

Centre for Energy, Indian Institute of Technology Guwahati

Publications in Conference proceedings:

Sl. No.	Details
01	P. Kalita and P. Mahanta, Equilibrium model development for prediction of producer gas composition of a cyclone gasifier, In the proceedings on computer aided modeling and simulation in computational mechanics (CAMSCM 2009), March 13-14, pp.167-180, 2009
02	B B Sahoo, U K Saha, N Sahoo and P Prusty, 2009, "Analysis of throttle opening variation impact on a diesel engine performance using second law of thermodynamics", ASME Internal Combustion Engine Division 2009 Spring Technical Conference, ICES2009-76069 (Accepted)
03	Gouri Sankar Paul and Pratima Agarwal, "Structural and transport studies on nanostructured SnS synthesized by solvothermal process", American Physical Society March Meeting 2009, Pittsburgh, Pennsylvania, USA, March 16-20, 2009
04	Gouri Sankar Paul and Pratima Agarwal, "Transport and transient photocurrent studies of CdS nanorods thin films for solar photovoltaic application", Proceedings in the 18 th International Photovoltaic Science and Engineering Conference and Exhibition (PVSEC18), Kolkata, India, pp. 169-170, January 19-23, 2009
05	R.S. Patil, M. Pandey, P. Mahanta, "Study on the Heat Transfer Characteristics in the Lower Splash Region of Circulating Fluidized Bed Riser", 7 th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics (ExHFT-7), Krakow, Poland, 28 June - 3 July, 2009
06	R.S. Patil, M. Pandey, P. Mahanta, "CFD Simulation for Heat Transfer and Hydrodynamics Characteristics of Circulating Fluidized Bed Riser", 1 st International Conference on Energy Engineering and Eco- Balance (IC-EEE), MITR Pune, India, 16-18 February, 2009
07	R.S. Patil, M. Pandey and P. Mahanta, "Studies on Hydrodynamic Characteristics along the Riser of Circulating Fluidized Bed", IISC Centenary – International Conference on Advances in Mechanical Engineering (IC-ICAME), IISC Bangalore, India, 2-4 July, 2008
08	B B Sahoo, N Sahoo and U K Saha, 2010, 'Assessment of a Syngas-Diesel Dual Fuelled Compression Ignition Engine'. Proceedings of ASME 2010 4 th International Conference on Energy Sustainability: Paper No. ES2010-90218, May 17-22, 2010, Phoenix, Arizona, USA.

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09	B B Sahoo, N Sahoo and U K Saha, 2010, 'Effect of H ₂ : CO ratio in Syngas for a Dual Fuel Diesel Engine Operation', ASME-ATI-UIT 2010 <i>proc of Conference on Thermal and environmental Issues in Energy Systems</i> , 16–19 May, Sorrento, Italy, 2010.
10	Buragohain, P. Mahanta, V. S. Moholkar, 'First Principles Design of a Circulating Fluidized Bed (CFB) Biomass Gasifier', National Workshop on "New Technologies for Rural Development having Potential for Commercialisation(NTRDPC-2009), Bhopal, 29 th May 2009.
11	Gouri Sankar Paul and Pratima Agarwal, "Electrical transport and transient photocurrent studies on CdS nanorods thin films, Proc of the International Conference on Advanced Nanomaterials and Nanotechnology (ICANN-2009), 9-11th December, 2009, IIT Guwahati, India (Accepted, Ref. No. A-652)
12	Gouri Sankar Paul and Pratima Agarwal, 'Structural, and thermal studies on PbS nanocubes', 23rd International Conference on Amorphous and Nanocrystalline Semiconductors (Aug 23 – 28, 2009) Utrecht, The Netherlands
13	Gouri Sankar Paul and Pratima Agarwal, 'Evolution of nanostructure with reaction time for ZnS synthesized by solvothermal process', 23 rd International Conference on Amorphous and Nanocrystalline Semiconductors (Aug 23 – 28, 2009) Utrecht, The Netherlands
14	Gouri Sankar Paul and Pratima Agarwal, ' <i>Structural, optical and thermal studies of CdS nanorods synthesized by solvothermal process</i> ', International Conference on Nano Science & Technology (ICONSAT), February 17-20, 2010, IIT Bombay, Mumbai, India, Abstract No. EN 33, pp-197
15	Amrita Ranjan, Chetna Patil and Vijayanand S. Moholkar, 'Mechanistic Assessment of Microalgal Lipid Extraction', <i>Ind. Eng. Chem. Res.</i> ,49(6), pp 2979-2985, 2010.
16	Amrita Ranjan and VS Moholkar, 'Biobutanol production: mProcess design and comparative evaluation of alternate substrate', <i>Chemcon</i> , Vishakhapatnam, P.06, 2009.
17	Swati Khanna and VS. Moholkar, 'A conceptual integrated wholecell biocatalytic process for biodiesel production and upgradation of glycerol to value added Products', <i>Chemcon</i> , Vishakhapatnam, P.247, 2009
18	Hanif A Choudhary and VS.Moholkar, 'Kinetic models for Fischer tropesch Synthesis', <i>Chemcon</i> , Vishakhapatnam, P.384, 2009
19	Adreeja Basu, Purabi Mazumdar and Lingaraj Sahoo, 'Genetic diversity among <i>Jatropha Curcas</i> accessions as revealed by rapd markers', National Symposium on plant cell tissue and organ culture: the present scenario, Kolkata, 3-5 March, 2010.

