)</b>  <b>11.30 am – 12.30 pm</b>  <b>Chairman:</b></p>	<b>Title</b>
11.30 am – 11.50 am	Talk by <b>Mr. Simon Eiden</b> Simon Eiden (OWI Oel-Waerme-Institute GmbH, Germany); Bernd Leuchtle (RWTH Aachen University, Germany); Winfried Koch, Roy Hermanns and Klaus Lucka (OWI Oel-Waerme-Institute GmbH, Germany); Lars Blank (RWTH Aachen University, Germany)	<b>Topic: Micro-emulsions - microbial stabilization and growth on biogenic fuels (1570211091)</b>
11.50 pm –12.10 pm	Talk by <b>Mr. D. Kareemulla</b> Dudekula Kareemulla (IIT Madras, India); Sreenivas Jayanti (Indian Institute of Technology Madras, India)	<b>Topic: Post Oxy-fuel CO2 Enrichment for CCS of Coal-fired Power Plants (1570208591)</b>
12.10 pm –12.30 pm	Talk by <b>Ms Pallavi Bharadwaj</b> Pallavi Bharadwaj and Vinod John (Indian Institute of Science, India)	<b>Topic: Cost Benefit Comparison of Grid-tied and Dual Mode PV System Considering Grid Outage Duration (1570206445)</b>
<b>12.30 pm – 1.30 pm</b>	<b>Lunch at AC Dining Hall</b>	

<b>Time Slot</b>	<b>February 27, 2016</b> <b>Technical Session-1.2, Hall-1</b> <b>11.30 am – 12.30 pm</b> <b>Topic: Waste Management (3 Papers)</b> <b>Chair: Dr. P. Sasidhar, IGCS, IIT Madras</b>	<b>Title</b>
11.30 am – 11.50 am	Talk by <b>Prof Martin Kranert</b> Martin Kranert (Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, Germany); Dominik Leverenz and Gerold Hafner (University of Stuttgart, Germany)	<b>Topic: Avoiding food waste - a measure for sustainability (1570181489)</b>
11.50 pm –12.10 pm	Talk by <b>Ms Anu Thomas</b> Anu Thomas (Indian Institute of Technology Madras, India); Ligy Philip (Indian Institute of Technology Madras (IIT M), India); Martin Kranert (Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, Germany)	<b>Topic: Optimization of bulking materials for Co-composting of septage ( 1570183813)</b>
12.10 pm –12.30 pm	Talk by <b>Mr. Max Juraschek</b> Max Juraschek (Technische Universität Braunschweig, Germany); Vikrant Bhakar (Birla Institute of Technology and Science, India); Gerrit Posselt, Alexander Kaluza, Stefan Böhme and Christoph Herrmann (Technische Universität Braunschweig, Germany); Kuldip Singh Sangwan (Birla Institute of Technology and Science, India)	<b>Topic: Recycling of plastic waste using fused deposition modeling as a production process (1570184267)</b>
<b>12.30 pm – 1.30 pm</b>	<b>Lunch at AC Dining Hall</b>	

<b>Time Slot</b>	<b>February 27, 2016</b> <b>Technical Session-1.3, Hall-2</b> <b>11.30 am – 12.30 pm</b> <b>Topic: Land Use (3 Papers)</b> <b>Chair: Dr. Mohan Kanda, IGCS IIT Madras</b>	<b>Title</b>
11.30 am – 11.50 am	Talk by <b>Prof. Peter Fiener</b> Peter Fiener (University Augsburg, Germany)	<b>Topic: Land use induced potential for carbon sequestration in South India – lessons learned from a detailed soil organic carbon survey in an intensively used catchment in Tamil Nadu (1570179793)</b>
11.50 pm –12.10 pm	Talk by <b>Mrs Neha Madan</b> Neha Madan (College of Engineering Pune, India)	<b>Topic: Land Management strategies for sustainable urban growth- Case Study Pune. (1570210183)</b>
12.10 pm –12.30 pm	Talk by <b>Mr Oliver Kirui</b> Oliver Kirui (Center for Development Research, University of Bonn, Germany)	<b>Topic: Economics of Land Degradation and Sustainable Land Management in Eastern Africa (1570185825)</b>
12.30 pm – 1.30 pm	<b>Lunch at AC Dining Hall</b>	

