

## Scope

Scarcity of fossil resources and their high environmental impact is currently causing the necessity for searching sustainable and renewable energy alternatives. In this context, a new approach that tries to cover all aspects related to the use of biomass as a renewable resource arises.

The RESTOENE-2 and INSPIRA-1 Consortia belong to the R&D activities program between research groups in Technology from Comunidad de Madrid.

- The **RESTOENE-2** Consortium (S2013/MAE-2882) outline a very attractive strategy of using agro-forest residues to produce clean biofuels to be used in the transport sector with a very low global balance of CO<sub>2</sub>. Researchers also belong to an Excellence Network entitled “Production of clean biofuels for transport from lignocellulose biomass” supported by Spanish Ministry of Economy and Competitiveness (CTQ2015-68844-REDT).
- The **INSPIRA-1** Consortium (S2013/ABI-2783) proposes as the main scientific and technological objective to develop biotechnological tools to improve the bacteria *Arthrospira platensis* (Spirulina) to optimize the biomass production. The aims are to achieve more efficient, productive and nutritious cultures for its direct use as food and feed and to achieve the full use by the production of nutraceutical and pharmaceutical compounds and energy.

The first workshop organized by both Consortia pretends to be a meeting point of scientific experts in the use of biomass for renewable energy production in order to give attendees the opportunity to know the cutting edge of the research activities and consider needs and solution for these themes.

## Scientific Program

The scientific program of the workshop will consist of several invited lectures from distinguished speakers,

poster presentations and a round table with the final remarks. Assistants are encouraged to present a poster in the workshop. If you are interested, please submit and abstract (maximum 2 pages in English as MS Word file) following the indications on the web site <http://www.restoene.net/workshop.html> before May 15<sup>th</sup>, 2016. An USB memory with the proceedings of accepted contributions will be edited and distributed at the workshop.

## Registration

No registration fee will be requested for participation at the workshop. However, to attend the conferences it will be necessary to fill the registration form on the web <http://www.restoene.net/workshop.html>.  
Deadline for registration: May 15<sup>th</sup>, 2016.

## Organizing committee

Prof. Juan Antonio Melero	URJC
Prof. Javier Dufour	URJC
Dr. Cristina González	IMDEA Energy
Dr. Juan Manuel Coronado	IMDEA Energy

More information of this event is available at RESTOENE web site: [www.restoene.net](http://www.restoene.net)

## Organized by:



## Sponsors:



## Workshop

# BIOMASS RESOURCES FOR RENEWABLE ENERGY PRODUCTION

**June 02-03, 2016**

**IMDEA Energy Institute  
Móstoles – Madrid**

## JUNE 2<sup>nd</sup> (morning)

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9:00 h	<b>Registration</b>
09:45 h	<b>Welcome Ceremony</b> David Serrano Granados IMDEA Energy (Spain)
10:00 h	<b>Opening session</b> <b>RESTOENE-2 &amp; INSPIRA-1</b> José L. G. Fierro ICP-CSIC (Spain) José L. García CIB-CSIC (Spain)
10:30 h	<b>Bioeconomy in the EU: the role of Bio-Based Industries Joint Undertaking</b> Paloma Mallorquín Bio-Based Industries (Belgium)
11:30 h	<b>Coffee Break</b>
12:00 h	<b>Thermochemical route for biomass conversion to aviation biofuels: catalytic CO hydrogenation to higher alcohols</b> Eleni Heracleous CERTH-CPERI (Greece)
13:00 h	<b>Poster session and lunch</b>

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## JUNE 2<sup>nd</sup> (afternoon)

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15:30 h	<b>Generals recommendations of LCA for microalgae biofuels: application to biogas production and water impact assessment</b> Pierre Collet IFP Energies nouvelles (France)
16:30 h	<b>Coffee Break</b>
17:00 h	<b>Xylooligosaccharides from cereal xylans produced by GH Family 10 and 11 xylanases and GH Family 43 and 51 arabinofuranosidase to obtain XOS prebiotic</b> Cristina Álvarez Vaquerizo CIEMAT (Spain)
17:20 h	<b>Catalysts for alkaline polymer membrane fuel cells</b> Manuel Montiel UAM (Spain)
17:40 h	<b>Pt/TiO<sub>2</sub> photocatalysts for H<sub>2</sub> production from bioethanol using visible light</b> Rufino M. Navarro Yerga CSIC (Spain)
18:00 h	<b>Performance of hierarchical ZSM-5 in catalytic fast-pyrolysis of de-ashed wheat straw</b> Héctor Hernando IMDEA Energy (Spain)

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## JUNE 3<sup>rd</sup> (morning)

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09:00 h	<b>Catalyst design for biorefining</b> Karen Wilson Aston University (United Kingdom)
10:00 h	<b>Revalorization of microalgae biomass via anaerobic digestion</b> Lara Méndez IMDEA Energy (Spain)
10:20 h	<b>Biogas production from Spirulina maxima: environmental and energy feasibility</b> Jovita Moreno URJC (Spain)
10:40 h	<b>Bioethanol production from microalgae: an applied case study</b> Mónica Coca Universidad de Valladolid (Spain)
11:00 h	<b>Microalgae applications for the treatment of CO<sub>2</sub> and other effluents produced in a waste incineration plant</b> María Álvarez Neoalgae (Spain)
11:20 h	<b>Coffee Break</b>
12:00 h	<b>Round Table.</b> Final Remarks.

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