Doctoral Program in Energy, Chemical and Environmental Engineering







Workshop on Renewable Energy and Products from Biomass and Waste Third Edition

3-4 November 2016

Organization: Chemical and Environmental Engineering Department, University of Seville

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Venue: Sala Juan Larrañeta (planta ático), ETSI, Seville, SPAIN

The workshop is oriented for PhD students and young researchers willing to share their project results in a friendlier environment than conventional conferences. Attendees are expected to give an oral presentation and participate in a project idea contest. International experts in outstanding topics in the field will give a few keynotes/lectures. The main objectives of the workshop are:

- Facilitate mutual knowledge of common topics for PhD students
- Improve presentation skills of PhD students
- Develop communication and management skills in research

There is no workshop fee (meals and social activities not included).

For more information on the workshop, check our previous editions:

- The International Energy Agency (Task 33) and the Universidad de Sevilla organized the First Edition in May 2015. The workshop was a success with more than 50 international experts and more than 20 institutions (→).
- The Second Edition was fully organized by the Universidad de Sevilla in October 2015. The course
 was oriented for PhD students and young researchers with a background in Process Engineering
 and interested in recent advances for thermochemical conversion of biomass and residues (→).

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Thursday (3 November)		Friday (4 November)	
8.45 – 9:00 9:00 – 10:30 (15' discussion) 10:30 – 11:00 11:00 – 11:30	Registration and Welcome Keynote 1 Biorefinery technologies, creating a platform enabling energy storage? Wiebren de Jong Associate Professor TU Delft (The Netherlands) Honorary Professor University of Groningen (The Netherlands) Coffee break Lecture 1 Thermal valorization of dewatered sewage sludge Rory Monaghan Lecturer Below The Bar National University of Ireland Galway	9:30 – 10:00 10:00 – 10:30 10:30 – 11:45 (15' discussion)	Iday (4 November) Lecture 2 Green gas from supercritical water gasification of wet bioresidues Wiebren de Jong Associate Professor TU Delft (The Netherlands) Honorary Professor University of Groningen (The Netherlands) Coffee break Keynote 2 Hydrogen as an energetic vector Lourdes Rodríguez Director Hydrogen and Fuel Cell Technology Experimentation National Center
11:30 – 14:00 (2 breaks of 5')	Oral Presentations Application of forward osmosis to ZLD processes José Martínez Pérez Universidad de Sevilla Optimal operation of solar fields with partial radiation Sergio Navas Universidad de Sevilla Proving the climate benefit in the production of biofuels from municipal solid waste refuse in Europe Cristina Aracil Universidad de Sevilla Measurement of Char Temperature by Pyrometry with Digital Camera to Develop Oxy-Combustion Jesús Salinero Universidad de Sevilla Data search (ELV) to adjust BIP in process butadiene from ethanol Camilo Ernesto Cabrera-Camacho Universidad de Sevilla Loop-Seal fluid-dynamics in CFB with application to fuel converters María Tripiana	11:45 – 13:00 (15' discussion) 13:00 – 14:30	Keynote 3 Biomass and waste valorisation: new perspectives for the sustainable production of chemicals and biofuels Rafael Luque Ramón y Cajal Researcher Universidad de Córdoba Oral Presentations Control of biomass conversion in fluidized bed gasifiers Teresa Berdugo Chalmers University of Technology (Sweden) Evaluation of wet scrubbing performance in tar cleaning of syngas Kostas Anastasakis TU Delft (The Netherlands) LCA of alternative bio-products for the production of energy Mauro Cordella Joint Research Center (European Commission)
14:00 – 15:00	Universidad de Sevilla Lunch	14:30 – 15:30	Lunch

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15:00 – 16:00	Oral Presentations Solutions of thermal energy storage and management applied to energy retrofitting Francisco Jesús Lizana Moral Universidad de Sevilla Catalytic transformation of bioethanol to butadiene Gracia Cabello Universidad de Sevilla Supercritical water reforming of model compounds of bio-oil aqueous phase: acetic acid, acetol, butanol and glucose Francisco Javier Campanario Canales Universidad de Sevilla	15:30 – 17:00	Preparation of Project Ideas (PhD students and young researchers)
16:00 – 16:45	LIFE LIFE Programme - good practice on energy and products from biomass and waste Carlos de la Paz LIFE Programme Communications Team	17:00 – 18:00	Project Ideas Contest Presentation of proposals and selection of the winner
17:00 – 18:00	Project Ideas Seminar All young researchers (moderated by Pedro Haro)		
19:00 –	Visit to Torre de Don Fadrique (Convento Santa Clara) Dinner at El Gallinero de Sandra	20:00 –	Social Activities (including dinner) [tbc]

Saturday (November 5): Social Activities (visit to Sevillian Monument, tbc)

Project Ideas Seminar and Contest

Inspired in the annual <u>YEAR Project Ideas Contest</u>, in this edition we want to offer young researchers the opportunity to present an idea for a project within relevant H2020 open and future calls. In the seminar, material will be provided to the participants along with the guidelines for the contest. Participants are encouraged to form efficient working teams and to elaborate feasible project ideas that could be of interest for their home institution. In the contest, one project idea will be selected. The winner team will get full support and guidance from the Department of Chemical and Environmental Engineering in the elaboration of a real proposal.