<p align="center"><b>February 27, 2016</b>  <b>Auditorium: Key Note Address-2</b>  <b>1.30 pm -2.15 pm</b>  <b>Moderator: Prof. Krishna Vasudevan, IIT Madras</b></p>		
1.30 pm -2.15 pm	<b>Keynote Address</b>	<b>Dr. Dieter Dohnal, Executive Director Technology, Maschinenfabrik Reinhausen GmbH, Germany</b>
<b>Time Slot</b>	<b>Technical Session-2.1a, IAR Conf Room 2.15 pm-3.15 pm Topic: Energy and Power (4 Papers) Chair: Prof. Pramod Mehta, IIT Madras</b>	<b>Title</b>
2:15 pm -2.35 pm	Talk by <b>Prof. Christian Oliver Paschereit</b> Christian Oliver Paschereit (Technische Universität Berlin, Germany); Panagiotis Stathopoulos (National Technical University of Athens, Greece)	<b>Topic: Innovative gas turbine cycles for power generation(1570216921)</b>
2.35 pm-2.55 pm	Talk by <b>Ms. A. Jayashree</b> A. Jayashree, Anusha Gontla V V and Benny Raphael (Indian Institute of Technology, Madras, India)	<b>Topic: Thermal comfort evaluation of a radiant cooling system coupled with mechanical ventilation ( 1570184265)</b>
2.55 pm -3.15 pm	Talk by <b>Mr Vinith Kumar Lakshmanan</b> Vinith Kumar Lakshmanan, Ganesh Duraisamy, Sathyajith Sridhar and Santosh Winfred (Anna University, India)	<b>Topic: Study of Combustion, Emission, Performance characteristics of Biodiesel derived from Waste Chicken Fat in a CI Engine (1570207047)</b>
<b>3.35 pm – 4.05 pm</b>	<b>Coffee Break, AC Dining Hall</b>	
<b>Time Slot</b>	<b>Technical Session-2.1b, IAR Conf Room, 4.05 pm-5.25 pm Topic: Energy and Power (4 Papers) Chair: Prof. Ajit Kolar, IIT Madras</b>	<b>Title</b>
4.05 pm -4.25 pm	Talk by <b>Mr Holger Nawroth</b> Holger Nawroth and Christian Oliver Paschereit (Technische Universität Berlin, Germany)	<b>Topic: Experimental Investigation of Direct Combustion Noise of a Turbulent Jet Flame (1570215359)</b>
4.25 pm -4.45 pm	Talk by <b>Prof. Pramod S. Mehta</b> Sravan Pannala, K Anand and Pramod S Mehta, (Indian Institute of Technology, Madras, India)	<b>Topic: Investigations on Sustainability of Biodiesel Fuels (1570207821)</b>
4.45 pm-5.05 pm	Talk by <b>Dr. N. Nallusamy</b> Nallusamy Nallusamy (SSN College of Engineering, India); Panneerselvam Malathi Sivaram (Research Assistant, India); Subbian Karuppuchamy (Alagappa University, India)	<b>Topic: Mathematical modelling and experimental investigation on solar parabolic trough collector integrated with thermal energy storage system (1570208153)</b>
5.05 pm- 5.25 pm	Talk by <b>Mr. Ivo Schneider</b> Ivo Schneider, Frank Behrendt (TU Berlin, Germany)	<b>Topic: Hydroliquefaction of Lignin using an iron-based Catalyst (1570210193)</b>

