

Scientific Program



Joint Event

12th World Congress on

Biofuels and Bioenergy

&

13th Global Summit and Expo on

Biomass and Bioenergy

September 04-06, 2018 | Zurich, Switzerland

UK: Conference Series LLC Ltd.
47 Churchfield Road, London, W3 6AY
Toll Free: +1-800-014-8923

DAY-1

September 04, 2018

Meeting Hall: **Brussels**

08:30-09:00 Registrations

Opening Ceremony 09:00-09:30

Keynote Forum

09:30-09:35 Introduction

09:35-10:15 **Title: Recent advances in catalytic production of biobased furan derivatives**
Christophe Len, Université de Compiègne, France

Group Photo

Networking & Refreshment 10:15-10:35 @ Europa Foyer

10:35-11:15 **Title: Biomass valorization by means of catalytical and biological processes**
Magda Constantí, University Rovira I Virgili, Spain

11:15-11:55 **Title: Development of efficient bioprocesses for improved bioethanol production from a mixture of food wastes**
Vinay Sharma, Banasthali University, India

Sessions: Biomass Conversion Methods | Biomass Applications | Biomass Energy Resources | Biomass Power & Thermal

Chair: Magda Constantí, University Rovira I Virgili, Spain

Co-Chair: Ferruccio Pittaluga, University of Genoa, DIME, Italy

11:55-12:15 **Title: Biomass Gasification Technologies for Biochar Production and Energy Generation**
Ferruccio Pittaluga, University of Genoa, DIME, Italy

12:15-12:35 **Title: Nanocatalysts for oxygen removal from biomass derived biofuel**
Antonia Infantes-Molina, Universidad de Málaga, Spain

12:35-12:55 **Title: Bioethanol Production from Perennial Grasses**
Satyawati Sharma, CRDT, IIT New Delhi, India

Lunch Break 12:55-13:40 @ La Place AB

13:40-14:00 **Title: Antimicrobial activity of microalgal strains against pathogenic bacteria and fungal Strains**
Sitwat Aman, The University of Lahore, Pakistan

14:00-14:20 **Title: Biomass Gasification: Sustainable technology for waste to energy**
Sandeep Kumar, Indian Institute of Technology (IIT) Bombay, India

Sessions: Production of Biofuels | Advanced Biofuels & Biochemicals

Chair: Jinying Yan, KTH - Royal Institute of Technology, Sweden

Co-Chair: Anushree Malik, Centre for Rural Development and Technology, IIT Delhi, India

- 14:20-14:40** **Title: Sustainable Water-Energy-Environment Nexus for Thermal Bioenergy Conversion**
Jinying Yan, KTH - Royal Institute of Technology, Sweden
- 14:40-15:00** **Title: Algal-fungal interactions for dewatering and pretreatment of microalgal biomass targeting improved biofuel production**
Anushree Malik, Centre for Rural Development and Technology, IIT Delhi, India
- 15:00-15:20** **Title: Microalgae cultivation in continuous reactor using mixotrophic anaerobic effluent: Effect of dilution rate on biomass productivity and tertiary treatment**
SERVIO CASSINI, Dept. Environmental Engineering UFES, Brazil
- 15:20-15:40** **Title: Modeling of slow pyrolysis of various biomasses in a rotary kiln using TGA data**
Ramiar Sadegh-Vaziri, KTH Royal Institute of Technology, Sweden
- 15:40-16:00** **Title: BIORAISE: a GIS tool for the evaluation of agricultural and forestry available biomass resources and costs in Mediterranean Countries**
Eva Sevillano Marco, CEDER-CIEMAT, Spain
- Networking & Refreshment 16:00-16:20 @ Europa Foyer**
- 16:20-16:40** **Title: Numerical study of the natural-draft flow and heat transfer in a biomass plancha-type cookstove**
Alberto Beltrán, Universidad Nacional Autónoma de México, México
- 16:40-17:00** **Title: Ultra thin membrane made by Atomic layer deposition for CO₂ separation**
Ying-Bing Jiang, Univ. of New Mexico, USA
- 17:00-17:20** **Title: Advanced liquid biofuels from residue biomass by thermo-catalytic reforming**
Andreas Hornung, Fraunhofer Institute for Environmental, Safety, and Energy Technology (UMSICHT), Germany
- 17:20-17:40** **Title: Chemical Characterization of Bio-oils from Cellulose, Hemicellulose and Lignin Pyrolysis**
Martin Stas, University of Chemistry and Technology Prague, Czech Republic
- 17:40-18:00** **Title: Fast entrained bio-oil production in an entrained flow pilot reaction**
Peyrot Marine, CEA LITEN, Grenoble, France

