SUPERBAT, International Course on “Batteries and Supercaps” 14-15 October @ Universidad Complutense de Madrid

SUPERBAT

INTERNATIONAL COURSE ON BATTERIES AND SUPERCAPS: PRINCIPLES AND APPLICATIONS

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. Recycling and second life batteries.

LECTURERS (on-site)

Elizabeth Castillo-Martínez, Univ. Complutense de Madrid-UCM
Alodia Orera & Mª Luisa Sanjuan, INMA-CSIC-Univ. Zaragoza
Alexandre Ponrouch, ICMAB-CSIC
Erlendur Jonsson, University of Cambridge (UK)
Ricardo Santamaría, INCAR-CSIC
Javier Carretero-González, ICTP-CSIC

HYBRID EVENT

(Limited availability for on-site participation)

Recognized with 1 ECTS credit @ UCM

SUPERBAT is an excellent training to face the challenges and opportunities that an increasingly sustainable society is demanding. During this 2-day course (16 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 characterisation to determine the storage capacity, electrochemical stability, power, cyclability and lifetime of different systems.
-Application of ex-situ and in-situ techniques for the characterisation of electrode and electrolyte materials of batteries and supercaps.
-Simulation and calculations applied to battery materials.
-Battery materials reuse and recycling as well as second life of batteries and supercapacitors.

Register now by email to superbatcourse@gmail.com with the following information:
Full name, current status and affiliation, and specify whether you would like to participate on-site or online.

FREE REGISTRATION!
14-15th October 2021

Organized by:

CSIC Consejo Superior de Investigaciones Científicas
Universidad Complutense Madrid