<b>Time Slot</b>	<b>February 27, 2016</b> <b>Technical Session-2.2a, Hall-1</b> <b>2.15 pm-3.35 pm</b> <b>Topic: Waste Management (4 Papers)</b> <b>Chair: Prof. Martin Kranert, Univ of Stuttgart</b>	<b>Title</b>
2:15 pm -2.35 pm	Talk by <b>Mr. C. Ramprasad</b> Ramprasad Chandrasekaran (Indian Institute of Technology Madras (IIT M), India); Mohammed A (Research Assistant, India); Ligy Philip (Indian Institute of Technology Madras (IIT M), India)	<b>Topic: Sustainable Decentralised Wastewater Management in Urban Residential Areas.(1570182907)</b>
2.35 pm-2.55 pm	Talk by <b>Ms Anu Thomas</b> Anu Thomas (Indian Institute of Technology Madras, India); Ligy Philip (Indian Institute of Technology Madras (IIT M), India); Martin Kranert (Institute for Sanitary Engineering, Water Quality and Solid Waste Management, University of Stuttgart, Germany)	<b>Topic: Dewatering of Septage for Co-composting (1570183805)</b>
2:55 pm -3.15 pm	Talk by <b>Ms Jil Sheth</b> Jil Sheth, Kinara Patel and Ganesh Devkar (CEPT University, India)	<b>Topic: Analysis of Construction and Demolition Waste Management Policies from Sustainability Perspective (1570210951)</b>
3.15 pm -3.35 pm	Talk by <b>Mr Cornelius Sandhu</b> Patrick Opala, Andre Kilian, Philip Grafe, Justus Tiepmar and Thomas Grischek (University of Applied Sciences Dresden, Division of Water Sciences, Germany); Cornelius Sandhu (University of Applied Sciences Dresden, Germany); Ankush Gupta (Homi Bhabha Centre for Science Education, Mumbai & Formerly IIT Roorkee, India); Pradeep Kumar (IIT Rourkee; Prakash Kimothi (Uttarakhand Jal Sansthan, India)	<b>Topic: Robust and Low-cost Disinfection Measures and Water-tightness Methods for Urban Water Supply RBF Wells in India (1570183963)</b>
<b>3.35 – 4.05 pm</b>	<b>Coffee Break, AC Dining Hall</b>	
<b>Time Slot</b>	<b>February 27, 2016</b> <b>Technical Session-2.2b, Hall-1</b> <b>4.05 pm-5.45 pm</b> <b>Topic: Waste Management (5 Papers)</b> <b>Chair: Dr. Martina Scheer, Engineering Consultants</b>	<b>Title</b>
4.05 pm -4.25 pm	Talk by <b>Mr Fatha Naji</b> Fatha Naji and Asya Drenkova-Tuhtan (University of Stuttgart, Germany)	<b>Topic: Phosphorus recovery from wastewater, sewage sludge and sewage sludge ash (1570210717)</b>
4.25 pm -4.45 pm	Talk by <b>Dr S. Netaji</b> Nethaji Sundarabal (Manipal Institute of Technology, Manipal, India); Arumugam Sivasamy (CSIR-CLRI, India)	<b>Topic: Application of magnetite nanoparticles coated active carbon derived from lignocellulosic waste biomass for wastewater remediation (1570206955)</b>

4.45-5.05 pm	<p>Talk by <b>Dr. Jaganathan Senthilnathan</b> Jaganathan Senthilnathan (Indian Institute of Technology Madras &amp; National Cheng Kung University, India); Masahiro Yoshimura (National Cheng Kung University, Taiwan)</p>	<p><b>Topic: Submerged Liquid Plasma for Treatment of pharmaceutical wastewater (1570183083)</b></p>
5.05 -5.25 pm	<p>Talk by <b>Dr. Madan Kumar Lakshmanan</b> Madan Kumar Lakshmanan (CSIR-CEERI, India); Hardeep Mor (BITS-Pilani, India); Giridhar Subramanian, Chandrasekar Venkataraman and Deepak Srivatsav (NIT Trichy, India); Chinnu Tharmalingam (CSIR-CEERI, India)</p>	<p><b>Title: A Statistical Approach for the Classification of Plastic Polymers using Near Infrared Spectroscopy towards Efficient Waste Management (1570181145)</b></p>
5.25-5.45 pm	<p>Talk by <b>Prof. T.S. Chandra</b> Jayavignesh Vijayan (IIT Madras, India); Anju KS (Indian Institute of Technology - Madras, India); Thomas Eichmeier (Bauhaus-University Weimar, Germany); Ravikrishna R (IIT Madras, India); Franziska Steinbruch (Indian Institute of Technology Madras, India); Christian Springer (Bauhaus-University Weimar, Germany); TS Chandra (Indian Institute of Technology Madras, India)</p>	<p><b>Title: Detection of pharmaceuticals and personal care products from metro water and ground water sources in Chennai (1570213864)</b></p>