DAY-2

September 05, 2018
Meeting Hall: **Brussels**

09:00-09:05 Introduction

Keynote Forum

09:05-09:50 **Title: World markets for conventional and advanced biofuels over the next five years**
Abhishek Asthana, Hallam Energy, Sheffield Hallam University, United Kingdom

Networking & Refreshment 09:50-10:10 @ Europa Foyer

10:10-10:50 **Title: Energy and Materials from Biomass Pyrolysis**
Gerrit Brem, University of Twente, The Netherlands

Sessions: Bioenergy |Renewable Energy

Chair: Layla Salih Al-Omran, University of Basrah, Iraq

Co-Chair: Harri Ali-Löyty, Tampere University of Technology, Finland

10:50-11:10 **Title: The most important factors influencing human exposure assessments of Brominated Flame Retardants (BFRs) via indoor dust ingestion**
Layla Salih Al-Omran, University of Basrah, Iraq

11:10-11:30 **Title: Efficient Use of Sugarcane Bioenergy for Sustainability of Indian Sugar Industry**
Narendra Mohan, National Sugar Institute, Kanpur, India

11:30-11:50 **Title: Operando Investigations of Electrochemical Interfaces for Solar Fuel Production by Ambient-Pressure Photoelectron Spectroscopy**
Harri Ali-Löyty, Tampere University of Technology, Finland

11:50-12:10 **Title: Moroccan energy transition: development of renewable energies and energy efficiency**
Touria Barradi, Ecole Centrale de Casablanca, Morocco

12:10-12:30 **Title: Producing energy through gases from biomass**
Aude Bertrandias, Air Liquide Centre de Recherche Paris-Saclay, France

12:30-12:50 **Title: Estimated production of electrical energy for the controlled landfill in Fez (Morocco) by the US EPA Land-GEM model**
Naimi Youssef, University of Hassan II Casablanca, Morocco

Lunch Break 12:50- 13:35 @ La Place AB

Poster Presentations 13:35-14:20

Poster Judge: Kurt D Thelen, Michigan State University, USA

BM 01 **Title: Capillary electrophoresis in the analysis of volatile fatty acids, ammonium and nutrients from mesophilic anaerobic digestion samples**

Jasmiina Haverinen, University of Oulu, Kajaani University, Finland

BM 02 **Title: Development of a Novel Liquid-Inerted Microwave Pyrolysis System**

Benjamin Shepherd, University of Nottingham, UK

- BM 03** **Title: Design Automation of the Manufacturing Process of a Mini – Biodiesel Plant**
Deivison Silveira Santos de Jesus, Automation and Control Engineer – FAMEC, Brazil
- BM 04** **Title: Chitin and shrimp shells liquefaction and their use in blend membranes**
Wen-Rong Xu, Hainan University, China
- BM 05** **Title: Sustainable Water-Energy-Environment Nexus for Thermal Bioenergy Conversion**
Zhi Zou, KTH - Royal Institute of Technology, Sweden
- BM 06** **Title: Pyrolysis of aerobic sewage sludge in fluidized bed reactor between 700 & 830°C: Comparison with woody wastes.**
Sid Ahmed Kessas, Université de Toulouse, CNRS, INPT, UPS, Toulouse, France
- BF 01** **Title: Renewable resource-based material synthesized from lignocellulosic biomass**
Chikakao Asada, Tokushima University, JAPAN
- BF 02** **Title: Improved Production of Cellulosic Bioethanol using Miscanthus Hydrolysate by Engineered Saccharomyces cerevisiae**
Young-Lok Cha, National Institute of Crop Science, Republic of KOREA
- BF 03** **Title: In field integration of winter cereals with corn stover to improve biomass yield and quality**
Kurt D Thelen, Michigan State University, USA
- BF 04** **Title: Gasification characteristics of various biomass on thermal decomposition and steam reforming**
Yuya Sakurai, Kogakuin University, Japan

