

Symposium on Renewable Energy and Products from Biomass and Waste

[CIUDEN](#) (Cubillos de Sil, León, Spain) 12-13 May 2015

Scientific and organization Committee

Prof. Alberto Gómez-Barea, Technical & Scientific chair (University of Seville)

Prof. Kevin Witty, Leader IEA Task 33 (University of Utah)

Dr. Pedro Haro, Secretariat (University of Seville / AICIA)

Objective of the Symposium

The symposium is organized by the University of Seville in the framework of the BIOTER (Thermochemical Biorefineries based on DME) project and in collaboration with the International Energy Agency (IEA) Task 33: Thermal Gasification. Invited speakers will give presentations in the symposium, selected from the IEA-Task 33, Academia and Industry. Attendees will be both senior researchers and PhD students from academy, industry and governments. There will be a poster session in parallel to the presentations. The preliminary program is given below.

Keywords: biomass/waste gasification, syngas production, CCS, thermochemical biorefineries, multiproduction

The Venue

CIUDEN is a Technology Development Centre for CO₂ Capture. There is a complete set of CCS rigs at demonstration scale (two 20 MW_{th} coal oxy-fired boilers, (PC and CFB) as well as a number of post-CO₂ technologies). In addition, there is a 3 MW_{th} biomass gasifier (see [video](#) for more details)

Workshop fee

The regular inscription fee is 250 € (it includes the Symposium inscription, bus from Ponferrada (main city close to the venue, which is situated in Cubillos de Sil) to the venue, coffee breaks, lunch and dinner.

Reduced fee (Committee members): 150 €

Poster session

The poster session aims to give an opportunity to attendees to show their results on topics included in the workshop. The activity is aimed at promoting further discussions and exchange of ideas. PhD students are encouraged to submit their works. The deadline for abstract submission is the 27th April 2015. The proceedings from the accepted abstracts will be distributed to the participants by email a few days before the Symposium.

Schedule:

Tuesday 12 May		Wednesday 13 May	
Session 1	Gasification, CO ₂ capture and synthesis (strong point: MSW and waste gasification)	Session 3	Demonstration and commercial plants
<i>Lunch</i>		<i>Lunch</i>	
Session 2	Design of new concepts of thermochemical biorefineries (strong points: use of platform chemicals and bio-chemical production)	Visit to CIUDEN's facilities	
Poster session			
<i>Dinner</i>			

List of presentations

Session 1: Gasification, CO₂ capture and synthesis	
Prof. Bo Leckner Chalmers University of Technology (Sweden)	Thermal conversion of wastes: technical and technological aspects
Prof. Umberto Arena Seconda Università degli Studi di Napoli (Italy)	An outlook on the commercialization of MSW gasification and needs for developments
Dr. José María Sánchez Hervás CIEMAT	Process developments for CO ₂ capture & valorization methods at CIEMAT
Dr. Sylvie Valin Commissariat à l'énergie atomique et aux énergies alternatives (CEA, France)	CO ₂ valorization in a biomass to fuel process: experimental gasification study and process evaluation
To be defined	
Session 2: Design of new concepts of thermochemical biorefineries	
Dr. Judit Sandquist SINTEF (Norway)	Advanced biorefinery concept based on cultivated macroalgae
Dr. Pedro Haro Universidad de Sevilla (Spain)	Thermochemical biorefineries with multiproduction: hydrocarbonylation of DME into fuels and chemicals (results of the BIOTER project)
Mr. Ilkka Hannula VTT (Finland)	Doubling of synthetic biofuels production via hydrogen from renewable electricity
Dr. Antonio Molino Italian National agency for new technologies (ENEA, Italy)	Supercritical water gasification of waste biomass in the BIOREF concept

Session 3: Demonstration and commercialization	
Mr. Juan Luis Cruz INERCO (Spain)	Development and commercialization of fluidized bed gasification technology for biomass and waste
Dr. Yoel Alemán EQTEC (Spain)	EQTEC gasifier technology: progress on waste to energy utilization
Mr. Juhani Isaksson Valmet (Sweden)	Progress in commercial scale CFB gasification for waste and biomass
Ms. Rocío Encinas Abengoa Bioenergy (Spain)	Integration of 2G ethanol in biorefineries
Dr. Bram van der Drift ECN (The Netherlands)	Commercialization of WtE through gasification technology developed by ECN
Mr. Iñaki Álvarez CIUDEN (Spain)	Carbon capture challenges & CIUDEN: oxy performance, CO ₂ recovery and energy efficiency
Dr. Manuel Silva CTAER, Universidad de Sevilla (Spain)	Development and demonstration of Solar-Biomass hybridization technologies
Dr. Marzena Kwapinska University of Limerick, Technology Centre for Biorefining and Bioenergy (Ireland)	Biomass and waste valorization in Irish perspective
Mr. Carlos de la Paz Life. EU Commission	The Life Program as a driver for the development of more efficient technologies for carbon capture and biomass/waste utilization