

*Program*

# BIOENERGY-II: FUELS AND CHEMICALS FROM RENEWABLE RESOURCES

March 8 - 13, 2009

Intercontinental Hotel Rio  
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**SUNDAY, MARCH 8, 2009**

16:00 – 18:00 Registration

18:00 – 19:00 Reception

19:00 – 20:30 Dinner

**NOTES –THIS NEEDS TO BE REVISED PER THIS EVENT INFO**

- Technical sessions will be held in Quartzo A and B
- Lunches will be in the Monseigneur
- Dinners will be in the Monseigneur
- Posters will be in the Topazio & Turmalina. Posters should be hung the morning of your assigned day of presentation and should be removed after your assigned session in order to make room for the next days presentations.
- Breakfasts will be in the A Varanda Restaurant
- Audiotaping, videotaping and photography of presentations are strictly prohibited.
- *Speakers – Please leave at least 5 minutes for questions and discussion.*
- *Please do not smoke at any conference functions.*
- *Turn your cellular telephones to vibrate or off during technical sessions.*
- Be sure to make any corrections to your name/contact information on the Master Participant List or confirm that the listing is correct. A corrected copy will be sent to all participants after the conference.

**MONDAY, MARCH 9, 2009**

- 08:00 – 09:00            Breakfast
- 09:00 – 10:00            **TBA**
- 10:00 – 10:15            **Kim Olofsson**, Lund University, Sweden  
Designing an SSCF process for bioethanol production from lignocellulosic substrates by co-fermentation of xylose and glucose
- 10:15 – 10:30            **Michael A. Cotta**, NCAUR-ARS-USDA, USA  
Conversion of lower lignin mutants of sorghum bicolor (L) to ethanol
- 10:30 – 11:00            Coffee Break
- 11:00 – 11:15            **Mose Rossi**, Institute of Protein Biochemistry-C.N.R, Italy  
Thermophilic enzymes for biomass conversion
- 11:15 – 11:30            **Daewon Pak**, Seoul National University of Technology, Korea
- 11:30 – 11:45            **Aiduan Li**, University College London, United Kingdom  
Bioethanol from municipal solid waste: the role of biomass properties and structures during the ethanol conversion process
- 12:00 – 13:30            Lunch
- 13:30 – 17:30            FREE TIME
- 17:30 - 17:45            **Vijay Singh**, University of Illinois at Urbana-Champaign, USA  
Increasing corn throughput dry grind process for ethanol production
- 17:45 – 18:00            **Anthony J. Clarke**, University of Guelph, Canada  
Real-time observation of cellulose biodegradation by atomic force microscopy
- 18:00 – 18:15            **Geng Anli**, Ngee Ann Polytechnic,  
Comparison of laboratory and industrial *SACCHAROMYCES CEREVISIAE* for their inhibitor resistance and xylose utilization
- 18:15 – 18:30            **Meik Wusterhausen**, Geesthacht GmbH Institute of Polymer Research, Germany  
High performance vapor permeation with organic membranes for dewatering ethanol and other organic solvents
- 18:30 – 18:45            Break
- 18:45 – 19:00            **Byoung-In Sang**, Korea Institute of Science and Technology, Korea  
Membrane-extractive butanol production by immobilized clostridium BEIJERINCKII NCIMB 8052
- 19:00 – 19:15            **Fabio Napoli**, University of Studies of Napoli Federico II, Italy  
Assessment of kinetics for butanol production by clostridium acetobutylicum
- 19:15 – 19:30            **Bo Liao**, University of Saskatchewan, Canada  
Use of genetically modified saccharomyces cerevisiae to convert soluble starch directly to ethanol
- 19:30- 21:00            Dinner
- 21:00- 23:00            Poster Session with Social Hour

