



# International Workshop on Supercapacitors and Energy Storage

31 May - 1 June 2018

Grand Hotel Salerno, Salerno, Italy



## WORKSHOP PROGRAM

"New roots..."

| Day                                                                                                         | Topic                                                                                                                                    | Speaker                                                             |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| Thursday, 31 May 2018                                                                                       | Visit to Campus and laboratories of University of Salerno (optional)                                                                     | University staff                                                    |
|                                                                                                             | Survey of energy storage applications and potential market                                                                               | Damiano Cavallaro (Politecnico di Milano, Italy)                    |
|                                                                                                             | Supercapacitors: key systems for energy sustainability                                                                                   | Francesca Soavi (University of Bologna, Italy)                      |
|                                                                                                             | Review on supercapacitors: matching materials and electrolytes for high-rate energy delivery                                             | Roman Mysyk (CIC Energigune, Spain)                                 |
|                                                                                                             | New graphene based electrode for supercapacitor applications                                                                             | Maria Sarno (University of Salerno & NARRANDO, Italy)               |
|                                                                                                             | Towards industrialization of a new supercap generation                                                                                   | Giancarlo Abbate (University of Naples Federico II & CapTap, Italy) |
|                                                                                                             | Lightweight flexible CNT supercapacitors for hybrid systems and morphing materials                                                       | Giulia Lanzara (Roma Tre University, Italy)                         |
|                                                                                                             | BATTERY: an Italian startup for the design of novel redox flow batteries                                                                 | Francesca De Giorgio (University of Bologna & BATTERY, Italy)       |
|                                                                                                             | Tests of supercapacitors and batteries in the framework of the European Strategic Energy Technology Plan (SET-Plan) and Battery Alliance | Francesco Vellucci (ENEA Casaccia, Italy)                           |
|                                                                                                             | Molecular dynamics and quantum mechanics study on/of ions conductivity of polyelectrolytes                                               | Javier Luque Di Salvo (University of Palermo, Italy)                |
|                                                                                                             | Performance of commercially available supercapacitors                                                                                    | Mazen Yassine (Santa Clara University, USA)                         |
|                                                                                                             | Friday, 1 June 2018                                                                                                                      | State of the art and future trends of supercapacitor technology     |
| State of the art and comparative test results of the current state-of-the-art supercapacitors               |                                                                                                                                          | Egert Valmra (Skeleton Technologies, Estonia)                       |
| Supercapacitors for high temperatures and harsh environments                                                |                                                                                                                                          | Fabrizio Martini (FastCap Systems, USA)                             |
| Lithium-ion capacitor (LIC) modules to combine energy and power performances                                |                                                                                                                                          | Massimo Miotti (EAS, Italy)                                         |
| Compact power supplies with integrated energy storage and recovery capabilities                             |                                                                                                                                          | Sandro Tenconi (OCEM Power Electronics, Italy)                      |
| Keep the evaluation of a battery state of charge updated                                                    |                                                                                                                                          | Luigi Pellegrino (RSE, Italy)                                       |
| Supercapacitor-assisted starting and peak load shaving in heavy-duty vehicles                               |                                                                                                                                          | Alon Kuperman (Ben-Gurion University of the Negev, Israel)          |
| Laboratory research on the application of supercapacitor-based storage systems for electric mobility        |                                                                                                                                          | Clemente Capasso (CNR Istituto Motori, Italy)                       |
| Technical and economical evaluation of hybrid flash-charging stations for electric public transport         |                                                                                                                                          | Fernando Ortenzi (ENEA Casaccia, Italy)                             |
| Energy storage projects for smart distribution grids                                                        |                                                                                                                                          | Laura Pimpinella (Enel Distribuzione, Italy)                        |
| Supercapacitor as backup for industrial production processes                                                |                                                                                                                                          | Gregor Scheppelmann (FREQCON, Germany)                              |
| Supercapacitor application for reduction of power oscillations                                              |                                                                                                                                          | Marcos Lafoz (CIEMAT, Spain)                                        |
| Battery systems for residential energy storage                                                              | Vincenzo Ferreri (Sonnen, Germany)                                                                                                       |                                                                     |
| Mitigation of power modulation impact in the ITER fusion project using supercapacitors: a feasibility study | Loris Zanotto (RFX Consortium, Italy)                                                                                                    |                                                                     |

"... for new plants"

# ENEA



### WORKSHOP CHAIRMEN

Paolo Ciambelli, *University of Salerno*  
Alessandro Lampasi, *ENEA*

### SCIENTIFIC COMMITTEE

Giancarlo Abbate, *University of Naples*  
Paolo Mattavelli, *University of Padua*  
Maria Sarno, *University of Salerno*  
Francesca Soavi, *University of Bologna*  
Giuseppe Taddia, *OCEM Power Electronics*



<http://www.worcap.eu>

Check website for final program with timetable

Workshop participation is free (with registration)