



Symposium “Breakthrough zero-emissions energy storage and conversion technologies for carbon-neutrality”

Providing clean and sustainable energy remains one of the biggest contemporary challenges to limit human impact on Earth. There is a clear need to develop novel concepts and breakthrough innovations to generate energy. Yet, these innovations must rely on net-zero emissions of greenhouse gases and avoid the usage of toxic or critical raw materials.

This symposium is inspired by the **H2020 FET Proactive: Emerging Paradigms and Communities** call Breakthrough zero-emissions energy storage and conversion technologies for carbon-neutrality. The focus of this symposium is on breakthrough innovations in energy storage and conversion that provide clean, compact, and ultimately low-cost solutions for batteries, solar cells, fuels and beyond. Themes discussed in the symposium include:

Topics of interest could include:

- Renewable fuels (including biomass upgrading, Fischer Tropsch, CO₂ conversion, etc)
- Solar Fuels and Chemicals
- Solid oxide fuel and electrolysis cells
- Mechanical energy recovery and heat conversion into electricity
- Optically controlled solar energy storage solutions
- Operando characterization technique applied to energy
- Advanced materials for energy production and storage
- Electrochemical storage

Contributed talks and posters are welcome. Deadline for abstract submission is June 6th.

Prizes are awarded to two outstanding talks from Early Stage Researchers (350€ each) and to the two best posters (150€ each)

Invited speakers:

- David Fairen-Jimenez (University of Cambridge)
- Magda Titirici (Imperial College, London, UK)
- Esther Alarcón Lladó (AMOLF, Amsterdam, NL)
- Mónica Burriel (CNRS, FR)
- Felix Gunkel (Forschungszentrum Jülich, DE)
- Jin-Chong Tan (University of Oxford, UK)

Organizers:

- ALBERT TARANCON (Catalonia Institute for Energy Research - IREC)
- ILKA KRIEGL (Functional Nanosystems Italian Institute of Technology)
- SIMONE MELONI (University of Ferrara)
- VICTOR A. DE LA PENA O'SHEA (IMDEA Energy)