## TUESDAY, MARCH 10, 2009

- 07:30 – 08:30 Breakfast
- 08:30 – 09:30 **Eduardo Cavalcanti**, Instituto Nacional de Tecnologia, Brazil  
Oxidation, Thermal and Storage Stability and Materials Compatibility Of Brazilian Soy Methyllic Biodiesel
- 09:30 – 09:45 **Shijie Liu**, Sunny ESF, USA  
Conversion of woody biomass to energy, chemicals and materials
- 09:45 – 10:00 **Ho Nam Chang**, Korea Advanced Institute of Science & Technology, Korea  
Biofuel production from biomass-derived volatile fatty acid platform
- 10:00 – 10:15 **Sylvio Ortega Filho**, PHB Industrial S/A, Brazil  
Production of renewable biopolymers (PHB, PHB-HV) based in a biorefinery concept
- 10:15 – 10:45 Coffee Break
- 10:45 – 11:00 **Jan Piskorz**, Resource Transforms International, Canada  
Hydrous thermolysis of biomass production of Hodge' Carbonlys and Oligomeric Lignin
- 11:00 – 11:15 **Mohamed Hamed**, Washington University in St. Louis, USA  
Mixing characteristics of bubble columns with internals for biomass to liquid synthesis
- 11:15 – 11:30 **Balaji Balagurunathan**, Institute of Chemical and Engineering Sciences, Singapore, Singapore  
In silico analysis for the production of higher carbon alcoholis using saccharomyces cerevisiae
- 11:30 – 11:45 **Clay M. Horiuchi**, University of Colorado at Boulder, USA  
Investigating catalyst design strategies for selective reaction of Cyclic C<sub>4</sub> oxygenates from biomass through use of spectroscopic techniques
- 11:45 – 12:00 **Gianluca Marcotullio**, Delft University of Technology, The Netherlands  
Selective production of furfural from C5 sugars contained in biomass, reaction kinetic assessment
- 12:00 – 12:15 **Juray De Wilde**, Universite catholique de Louvain, Belgium  
A novel tao-glyverol based extraction- re-extraction process for the separation of chemicals produced by acidogenic fermentation of biomass
- 12:30 - 14:00 Lunch
- 14:00- 19:00 Free Time
- 19:00- 20:30 Dinner
- 20:30 – 22:00 Poster Session and Social Hour

**WEDNESDAY, MARCH 11, 2009**

- 07:30 – 08:30            Breakfast
- 08:30 – 9:30            **Fernando Preto**, Natural Resources Canada. Canada  
Supply and properties of agricultural residues suitable for bioenergy application
- 09:30- 09:45            **Dietrich Meier**, vTI-Institute of Wood Technology and Wood Biology, Germany  
Comparative fast pyrolysis of agricultural residues for use in biorefineries
- 09:45 – 10:00            **Piotr Oleskowicz-Popiel**, Technical University of Denmark, Denmark  
A simulation model of combined biogas, bioethanol and protein fodder coproduction in organic farming
- 10:00 – 10:15            **Ahmed Youssef**, Washington University in St. Louis, USA  
Novel design of multiphase reactors for biomass-to-liquid synthesis
- 10:15 – 10:45            Coffee Break
- 10:45 – 11:00            **Ran Xu**, The University of Western Ontario, Canada  
Pyrolysis of agricultural wastes into bio-oil in a bubbling fluid bed pilot plant
- 11:00 – 11:15            **B. Vreugdenhil**, Energy research Centre of the Netherlands (ECN), The Netherlands  
Scale-up of the milena gasification process for the production of bio-sng
- 11:15 – 11:30            **Muthanna Al-Dahhan**, Washington University in St. Louis, USA  
Advanced measurement and computational techniques for optimizing the design and scale-up strategy for biogas production via anaerobic digestion
- 11:30 – 11:45            **Li Chen**, Commissariat à l'Energie Atomique (CEA), France  
FAST PYROLYSIS UNDER GASIFICATION CONDITIONS: INFLUENCE OF PARTICLE SIZE, REACTOR TEMPERATURE AND GAS PHASE REACTIONS
- 11:45 – 12:00            **E. Simeone**, Delft University of Technology, The Netherlands  
Study of the behavior of a catalytic ceramic candle filter in a lab-scale unit at high temperatures
- 12:00 – 13:30            Lunch
- 13:30 – 17:00            Free Time
- 17:00 – 17:15            **Jesús Arauzo**, University of Zaragoza, Spain  
Synthesis gas by catalytic steam reforming of bio-oil
- 17:15 – 17:30            **Mohammad Latifi**, Institute for Chemicals and Fuels from Alternative Resources (ICFAR), Canada  
Effects of temperature and residence time on the thermal cracking of bio-oil for syngas production
- 17:30 – 17:45            **Avdhesh Kr. Sharma**, DCR University of science and Technology, India  
Exergy analysis of thermochemical conversion of woody biomass in fixed bed gasifiers

