

WASTE TO ENERGY CONVERSION

[Org. by IIT GUWAHATI & NIT MIZORAM]

28th & 29th December, 2018

THEME: ‘Perspective and Trends in the Development of Science Education and Research’

DAY 1		28 th December, 2018 (Friday)
9:00 – 10:00		Registration
10:00 – 11:00		Inaugural Session
10:00 – 10:05		Welcome Address: Dr. Pankaj Kalita
10:05 – 10:10		Short Speech : TEQIP Coordinator, IIT Guwahati
10:10 – 10:15		Short Speech : TEQIP Coordinator, NIT Mizoram
10:15 – 10:20		Inaugural Speech: HOD, Dept. of ME , NIT Mizoram
10:20 - 10:30		Short Speech : Director, NIT Mizoram
10:30 - 10:55		Speech : Dr. R. Lalthangliana, Honorable Minister Dept. of Higher & Technical Education Govt. of Mizoram
10:55 - 11:00		Vote of Thanks : Dr. H. Lalhmingsanga, NIT Mizoram
TEA BREAK (11:00 – 11: 15)		
11:15 – 13:45		TECHNICAL SESSIONS I 28 th December, 2018 (Friday)
Chairman		Dr. Jyoti Prasad Chakraborty , IIT BHU
11:15 – 12:15 Keynote Address		Prof. Sudipta De, Jadavpur University Distributed energy solution: a few case studies with agricultural wastes of India
12:15 – 12:25		A.K.Das / GIFT, BHUBANESWAR / NCWEC-18-04/ Thermolysis of waste plastics into value added products and its future prospective
12:25 – 12:35		B. G. Abreha / IIT Guwahati / NCWEC-18-08/ Numerical Comparative Study of Thermal Energy Storage for Solar Cooking using Comsol Multiphysics Software
12:35 – 12:45		Sujit Roy / NIT Silchar / NCWES-18-11/ Study of Different techniques to Improve Biogas Generation in the Low Temperature Regions – A Review
12:45 – 12:55		Harrison Hihu Muigai / IIT Guwahati / NCWEC-18-15/ Estimating the higher heating value of noxious weeds through proximate and ultimate analysis for energy application
12:55 – 13:05		Chintak K. Parashar / CSIR-CMERI, Durgapur/ NCWEC-18-17/ Performance analysis of Plasma Gasification of municipal solid waste and scope of its energy potential
13:05 - 13:45		LUNCH
DAY 1		28 th December, 2018 (Friday)
13:45 – 13:45		TECHNICAL SESSIONS II
Chairman		Prof. Sudipta De, Jadavpur University
13:45 – 14:45 Keynote Address		Dr. Jyoti Prasad Chakraborty, IIT BHU In Search of a suitable pretreatment method for Biomass Processing
14:45 – 14:55		Siddhant Jain / IIT Guwahati / NCWEC-18-22/ Performance evaluation of various clear sky models for the estimation of global horizontal irradiance in Guwahati city, India
14:55 – 15:05		Rabindra K. Banik / IIT Guwahati / NCWEC-18-27/ Energy Scenario of Industries of North-East India- Issues & Prospects
15:05 – 15:15		Hirakh Jyoti Das / IIT Guwahati / NCWEC-18-28/ A Comparative Study On The Hydrodynamic And Heat Transfer Behaviour Of Conical Fluidized Bed With That Of A Columnar Pressurized Circulating Fluidized Bed
15:15 – 15:25		R. Lalbiaknungi / PHED Mizoram / NCWEC-18-29/ Construction of Biogas Plant for Rural Community in Mizoram

