

## 3<sup>rd</sup> SUPERBAT, International Course on “Batteries and Supercaps” 19-20 October @ Univ. Complutense de Madrid



### CONTENTS

Li-ion batteries and beyond: Na, K, Mg, Ca-ion, Metal-Air batteries, Li-Sulphur, Redox Flow (inorganic and organic based), liquid and solid electrolytes. Electrochemical double layer capacitors, hybrid supercapacitors. Processing of battery materials.

### LECTURERS

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SUPERBAT is an excellent training to face the challenges and opportunities that an increasingly sustainable society is demanding. During this 2-day course (14 hours), students will acquire basic knowledge on different topics of interest such as: rechargeable electrodes, liquid and solid electrolytes; solid state chemistry, synthesis, characterization and implementation of these electrode and electrolyte materials in laboratory cells; theory and calculations.

Specific objectives include acquiring basic knowledge about:

- The most widespread electrochemical storage systems such as batteries and supercapacitors.
- Electrochemical characterization to determine the storage capacity, electrochemical stability, power, cyclability and lifetime of different systems.
- Application of ex-situ and in-situ techniques for the characterization of electrode and electrolyte materials of batteries and supercaps.
- Simulation and calculations applied to battery materials.
- Battery materials processing, reuse and recycling as well as second life of batteries and supercapacitors.

If you would like to attend, please register now by email to [superbatcourse@gmail.com](mailto:superbatcourse@gmail.com) with the following information:  
Full name, current status and affiliation.

## ON SITE EVENT

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