**WEDNESDAY, MARCH 11, 2009 CONTINUED**

- 17:45 – 18:00      **Capucine Dupont**, Commissariat à l'Energie Atomique, France  
Suitability of wood chips from forestry and different biomass feedstocks for use in a semi-industrial plant of BTL production by gasification
- 18:00 – 18:15      **Isabel Paula Marques**, Universidade do Minho, Paraguay  
Anaerobic digestion of OMW: anaerobic filter vs. hybrid
- 18:15 – 18:30      **Fernando Preto**, Natural Resources Canada, Canada  
Combustion of pyrolysis 'bio-oils' in a tunnel furnace
- 18:30 – 18:45      Break
- 18:45 – 19:00      **Christina J. Booker**, University of Western Ontario, Canada  
Characterization of bio-oils from agricultural biomass as potential pesticides
- 19:00 – 19:15      **Martin Huard**, The University of Western Ontario, Canada  
Development of a novel integrated gas-solid separator for pyrolysis reactors
- 19:15 – 19:30      **M. Hakký Almaa**, University of Kahramanmaras Sutcu Imam, Turkey  
Solvolytic of wood by using bio-oil from wood
- 19:30 – 19:45      **Paul de Wild**, Energy research Centre of the Netherlands (ECN), The Netherlands  
Biomass valorization by a hybrid thermochemical fractionation approach
- 19:45 – 20:00      **Denilson DA SILVA PEREZ**, Institut Technologique FCBA, France  
The Impact of storage conditions on the forest biomass quality for biofuels production
- 20:00 – 21:30      Dinner
- 21:30 – 23:30      Poster Session with Social Hour

## THURSDAY, MARCH 12, 2009

- 08:00 – 09:00 Breakfast
- 09:00 – 10:00 **Palligarnai T Vasudevan**, University of New Hampshire, USA  
Biodiesel production – Current state of the art and challenges
- 10:00 – 10:15 **Jose Gerlado A. Pacheco**, Universidade Federal de Pernambuco – UFPE, Brazil  
Production of ethylic biodiesel from hydrolysis and estherification of acidic fat residues
- 10:15 - 10:30 **Jesús Arauzo**, University of Zaragoza, Spain  
Hydrogen from catalytic steam reforming of bio-oil in a bench scale fluidized bed
- 10:30 – 10:45 **Muthanna Al-Dahhan**, Washington University in St. Louis, USA  
Microalgae culturing via advanced measurement and computation techniques for bioenergy production
- 10:45 – 11:15 Coffee Break
- 11:15 – 11:30 **Zahira Yaakob**, Universiti Kebangsaan Malaysia, Malaysia  
Transtersterification of Jatropha Curcas oil radiated with the Gamm Ray
- 11:30 – 11:45 **Erin E. Powell**, University of Saskatchewan, Canada  
A novel bioreactor design for culture of photosynthetic microorganisms and its use as a cathodic half cell
- 11:45 – 13:30 Lunch
- 13:30 – 17:00 Free Time
- 17:00 – 17:15 **Flora Ng**, University of Waterloo, Canada  
Upgrading waster oil to biodiesel via catalytic distillation
- 17:15 – 17:30 **Jesús Arauzo**, University of Zaragoza, Spain  
Hydrogen production by aqueous-phase reforming
- 17:30 – 17:45 **M.G. Devanesan**, Annamalai University, India  
Optimization of biodiesel production in a packed red reactor using co-immobilized Canada Bugosa Lipase and rhizopus orvzae cells
- 17:45 – 18:00 **Nádia Regina Camargo Fernandes Machado**, Universidade Estadual de Maringá, Brazil  
Temperature effect of hydrogen production from reactions between ethanol and steam in the presence of PD-RU/NB<sub>2</sub>O<sub>5</sub>-TIO<sub>2</sub> catalyist.
- 18:00 – 19:30 Poster Session with Cocktail
- 19:30 – 23:00 Banquet

**FRIDAY, MARCH 13, 2009**

07:00 – 08:00	Breakfast
08:00 – 9:00	<b>WORKSHOP I:</b> Bioethanol-Biobutanol
9:00 – 10:00	<b>WORKSHOP II:</b> Biodiesel
10:00 – 10:30	Coffee Break
10:30 – 11:30	<b>WORKSHOP III:</b> Thermochemical Conversion into Fuels and Chemicals
11:30 – 12:30	<i>Ad Hoc</i> Discussion – What is next? Closing of Conference
12:30 – 13:45	Lunch and Departure