High Tea (15:25-15:40)	
15:40 – 15:50	Pavitra Singh / IIT Guwahati / NCWEC-18-30/ Development and performance evaluation of an efficient and user friendly rotating fluidized bed in static geometry (RFBSG)for drying applications
15:50 – 16:00	Renjith Krishnan / NIT Mizoram / NCWEC-18-05/ The Feasibility of Extracting Biodiesel from Waste Cooking Oil
16:00-16:10	Dr C. Lalengzama / HATIM / NCWEC-18-14/ Domestic waste disposal and management in Mizoram
16:10-16:20	I.B. Laskara / NIT Silchar /NCWEC-18-41/ Biodiesel production from used cooking oil using metal free phenolsulphonic acid formaldehyde resin
DAY 2	29 th December, 2018 (Saturday)
9:30 – 13:50	TECHNICAL SESSIONS III
Chairman	Dr. Ajay Kalamdhad, IIT Guwahati
9:00 – 10:00 Keynote Address	Prof. Anupam Dewan, IIT Delhi Challenges in modelling of engineering turbulent Flows
10:00 – 10:15	Shayaram Basumatary / IIT Guwahati / NCWEC-18-31/ Food waste utilization for anaerobic digestion: A sustainable energy conversion technique
10:15 – 10:25	Debangsu Kashyap / IIT Guwahati / NCWEC-18-32/ Waste heat recovery from engine exhaust through different refrigeration systems
10:25 – 10:35	Sharath Akarapu / NIT Mizoram / NCWEC-18-34/ SWOC Analysis of Twin Spark and GDI Technology on Performance and Emission of 2-stroke Engine
10:35– 10:45	Srimonti Dutta / IIT Guwahati / NCWEC-18-35/ Compositional and Magnetic Analysis of Bell-Metal on the basis of study of its processing by Artisans of Assam
10:45 – 10:55	Chandan Kakati / IIT Guwahati / NCWEC-18-38 / Waste Heat recovery: A review
Tea Break (10:55 – 11:10)	
11:10 – 11:20	Kalyani Rajkumari / NIT Silchar / NCWEC-18-40/ Waste to wealth: A sustainable protocol for production of biodisel by transesterification of soyabean oil using banana trunk ash as a heterogeneous catalyst
11:20 – 11:30	Debarshi Baruah / IIT Guwahati / NCWEC-18-42/ Testing of Solar Lantern Systems: A Case Study
11:30 – 11:40	Bishal Choudhury/ TISS, Guwahati/ NCWEC-18-48/
11:40 – 11:50	Prasanta Majumder/ NIT Mizoram/ NCWEC-18-49/ Application of Thermoelectric Generator and Organic Rankine Cycle (ORC) for Waste Energy Recovery - A Review
11:50 – 12:00	Shahrukh Hussain/ MZU, Aizawl/ NCWEC-18-50 / Feasibility study of implementation of microbial fuel cells in constructed wetlands for electricity generation
12:00 – 12:10	RishirajPurkayastha/ IIT Guwahati/ NCWEC-18-18/ Feasibility of municipal sewage sludge as a fuel for gasification - A study by thermogravimetric analysis
12:10 – 12:20	Akhil Mohan/ NIT Karnataka/ NCWEC-18-20/ Studies On The Effect Of Flyash (Class-F) As A Catalyst For The Co-Pyrolysis Of Scrap Tyre And Plastic Waste
12:20 – 12:30	Kanthala Uma Reddy / NIT Mizoram / NCWEC-18-33/ Suggestive Measures for Improvement of Power Production from Wind Energy in India
12:30 – 12:40	Dudul Das / IIT Guwahati/ NCWEC-18-39/ Development of a tube and sheet type PV/T collector: Experimental study and performance evaluation
12:40 – 13:50	LUNCH
13:50 – 15:45	TECHNICAL SESSIONS IV
Chairman	Prof. Anupam Dewan, IIT Delhi

13:50-14:50	<i>Dr. Ajay Kalamdhad, IIT Guwahati</i> <i>Biological Treatment of Biodegradable Waste</i>	
14:50 – 15:00	Gokul Gopan / NIT Mizoram / NCWEC-18-07/ Computational modelling of tapered fluidized bed gasifier using eulerian-eulerian model	
15:00 – 15:10	Aswathy M.S (Renjith Krishnan) / NIT Mizoram / NCWEC-18-05/ D-Optimal Modelling for Higher Heating Values of Biomass in South India by using Proximate Analysis	
15:10 – 15:20	Nimesh Kumar Singh / NIT Mizoram / NCWEC-18-19/ Energy Conservation through Audit in Mizoram Institute of Medical and Research	
15:20 – 15:30	J.P Chakraborty/ IIT BHU/ NCWEC- 18- /Torrefaction and Pyrolysis of Banana Peel	
15:30 – 15:45	Snacks/ Tea	
15:45 - 16:45	Valedictory session	
Venue	Hotel Floria	
Distribution of Certificates	<i>Head, Dept. of Mechanical engg., NIT Mizoram</i>	
Speech	<i>Dr. Pankaj Kalita, IIT Guwahati</i>	
Vote of Thanks	DR. H. Lalhmingsanga, NIT Mizoram	