20	Mazumdar, P., Basu, A., Paul, A., Mahanta, C., L. Sahoo, 'Age and orientation of the cotyledonary leaf explants determine the efficiency of de novo plant regeneration and Agrobacterium tumefaciens mediated transformation in <i>Jatropha curcas</i> L.', National Symposium on Plant Cell Tissue and Organ Culture: The Present Scenario, Kolkata, 3-5 March, 2010
21	Sandip Bordoloi, Madhuri Das, Pranab Goswami, Fabrication Of Carbon Nanotube Based Cholesterol Oxidase Bioelectrode For Biosensor And Biofuel Cell Application, <i>Proc of International Conference on Advanced Nanomaterials and Nanotechnology (ICANN)-2009</i> , Indian Institute of Technology Guwahati, 9-11 December, 2009.
22	Ranjit S. Patil, Manmohan Pandey and Pinakeswar Mahanta, "Study on Wall to Bed Heat Transfer Characteristics in the Upper Splash Region of Cold Circulating Fluidized Bed Risers" Proc of 9th International ISHMT-ASME Heat and Mass Transfer Conference (ISHMT-ASME), IIT Bombay, Mumbai, India, 4-6th January, 2010.
23	R.S. Patil, M. Pandey and P. Mahanta, "Study on the Heat Transfer Characteristics in the Lower Splash Region of Circulating Fluidized Bed Riser", Proc of 7th World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics (ExHFT-7), Krakow, Poland, 28th June – 3rd July, 2009.
24	M. Sharma, M Nishioka, S.C Mishra and P. Mahanta, 'A Modeling Study of a Premixed CH ₄ /Air Mixtures: Dependence of Laminar Flame speed on Pressure and Preheating Temperature', ISHMT-ASME Heat and Mass Transfer Conference, January, Mumbai, 2010.
25	M. Sharma and S.C Mishra and P Acharjee, 'Use of Ceramic Heat Shield Ring with Embedded Porous Zirconia: An Approach to Enhance Thermal Efficiency of Conventional Pressure Stove', ICAER, December 2009, Mumbai, India.
26	Lepakshi Barbora, Rupesh Singh, Nivedita Shroti and Anil Verma, 'Neodymium Triflate Modified Nafion Composite Membrane for Reduced Alcohol Permeability in Direct Alcohol Fuel Cell', Fuel Cell Technologies: FUCETECH 2009, 11 - 13 Nov 2009; Mumbai.
27	Urmila Saxena, Madhuri Das, Seraj Ahmed and Pranab Goswami, An amperometric cholesterol biosensor based on multiwalled carbon nanotube-nafion-cholesterol oxidase-cholesterol esterase nanobiocomposite, International Conference on Advanced Nanomaterials and Nanotechnology, 2009, IIT Guwahati, Guwahati, Assam, 9-11 December, 2009. Abstract no.E-134.

