

# 3<sup>rd</sup> Annual Workshop of Senior Researchers of IMDEA Energy

27 Sept 2022

9:30 - 18:00



**09:30- OPENING- INTRODUCTION TO THE WORKSHOP. DAVID SERRANO**

**RESEARCH UNITS Session 1 Chairs: Patricia Horcajada / Elia Tomas**

9:50 -10:10	Thermochemical Processes Unit	Patricia Pizarro
10:10-10:30	High Temperature Processes Unit	José González
10:30-10:50	Electrochemical Processes Unit	Jesús Palma
10:50-11:10	System Analysis Unit	Javier Dufour

**11:10-11:40 Coffee Break**

**RESEARCH UNITS Session 2 Chairs: Rebeca Marcilla / Javier Dufour**

11:40-12:00	Electrical Systems Unit	Milan Prodanovic
12:00-12:20	Biotechnological Processes Unit	Cristina González
12:20-12:40	Photoactivated Processes Unit	Marta Liras
12:40-13:00	Advanced Porous Materials Unit	Patricia Horcajada

**SENIOR & SENIOR ASSISTANT RESEARCHER Session 1 Chairs: Marta Liras/ Jesús Palma**

13:00-13:15	The Fascinating Trip Towards More Sustainable Batteries	Rebeca Marcilla
13:15-13:30	Sustainability assessment and ecodesign of hydrogen energy systems	Diego Iribarren
13:30-13:45	Progress on an innovative microchannel solar receiver for pressurized fluids	M <sup>a</sup> José Montes
13:45-14:00	Not only sugars: alternative carbon sources for yeast-based bioprocesses	Elia Tomas
14:00-14:15	Hybrid halide perovskites as potential photocatalysts for H <sub>2</sub> production	Yolanda Pérez

**14:15-15:15 Buffet Lunch**

**SENIOR ASSISTANT RESEARCHER Session 2 Chairs: Patricia Pizarro /Diego Iribarren**

15:15-15:30	The Challenge of Resource Scarcity and High Energy Prices in the EU. Lessons from "Dune" (1965) of Frank Herbert	Julio José Lado
15:30-15:45	NO <sub>x</sub> removal from urban polluted air by activated biochars	Javier Feroso
15:45-16:00	Accelerated Solid Electrolyte Interface Quality Assessment of Lithium - Ion Batteries By Mediator-Enhanced Coulometry	Enrique García-Quismondo
16:00-16:15	Discovering the role of ammonia for a renewable energy transition	Laura Collado

**16:15 - 16:45 Break**

**SENIOR ASSISTANT RESEARCHER Session 3 Chairs: Milan Prodanovic / Enrique G Quismondo**

16:45-17:00	Grid-Forming Converters for Future Power Systems	Javier Roldán
17:00-17:15	Governing the intestinal crossing of Metal-Organic Frameworks: an ex vivo & in vivo study	Tania Hidalgo
17:15-17:30	How computational modeling can help us explain the performance of organic molecules in flow batteries	Andreas Mavrantoukakis

**17:30 – CLOSURE. MANUEL ROMERO**