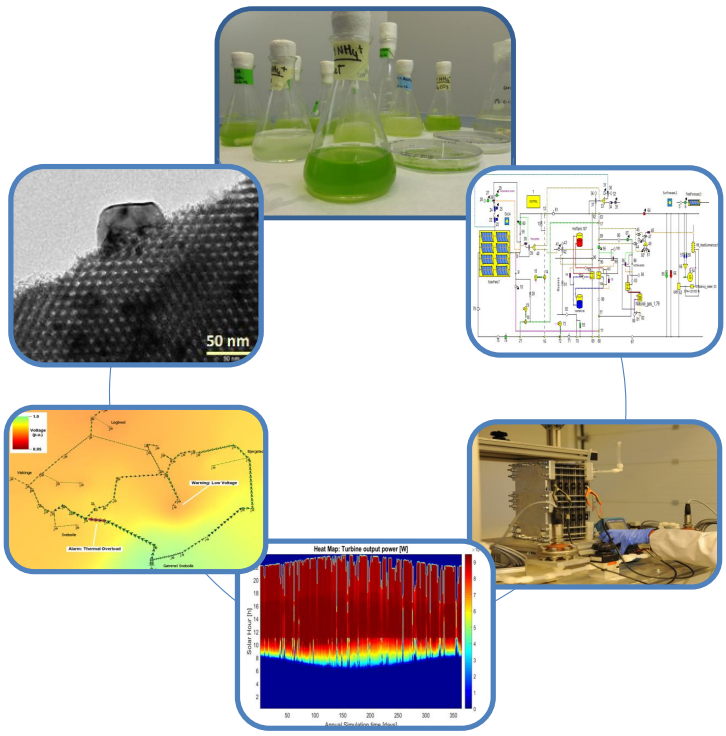
December 11th, 2015



4th Annual Workshop of Young Researchers of IMDEA Energy

09:00-09:30 IMDEA Energy: Current Status and Action plan for 2016. David Serrano

Chairs: Rebeca Marcilla, Diego Iribarren / Post Doc Communication Session 1

09:30-09:45	Mixed Transition Metal Oxide Nanostructures: Promising Electrode Materials for Energy Storage	Afshin Pendashteh
09:45-10:00	Bio-oil production from catalytic fast-pyrolysis of wheat straw	Javier Fermoso
10:00-10:15	Estimation and analysis of building energy demand and supply costs	Jorn K. Gruber
10:15-10:30	Design of advanced thermodynamic cycles for high-efficiency concentrated solar power plants	Miguel Ángel Reyes
10:30-10:45	Hybridization of biomass and coke co-gasification with water electrolysis for hydrogen production. Exergy assessment	Abel Sanz
10:45-11:00	Fast charging of Lithium-ion Batteries for Electric Vehicles under a Frequency Range	Enrique Garcia-Quismondo

11:00-11:30 Coffee Break

Chairs: Mercedes Ballesteros, Jesus Palma / Post Doc Communication Session 2

11:30-11:45	A 20 kW modular bidirectional power supply	Francisco Huerta
11:45-12:00	Inorganic photocatalysts for the production of solar fuels	Fernando Fresno
12:00-12:15	Something is better than nothing. An approach to energy systems modelling	Diego García
12:15-12:30	Predictive decision support tools for smart grids	Barry Hayes
12:30-12:45	Upgrading the bio-oil model components over supported Ni catalysts	Sankaranarayanan Thangaraju
12:45-13:00	Redox couples for flow battery technologies	Pui Ki Leung

13:00-14:30 Poster Session and Lunch

Chairs: Milan Prodanovic, Victor de la Peña / Pre Doc Communication Session 1

14:30-14:37	Reliability assessment in distribution networks: State of the art	Alberto Escalera
14:37-14:44	Performance of All-Solid State Supercapacitors Based on Polymer Electrolytes containing different Ionic Liquids	Girum Ayalneh Tiruye
14:44-14:51	Hydrodeoxygenation of pyrolysis bio-oil using nickel phosphide supported on acidic materials catalysts	Antonio M. Berenguer
14:51-14:58	Life-Cycle performance of novel biofuel systems based on microalgae	Mario Martin
14:58-15:05	Optimization of the laccase detoxification step in SSF processes for bioethanol production	Alfredo Oliva
15:05-15:12	Numerical Modelling of a 100-Wh Lab-Scale Thermochemical Heat Storage System for Concentrating Solar Power Plants	Sandra Álvarez
15:12-15:19	Techno-economic analysis of hydrogen production via cogasification	Esperanza Montero
15:19-15:26	Solar Thermochemical Heat Storage Based on BaO_2/BaO Redox Cycles: Re-evaluating an old concept	Alfonso Carrillo

16:00-17:00 Poster Session and Break

Chairs: Juan Coronado, Salvador Luque / Pre Doc Communication Session 2

16:00-16:07	Novel Concepts of Redox Flow Batteries	Paula Navalpotro
16:07-16:14	Particles reactors based on fluidized beds	Lucía Arribas
16:14-16:21	Cyanobacteria vs Microalgae: a sustainable feedstock for an efficient biomass to biogas conversion	Lara Mendez
16:21-16:28	Catalytic fast pyrolysis of Eucalyptus woodchips over lamellar and pillared ZSM-5	Héctor Hernando
16:28-16:35	Numerical Analysis of Radiation Propagation in Innovative Volumetric Receivers based on Selective Laser Melting Techniques	Sergio Santiago
16:35-16:42	Development of Multifunctional All-solid-state Supercapacitor Based on Carbon Nanotube Fibers	Evgeny Senokos
16:42-16:49	Modelling of the co-processing of pyrolysis oil with VGO in a FCC unit	Pedro Cruz
16:49-16:57	Design of multifunctional hybrid materials: a step closer to artificial photosynthesis	Patricia Reñones

Researchers in Training - Posters

• Quinones: A new field in flow Batteries	Nabil Hechimi
• Boosting Energy Storage Performance of Commercial Fe_2O_3 Nanoparticles by Facile Anchoring on rGO Nanosheets	Jaime Sanchez
• Effect of lignocellulose biomass de-ashing on the bio-oil production by catalytic fast-pyrolysis	Sergio Jimenez
• Electrochemical Performance of Nitrogen-doped carbons in Ionic Liquid based Supercapacitors	David Muñoz-Torrero

17:00-17:30 VOTING FOR AWARDS

18:00- AWARDS AND CLOSING CEREMONY (David Serrano, Manuel Romero)