28	Preety Vatsyayan, Sandip Bordoloi, Lepakshi Barbora and Pranab Goswami, Direct electrochemistry of large novel catalase from <i>Aspergillus terreus</i> immobilized on MWCNT-NF/PEI modified glassy carbon electrode and its fuelcell application, Fucetech, 2009, International Symposium and Exhibition on Fuel Cell Technologies, Mumbai, 11-13 November, 2009. Abstract number is 79 with page number 82.
29	A Ranjan and V.S. Moholkar, "Impact of Variable Glucose Concentration on Growth Cycle of <i>C. acetobutylicum</i> ", Proceedings of CHEMCON 2010, Chidambaram.
30	S. Mahapatra and P. Mahanta, "Performance evaluation and quality drying in a natural convection wind dryer", Proceedings of 2nd International Conference on Mechanical, Industrial and Manufacturing Technologies (MIMT 2011), Singapore, February 26-28, 2011.
31	B.B. Sahoo, N. Sahoo and U.K. Saha (2010) 'Assessment of a syngas-diesel dual fuelled compression ignition engine'. Proceedings of ASME 2010 4th International Conference on Energy Sustainability. May 17-22, 2010. Phoenix, Arizona, USA.
32	B.B. Sahoo, N. Sahoo and U.K. Saha (2010) 'Effect of H ₂ :CO ratio in syngas for a dual fuel diesel engine operation'. ASME-ATI-UIT 2010 Conference on Thermal and environmental Issues in Energy Systems. May 16-19, 2010. Sorrento, Italy.
33	Amrita Ranjan, Chetna Patil and Vijayanand S. Moholkar, 'Mechanistic Assessment of Microalgal Lipid Extraction', Ind. Eng. Chem. Res., 49(6), pp 2979-2985, 2010.
34	Pinakeswar Mahanta, Ranjit S. Patil and Manmohan Pandey, "Effect of Particle Size and Bed Inventory on Wall-to-Bed Heat Transfer Characteristics of Circulating Fluidized Bed Risers" International Association of Engineers (IAENG)-World Congress on Engineering 2010, International Conference of Mechanical Engineering (ICME'10) London, UK, 30th June-2nd July, 2010.
35	Swati Khanna, Arun Goyal Dr. V. Moholkar, n-butanol production by immobilized clostridium pasterianum utilizing biodiesel derived crude glycerol as a sole carbon source, CHEMCON 2010, Annamalai University, Chidambaram, December 2010, p.34.
36	Hanif A Choudhuri, V. s. Moholkar, Structure and performance of Iron catalyst for Fischer-troph synthesis and its utilization towards model biosyngas, CHEMCON 2010, Annamalai University, Chidambaram, December 2010, p.34.

37	Buragohain, P. Mahanta, V.S. Moholkar. Performance Correlations for Biomass Gasifiers. CHEMCON 2010, Annamalai University, Chidambaram, December 2010.
38	Debjyoti Sahu, Durgesh Singh Songera, Anil Verma, Sasidhar Gumma, Synthesis and characterization of Nickel nanoparticle using template assisted electrodeposition technique, CHEMCON 2010, Annamalai University, Chidambaram, December 2010, p.47.
39	B.B. Sahoo, N. Sahoo, and U.K. Saha (2011), 'Dual Fuel Mode Performance Studies of a Small Diesel Engine Using Green Fuels'. 2nd International Conference on Mechanical, Industrial and Manufacturing Technologies. February 26–28, 2011. Singapore.
40	B.K. Debnath, B.B. Sahoo, N. Sahoo and U.K. Saha (2010) 'Simulation of combustion and emission characteristics in a dual fuelled diesel engine'. ASME 2010 Internal Combustion Engine Division Fall Technical Conference. September 12–15, 2010. San Antonio, USA.
41	B.B. Sahoo, N. Sahoo and U.K. Saha (2010) 'Effect of Load Level on the Performance of a Biogas–Diesel Dual Fuel Compression Ignition Engine'. National Seminar on Renewable Energy Technology: Issues and Prospects, September 24–25, 2010. NERIST, Itanagar, India.
42	Dipti Yadav, Lepakshi Barbora and P. Mahanta, "Characterization of alternate feedstock for biogas production", All India Seminar on "New Renewable Energy Sources", Shillong, Meghalaya, 18th September 2010
43	Dipti Yadav, Lepakshi Barbora, Utsav Guharoy and P. Mahanta, "Characterization of tea waste and cooked waste as a potential feedstock for biogas production", International Conference on Renewable Energy, Jaipur, 16-21 January 2011.
44	Swati Khanna and Vijayanand S. Moholkar, "Production of n-butanol from biodiesel derived crude glycerol using Clostridium pasteurianum immobilized on amberlite", International Conference on Renewable Energy, Jaipur, 16-21 January 2011.
45	Swapnil J Borah, Kaustubha Mohanty, Vaibhav V. Goud, "Physico-Chemical Characterization of Biomass Samples as Prospective Bioenergy Source for North-East India", International Conference on Renewable Energy, Jaipur, 16-21 January 2011.
46	Amrita Ranjan and Vijayanand S Moholkar, "Comparative study of various pretreatment techniques for rice straw saccharification for the production of alcoholic biofuels", International Conference on Renewable Energy, Jaipur, 16-21 January 2011.