Sessions: Pyrolysis| Bioeconomy

Chair: Stephen Mitchual, University of Education, Ghana

- 14:20-14:40** **Title: Fuel characteristics of binder free briquettes made at room temperature from blends of Ceiba pentandra and oil palm mesocarp fibre**
Stephen J Mitchual, University of Education, Ghana
- 14:40-15:00** **Title: I'm greenTMPE: paving the way for sustainable plastics.**
Martin Clemesha, BRASKEM, Netherlands
- 15:00-15:20** **Title: Waste-derived carbon: structure, properties and applications**
Swati Sharma, Karlsruhe Institute of Technology, Germany
- 15:20-15:40** **Title: How to meet the needs of bees? – Diversification of industrial crops cultivation for a more environmentally benign bioeconomy**
Moritz Von Cossel, Universität Hohenheim, Germany
- 15:40-16:00** **Title: Scalable concepts for microwave pyrolysis**
John Robinson, University of Nottingham, UK

Networking & Refreshment 16:00-16:20 @ Europa Foyer

- 16:20-16:40** **YRF: L-Lactic acid production from cellulose and hemicellulose extract of Walnut Shell through microwave-assisted autohydrolysis followed by microbial fermentation**
Richard Ahorsu, University Rovira I Virgili, Spain
- 16:40-17:00** **YRF: Tuning biomass pyrolysis for polymer precursors**
John Ryan, University of Nottingham, UK
- 17:00-17:20** **YRF: Title: Understanding the potential of energy crops in heavy metals contaminated soils**
Berta Cumbane, DCTB/METRICS/FCTNOVA, Portugal

DAY-3

September 06, 2018
Meeting Hall: **Brussels**

10:00-10:05 Introduction

Sessions: Bioalchol and Bioethanol | Biorefineries | Biodiesel

Chair: Julio Sacramento-Rivero, Universidad Autonoma de Yucatan, Mexico

10:05-10:25 **Title: Mechanochemistry for a smart and sustainable biodiesel production under heterogeneous catalysis**

Irene Malpartida Garcia, University of Malaga, Spain

10:25-10:45 **Title: Ex-ante and ex-post sustainability evaluation of a biorefinery: lessons learned from jatropha biodiesel in Yucatan, Mexico**

Julio Sacramento-Rivero, Universidad Autonoma de Yucatan, Mexico

10:45-11:05 **Title: Fundamental Investigations of Electrocatalyzed Transformations of Organic Compounds**
Sneha A. Akhade, Pacific Northwest National Laboratory, Washington, USA

Networking & Refreshment 11:05-11:25 @ Europa Foyer

11:25-11:45 **Title: The strategic use of sugarcane for second generation ethanol production: Cold alkaline extraction pre-treatment**

Danila Morais de Carvalho, Royal Institute of Technology, Sweden

11:45-12:05 **Title: Production of ethanol and longer chain alcohols by fermentation**
Johann Orlygsson, University of Akureyri, Iceland

12:05-12:25 **Title: U.S Biodiesel markets and trends, with a special focus on sustainability.**
Ryan Lamberg, University of California, USA

12:25-12:45 **YRF: Development of Biodiesel Production from Brown Grease**
Mirit Kolet, Ariel University, Israel

Lunch Break 12:45-13:30 @ La Place AB

Panel Discussion & Networking 13:30-14:00 @ Europa Foyer

Awards & Closing Ceremony: 14:00-14:30