<b>Time Slot</b>	<b>February 27, 2016</b> Technical Session-2.3a, Hall-2 2.15 pm-3.35 pm <b>Topic: Generic Sustainability (4 Papers)</b> <b>Chair: Dr. Franziska Steinbruch, IITM</b>	<b>Title</b>
2:15 pm -2.35 pm	Talk by <b>Prof Thomas Grischek</b> Thomas Grischek (University of Applied Sciences Dresden, Division of Water Sciences, Germany); Cornelius Sandhu (University of Applied Sciences Dresden, Germany); Narayan Ghosh (National Institute of Hydrology, India); Prakash Kimothi (Uttarakhand Jal Sansthan, India)	<b>Topic: A Conceptual Master Plan for RBF Water Supply in India - Science, Policy &amp; Implementation Aspects (1570183329)</b>
2.35 pm-2.55 pm	Talk by <b>Mr Cornelius Sandhu</b> Cornelius Sandhu, Thomas Grischek and Thomas Voltz (University of Applied Sciences Dresden, Division of Water Sciences, Germany); Wido Schmidt (DVGW – Water Technology Center, Dresden Branch, Germany); Hilmar Börnick (TU Dresden, Institute for Water Chemistry, Germany); Pradeep Kumar (IIT Roorkee, India); Prakash Kimothi (Uttarakhand Jal Sansthan, India)	<b>Topic: Riverbank Filtration for Year-round Urban Water Supply in India (1570183531)</b>
2:55 pm -3.15 pm	Talk by <b>Ms Georgina Njiraini</b> Georgina Njiraini and Djiby Thiam (Centre for Development Research, University of Bonn, Germany)	<b>Topic: Transaction Costs associated with water policies in the Olifants basin of South Africa (1570184221)</b>
3.15 pm – 3.35 pm	Talk by <b>Mr. Sunil Dahiya</b> Sunil Dahiya and Suresh Jain (TERI University, India); Suneel Pandey (TERI, India); Poonam Khatri (TERI University, India)	<b>Topic: Assessing sustainability of food grain packaging from climate change perspective: A case of Jute sacks manufacturing in India (1570181177)</b>
<b>3.35 pm – 4.05 pm</b>	<b>Coffee Break, AC Dining Hall</b>	
<b>Time Slot</b>	<b>February 27, 2016</b> Technical Session-2.3b, Hall-2 4.05 pm-5.05 pm <b>Topic: Generic Sustainability (3 Papers)</b> <b>Chair: Dr. Katrin Premke, Leibniz Institute</b>	<b>Title</b>
4.05 pm -4.25 pm	Talk by <b>Mr. S. Niranjana</b> Niranjana S (UVCE, India)	<b>Topic: Prediction of UHO by Morphometric Parameters at Different Reaches of Mainstream (1570210107)</b>
4.25 pm -4.45 pm	Talk by <b>Ms. Shrimoyee Bhattacharya</b> Shrimoyee Bhattacharya, Sonali Patro and Sujaya Rathi (Center for Study of Science, Technology and Policy, India)	<b>Topic: Creating Sustainable Urban Systems: Need for redesigning indicators for urban infrastructure and services (1570208733)</b>
4.45 pm- 5.05 pm	Talk by <b>Dr. Arne Harms</b> Arne Harms (Leipzig University, Germany)	<b>Topic: The Invisible Hand in Nature's Baskets: Reflections on the Sustainability of Economic Valuations. (1570215450)</b>

**Celebration of the 5<sup>th</sup> anniversary of IGCS  
Cultural Programme**

27<sup>th</sup> February 2016  
Central Lecture Theater, IIT Madras

**6.15 pm-8.30 pm**

**(Details of Cultural Programme will be provided in due course)**

**8.30pm - 10pm**

Dinner: 8:30 pm – 10 pm at AC dining hall, ICSR

*All are welcome.*

## Programme

**February 28, 2016**

Special IGCS Session  
Venue: ICSR Auditorium

9.00 am – 10.40 am

**Chair:**

9.00 am – 9.25 am	Invited Talk by <b>Prof Rafiq Azzam</b> , IGCS Area Coordinator
9.25 am-9.50 am	Invited Talk by <b>Prof Sudhir Chella Rajan</b> , IGCS Area Coordinator
9.50 am-10.15 am	Invited Talk by <b>Prof Ajit Kolar</b> , Former IGCS Energy Area Coordinator
10.15 am–10.40 am	Invited Talk by <b>Prof Ligy Philip</b> , IGCS Waste Area Coordinator
10:40 am-11.15 am	<b>Coffee Break, AC Dining Hall</b>