47	Buljit Buragohain, Renewable energy for development of under-developed regions with particular reference to North-East India, Tezpur University, 23rd - 25th March, 2010.
48	Amrita Difusa, Swapnil J. Borah and K. Mohanty "Use of Fossil and Renewable Energy and Their Impacts on Environment", International Conference on "Climate Change and Water: Assessing Vulnerability, Impact and Adaptation in the Eastern Himalayas", IITGuwahati, 3rd-5th January, 2011.
49	Dipti Yadav and P. Mahanta, "Agro Waste Management by its Utilization for Biogas Generation", International Conference on "Climate Change and Water: Assessing Vulnerability, Impact and Adaptation in the Eastern Himalayas", IITGuwahati, 3rd-5th January, 2011.
50	Swapnil Borah, K. Mohanty, Vaibhav V. Goud, Investigation of physico-chemical properties of biomass samples as prospective bioenergy source for north-east India, 60th Canadian Chemical Engineering Conference, TCU Place, Saskatoon, Saskatchewan, Canada, October 24-27, 2010.
51	Amrita Difusa, Swapnil J. Borah, K. Mohanty, Vaibhav V. Goud, Use of fossil and renewable energy and their impacts on environment, Climate conference 2011: International Conference on Climate Change and Water, IIT Guwahati, January 3 – 5, 2011.
52	Shuchi Singh, V.S. Moholkar and Arun Goyal (2010) Screening, isolation and optimisation of culture conditions of cellulolytic bacterium (SS10) isolated from microbial biodiversity rich Assam. 4th Annual Convention of Association of Biotechnology and Pharmacy, National Conference of Emerging trends in Biopharmaceuticals: Relevance to Human Health, Nov 11-13, 2010. Thapar University, Patiala, India.
53	Madhuri Das, Pranab Goswami* Modified carbon nanotube and nafion composite as electro-active matrix for immobilization of cholesterol oxidase on gold electrode for Bioelectrode Fabrication. International Conference on Carbon Nanotechnology : Potential and Challenges, IIT Kanpur, 15-17 December, 2010.
54	Lepakshi Barbora, Pankaj Kalita, Kushal Kalita, Sarvesh Agarwal and P. Mahanta, "Fluoride Removal from Drinking Water Utilizing Renewable Energy", International Conference on "Climate Change and Water: Assessing Vulnerability, Impact and Adaptation in the Eastern Himalayas", IITGuwahati, 3rd-5th January, 2011.
55	Dipti Yadav, L. Barbora and P. Mahanta, "Characterization of tea waste and cooked waste as a potential feed stock for biomethanation", All India Seminar on New and Renewable Energy, Institute of Engineers, Shillong, 18 th September 2010.

