

Workshop on Electrochemical Energy Storage: Theory, Experiments, and Applications



5,12,19 and 26 May 2022
An ICTP Virtual Meeting
Trieste, Italy

Further information:
[http://indico.ictp.it/event/9783/
smr3698@ictp.it](http://indico.ictp.it/event/9783/smr3698@ictp.it)

The workshop will discuss progress in the investigation of materials for batteries, and of the related chemical and physical processes, including lithium- and sodium-based, high-valence-ion, and metal-air batteries, electrodes and electrolytes.

Description:

The world is likely to see an increase of the importance of energy storage in the near future. One reason is the increasing presence of renewable energy sources, most of which are intermittent in nature. Another reason is the drive towards alternatives to fossil fuels for the transportation sector. Across these fields, requirements on the storage system may be very different, for example in terms of energy and power density. For all these solutions, a key issue is the development of functional materials able to perform the required tasks efficiently, produced from safe, widely available and easy-to process raw materials. The aim of the workshop is to discuss recent progress in the investigation of materials for batteries, and of the related chemical and physical processes.

Topics:

- Alkali-ion batteries
- Lithium-sulphur batteries
- Batteries with high-valence ions
- Metal-air batteries
- Experimental techniques
- Computational modeling of materials

Directors:

R. GEBAUER, ICTP, Italy
N. SERIANI, ICTP, Italy

Local Organiser:

N. SERIANI, ICTP, Italy

Speakers:

G. CEDER, UC Berkeley, USA
R. DOMINKO, National Institute of Chemistry, Slovenia
A. FRANCO, University of Picardie, France
Y. GOGOTSI, Drexel University, USA
F. LA MANTIA, Bremen University, Germany
Y.-H. NA, IBM, USA
S. PASSERINI, KIT, Germany
S. SARICIFTCI, JKU, Austria
L. YASHINA, Moscow State University, Russia
A. WALSH, Imperial College London, UK

How to apply:

Online application:
<http://indico.ictp.it/event/9783/>

Female scientists are encouraged to apply.

Registration:

There is no registration fee.

Deadline:

20 April 2022



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