### February 28, 2016

Auditorium: Key Note Address-3

11.15 Noon -12.00 Noon

Moderator: Dr. Christoph Woiwode, IITM

11.15 Noon -12.00 Noon	Keynote Address	Prof. Dr.-Ing. Peter Gotsch, Int. Cooperation and Urban Development, TU Darmstadt
<b>Time Slot</b>	<b>February 28, 2016</b> Technical Session-3.1, IAR Conf Room 12.00 Noon -1.00 pm Topic: Land Use (3 Papers) Chair: Prof. Peter Fiener, Univ of Augsburg	<b>Title</b>
12.00-12.20 pm	Talk by <b>Prof. Peter Fiener</b> Paul D. Wagner (Freie Universität Berlin, Germany); Murty Bhallamudi (IIT Madras, India); Balaji Narasimhan (Indian Institute of Technology Madras, India); Lakshmi Kantakumar (Institute of Environment Education and Research & Bharati Vidyapeeth University, India); Shamita Kumar (Institute of Environment Education & Research, Bharati Vidyapeeth University, India); Peter Fiener (University Augsburg, Germany)	<b>Topic: Analyzing the effects of dynamic representations of land use change in hydrologic impact assessments (1570184429)</b>
12.20-12.40 pm	Talk by: <b>Prof Klaus Reicherter</b> Klaus Reicherter (RWTH Aachen University)	<b>Topic: Impact of coastal hazards on urban environments (1570215447)</b>

12.40-1.00 pm	Talk by <b>Dr Martina Scheer</b> Martina Scheer (Engineering Consultants Scheer, Germany)	<b>Topic: Application of traditional and advanced cost approaches including investment theory based methods in sustainable technical infrastructure projects (1570212392)</b>
<b>1.00 pm – 2.00 pm</b>	<b>Lunch at AC Dining Hall</b>	

<b>Time Slot</b>	<b>February 28, 2016</b> <b>Technical Session-3.2, Hall-1</b> <b>12.00 Noon -1.00 pm</b> <b>Topic: Water (3 Papers)</b> <b>Chair:</b>	<b>Title</b>
12.00-12.20 pm	Talk by <b>Mr C . Ramprasad</b> Ramprasad Chandrasekaran and Ligy Philip (Indian Institute of Technology Madras (IIT M), India)	<b>Topic: Greywater treatment and reuse using constructed wetlands - A sustainable approach (1570182859)</b>
12.20-12.40 pm	Talk by <b>Mr. Tilman Floehr</b> Tilman Floehr and Henner Hollert (RWTH Aachen University, Germany)	<b>Title: A glimpse in the black box - Ecotoxicological impacts on the Yangtze Three Gorges Reservoir, China (1570184231)</b>
12.40-1.00 pm	Talk by <b>Ms. Krithika Delhiraja</b> Krithika Delhiraja (Indian Institute of Technology Madras(IITM), India); Srinivas Reddy (IIT Madras, India); Ligy Philip (Indian Institute of Technology Madras (IIT M), India); Sharon Nadar and Philip Varghese (IITM, India)	<b>Topic: Preliminary Studies on Treatment of Black Water by Sustainable Technology - A Zero Liquid Discharge Toilet (1570180907)</b>
<b>1.00 pm – 2.00 pm</b>	<b>Lunch at AC Dining Hall</b>	

Time Slot	<b>February 28, 2016</b> <b>Technical Session-3.3, Hall-2</b> <b>12 Noon -1.00 pm</b> <b>Topic: Air Quality (3 Papers)</b> <b>Chair: Prof. Sachin Gunte, IITM</b>	Title
12.00-12.20 am	Talk by <b>Dr. S.M. Shiva Nagendra</b> Shiva Nagendra SM (IIT Madras, India); Uwe Schlink (Helmholtz Centre for Environmental Research, Germany); Jyothi S Menon, Lekshmi Mohan, Sathyannarayana N Gummadi and Ravikrishna R (IIT Madras, India)	<b>Topic: Air Quality and Personal Exposure in Residential, Industrial and High-Traffic Regions ( 1570182453)</b>
12.20-12.40 am	Talk by <b>Ms. Jyothi S Menon</b> Jyothi S Menon and Shiva Nagendra SM (IIT Madras, India)	<b>Topic: Personal exposure to PM10 concentration at selected hotspots in Chennai city (1570184087)</b>
12.40-1.00 pm	Talk by <b>Mr. Anand Kakarla</b> Anand Kakarla (Indian Institute Of Technology Hyderabad, India); Soumya Jana (Indian Institute of Technology, Hyderabad, India); Swades De (Indian Institute of Technology Delhi, India)	<b>Topic: Fine Scale Mapping of Air Pollution based on Mobile Sensing: A Practical Prototype (1570206479)</b>
1.00 pm – 2.00 pm	Lunch at AC Dining Hall	