56	B. B. Sahoo, U. K. Saha and N. Sahoo 'Demonstration of dual fuel technology – gas and diesel for the future', <i>Proceedings of the National Seminar on Renewable Energy Technology: Issues and Prospects</i> , NERIST, Itanagar, India, 29–30 September (2011).
57	P. Kalita, P. Mahanta and U. K. Saha 'Effect of operating parameters on the performance of a pressurized circulating fluidized bed unit - a review', <i>Proceedings of Summer school 2011 on Efficient Fossil Energy Technologies</i> , IIT Guwahati, Assam, India, 4-10 July, 2011.
58	S. S. Mohapatra and P. Mahanta 'Experimental investigation of an indirect type of natural convection grain dryer', <i>Proceedings of Summer school 2011 on Efficient Fossil Energy Technologies</i> , IIT Guwahati, Assam, India, 4-10 July, 2011.
59	J.K. Verma, A. Verma and A.K. Ghoshal 'Performance analysis of solid oxide fuel cells (SOFC) using reformed fuel', <i>Proceedings of 3rd International Conference on Fuel Cell & Hydrogen Technology (ICFCHT 2011)</i> , Kuala Lumpur, Malaysia, 22– 23 November, 2011.
60	D. Yadav, L. Barbora and P. Mahanta 'Characterization and comparison of locally available biomass waste as feedstock for biogas production', <i>Proceedings of 3rd International Conference on Advances in Energy Research 2011</i> , IIT Bombay, 9-11 December, 2011.
61	M. Das and P. Goswami 'Development of alcohol biosensor using multiwalled carbon nanotube (MWCNT) -nafion-polyethyleneimine (PEI) as electroactive matrix for immobilization of alcohol oxidase on electrode surface', <i>Proceedings of 11th Bangalore India Bio, international conference and trade show</i> , Bangalore International Exhibition Centre, Bangalore, 4-6 May, 2011.
62	M. Das and P. Goswami 'Electrochemical characterization and development of alcohol oxidase bioelectrode for enzymatic biosensor and biofuel cell application', <i>Proceedings of 80th Annual meeting of the Society of Biological Chemists</i> , CSIR-CIMAP Lucknow, 12 -15 November, 2011.
63	M. Das, P. Goswami 'Carbon nanotube as electroactive matrix for immobilization of alcohol oxidase on gold electrode for biosensor and biofuel cell application', <i>Proceedings of 2nd International conference on Advanced Nanomaterials and Nanotechnology (ICANN- 2011)</i> , IIT Guwahati, 8-10 December, 2011.
64	M. Das, P. Das, L. Barbora, and P. Goswami 'Electroactive nanomaterials based alcohol oxidase bioanode and laccase biocathode for biofuel cell development', <i>Indo-US workshop on Electrocatalytic Materials for Fuel and Biofuel Cells</i> , Indo-US ECM 2013, Banaras Hindu University (BHU), 25-28 February 2013.

65	P. Kalita, U. K. Saha, and P. Mahanta, 'Some Studies on Wall-to-Bed Heat Transfer in a Pressurized Circulating Fluidized Bed Unit', 5th BSME International Conference on Thermal Engineering, Procedia Engineering 56 (2013) 163-172 (http://dx.doi.org/10.1016/j.proeng.2013.03.103).
66	M. Dash, V.V. Dasu, K. Mohanty, 'Kinetic study of lignocellulosic biomass using non-isothermal model free methods towards biofuel production', International conference on Frontiers in energy, Environment, Health and Materials Research(EEMR-2013) 12-13 th August, 2013, Bhubaneswar.
67	S. Singh, V.S. Moholkar, and A. Goyal "Optimization of pretreatment strategies for enzymatic saccharification of Parthenium hysterophorus for bioethanol production", International Symposium on Frontier Discoveries and Innovations in Microbiology and its Interdisciplinary Relevance (54th Annual Conference of Association of Microbiologists of India) (AMI-2013), November 17-20, 2013, Maharshi Dayanand University, Rohtak, Haryana, India.
68	A.J. Chaudhari, U. Garg, V. Kulkarni, and N. Sahoo " Simulation models for spark ignition engine- A comparative performance study"4th International Conference on Advances in Energy Research-2013(ICAER-2013), Indian Institute of Technology Bombay,pp.855 (ORAL PRESENTATION)
69	A. Yadav, R. Madaka, H.S. Jha, and P. Agarwal "Hydrogenated Amorphous Silicon Films on Flexible Substrates", ICANN 2013, IIT Guwahati, 1-3 Dec, 2013
70	A.J. Chaudhari, V. Kulkarni, and N. Sahoo " Spark ignition engine with gasoline and alternative fuel- A comparative performance study" 22nd National and 11th ISHMT- ASME Heat and Mass Transfer Conference, Indian Institute of Technology Kharagpur, (2013) paper no.254 (POSTER PRESENTATION)
71	A. Yadav, H. S. Jha, M. Singh, R. Madaka, B. D. Boruah, and P. Agarwal "Study on photoconductivity of hydrogenated amorphous Silicon (a-Si:H) films on flexible substrate", ICNT 2013, Haldia Regional Center, Indian Institute of Chemical Engineering, 25-26 Oct, 2013

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