Time Slot	<p align="center"><b>February 28, 2016</b>  <b>Technical Session-4.1, IAR Conf Room</b>  <b>2.00 pm – 4.00 pm</b>  <b>Topic: Land use (7 Papers)</b>  <b>Chair: Prof. Peter Gotsch, TU Darmstadt</b></p>	Title
2.00-2.20 pm	Talk by <b>Mr. Tobias Kuttler</b> Tobias Kuttler (Technical University Berlin, Germany); Pushkal Shivam (Indian Institute of Technology Madras, India)	<b>Topic: Development by "state of exception" in peri-urban Chennai - the case of Sriperumbudur (1570210137)</b>
2.20-2.40 pm	Talk by <b>Ms. Keerthi Purushothaman</b> Keerthi Purushothaman (Indian Institute of Technology Madras, India); Amala Devi (Indo-German Centre for Sustainability, India); Sudhir Chella Rajan (IIT Madras, India)	<b>Topic: Agent-based modelling of peri-urban land conversions as decisions of land-holding farmers (1570210015)</b>
2.40-3.00 pm	Talk by <b>Mr. Lakshmi Kankumar</b> Lakshmi Kankumar (Institute of Environment Education and Research & Bharati Vidyapeeth University, India); Priti Neelamsetti (JV Analytics, India); Paul D. Wagner (Freie Universität Berlin, Germany); Chandrasekhar Vibhute (JV Analytics, India)	<b>Topic: Projecting land use change in an eco-sensitive zone of Sawantwadi (Maharashtra) using Markov chains and artificial neural networks (1570184429)</b>
3.00 – 3.20 pm	Talk by <b>Mr Niklas Potthoff</b> Paul D. Wagner and Niklas Potthoff (Freie Universität Berlin, Germany); Balaji Narasimhan (Indian Institute of Technology Madras, India); Björn Waske (Freie Universität Berlin, Germany)	<b>Topic: Monitoring land use changes in the Chennai Basin using multi-temporal remote sensing data (1570184319)</b>
3.20-3.40 pm	Talk by <b>Dr Katrin Premke</b> Katrin Premke (Leibniz-Institute of Freshwater Ecology and Inland Fisheries, ZALF Müncheberg, Germany); Pascal Bodmer, Jenny Fabian (Leibniz-Institute of Freshwater Ecology and Inland Fisheries (IGB), Germany); Jayakumar Renganathan (IITM), Robert Taube and Katrin Attermeyer (Leibniz-Institute of Freshwater Ecology and Inland Fisheries, Germany)	<b>Topic: Carbon turn-over in a cascade of South Indian irrigation ponds (1570184237)</b>
3.40-4.00 pm	Talk by <b>Ms Divya Swaminathan</b> Ms Divya Swaminathan (Center for Development Research, University of Bonn, Germany)	<b>Topic: Landuse change, Agricultural Transformation and indigenous communities: A case study of the Soliga communities in Southern India</b>
4.00 pm – 4.30 pm	<b>High Tea at AC Dining Hall</b>	

Time Slot	<p align="center"><b>February 28, 2016</b>  <b>Technical Session-4.2, Hall-2</b>  <b>2.00 pm -4.00 pm</b>  <b>Topic: Energy and Power (7 Papers)</b>  <b>Chair: Prof. Oliver Paschereit, TU Berlin</b></p>	Title
2.00-2.20 pm	Talk by <b>Dr. Anand Krishnasamy</b> Anand Krishnasamy, S. Santhosh, J. Thangaraja, Pramod S. Mehta (Indian Institute of Technology Madras, India)	<b>Topic: Effects of Compositional Variations on Biodiesel Properties ( 1570209971)</b>
2.20-2.40 pm	Talk by <b>Dr Nitin Labhsetwar</b> Nitin Labhsetwar (NEERI, India)	<b>Topic: Catalytic Combustion of Producer Gas: A Potential Renewable Energy Option (1570215145)</b>
2.40-3.00 pm	Talk by <b>Mr. R. Senthil Kumar</b> Ranganathan Senthil Kumar (Anna University, India)	<b>Topic: Numerical and Experimental Investigation of the Transient Thermal Behaviour on Solar Photovoltaic Thermal (PV/T) Hybrid System (1570210033)</b>
3.00-3.20 pm	Talk by <b>Mr Abdus Azad</b> Abdus Azad, Dibakar Rakshit and S Kaushik (Indian Institute of Technology Delhi, India)	<b>Topic: A comparative study of energy efficient building using different Building Energy Modeling Programs (1570176115)</b>
3.20-3.40 pm	Talk by <b>Mr. K. Saikiran</b> Kasamsetty Saikiran (Indian Institute of Technology Madras, India); Benny Raphael (Indian Institute of Technology, Madras, India)	<b>Topic: A novel energy-efficient dehumidification system for a radiant cooled chamber (1570184111)</b>
3.40-4.00 pm	Talk by <b>Mr Sreejus Kumar</b> Sreejus Kumar and Arun Nagarkatti (Indian Institute of Technology Madras, India); Ajit Kolar (IIT Madras, India)	<b>Topic: Methodology to Estimate the Sustainability Index of a Solar Photovoltaic Energy System (1570205707)</b>
4.00-4.20 pm	Talk by <b>Mr Darpan das</b> Darpan Das (IIT Bombay, India)	<b>Topic: Study of Coal Gasification for Potential Applications in Cook Stoves (1570210143)</b>
4.00 pm – 4.30 pm	<b>High Tea at AC Dining Hall</b>	

Time Slot	<b>February 28, 2016</b> <b>Technical Session-4.3, Hall-1</b> <b>2.00 pm -4.00 pm</b> <b>Topic: Air Quality (3 Papers)</b> <b>Chair: Dr. Shiva Nagendra, IITM</b>	Title
2.00-2.20 pm	Talk by <b>Mr Sreekanth Bojjagani</b> Sreekanth Bojjagani (Centre for Environmental Science and Engineering, IIT Bombay, Mumbai, India); Anil Namdeo (Newcastle University, United Kingdom); Rakesh Kumar (National Environmental Engineering Research Institute, Mumbai Zonal Center, India); Virendra Sethi (Centre for Environmental Science and Engineering, IIT Bombay, Mumbai, India); OpalaMargaret Bell (Newcastle University, United Kingdom); Rashmi Patil (Centre for Environmental Science and Engineering, IIT Bombay, Mumbai, India)	<b>Title: Comparison of the Influence of Rain on Ambient Particulate Matter in London (UK) and Chandrapur (India) (1570210181)</b>
2.20-2.40 pm	Talk by <b>Dr. Anirban Middey</b> Anirban Middey, Navneet Kumar, Shweta Meshram, Mayuri Shrirang and Padma Rao (CSIR-National Environmental Engineering Research Institute, India)	<b>Title: Impression of fine dust and Black carbon concentrations at traffic junctures on ambient air quality - a pilot study in Nagpur city (1570212889)</b>
2.40-3.00 pm	Talk by <b>Ms Neha Agarwal</b> Neha Agarwal (Indian Institute of Technology, India); Shiva Nagendra SM (IIT Madras, India)	<b>Title: Modelling of Particulate Matter Size Distribution in Work Environments (1570181261)</b>
4.00 pm –4.30 pm	<b>High Tea at AC Dining Hall</b>	



**February 28, 2016**  
**Valedictory Function**  
**Venue: ICSR Auditorium**

4.30 pm-5.00 pm

4.30-4:35 pm	Welcome Address	<b>Prof Krishna Vasudevan</b> , Chairman, Local Organizing Committee
4.35-4.45 pm	Review of Conference Proceedings	<b>Prof. B.S. Murty</b> , IITM IGCS Area Coordinator, Water Management
4.45-4.55 pm	Distribution of Certificates to Prize winning papers	
4.55- 5.00 pm	Vote of Thanks	<b>Prof Ajit Kolar</b> , Chairman, Technical Program Committee