



SECOND STORIES SUMMER SCHOOL 2024

'HYBRID ENERGY STORAGE AND APPLICATION-ORIENTED SOLUTIONS IN EUROPE'

The Second StoRIES Summer School 2024 entitled "**Hybrid energy storage and application-oriented solutions in EU**" will be held in **Rome in Italy** (Complesso Eni Gazometro di Roma, Via Ostiense 72, 00154 Roma) between **3 June and 6 June 2024**.

The main objective of the Summer School is not only to provide a general overview of a combination of various energy storage technologies (electrochemical, chemical, thermal, electrical and mechanical energy storage), but to suggest innovative hybrid solutions at different levels (from industrial-, to grid-, microgrid-, and domestic-scale applications) for early-career researchers (MSc, PhD students and postdoctoral researchers within 2 years after PhD). Well-recognized experts will share insights on the issues related to hybrid energy storage applications. A [detailed schedule](#) of the Summer School can be found below.

| Second StoRIES Summer School 2024 | | | |
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| Venue: Complesso Eni Gazometro di Roma, Via Ostiense 72, 00154 Roma | | | |
| Monday, 3 June | Tuesday, 4 June | Wednesday, 5 June | Thursday, 6 June |
| Travelling | 09:30 Session 2 (BUIL): <ul style="list-style-type: none"> Hybridisation of vanadium flow batteries – Dr. Peter Fischer, Fraunhofer ICT (45') Integration of battery-flywheel energy storage systems in residential micro-grid – Prof. Linda Barelli, Uni. of Perugia (45') | 09:30 Session 5 (GRID): <ul style="list-style-type: none"> Hybrid Renewables with Storage Technology Stack for Valuation, Planning, Design, and Operations – Dr. Randell Johnson, Acelerex (45') Integration of Storage in Transmission & Distribution Grid: why, where and how? – Prof. Maria Carmen Falvo, Sapienza Uni. Of Rome (45') | 09:30 Group Work Results – Day 1 <ul style="list-style-type: none"> Introduction (5') BUIL: Group 1 (15') + Q&A (5') OFF: Group 2 (15') + Q&A (5') TRA: Group 3 (15') + Group 4 (15') TRA: Q&A (10') Evaluation of presentations (5') |
| | 11:00 Coffee Break | 11:00 Coffee Break | 11:00 Coffee Break |
| | 11:30 Session 3 (OFF): <ul style="list-style-type: none"> Hybrid systems in Off-grid and Energy Islands: comparison of case studies with and without | 11:30 Session 6 (IND): <ul style="list-style-type: none"> Hybrid Energy Storage for Renewable Energy Sources | 11:25 Group Work Results – Day 2 <ul style="list-style-type: none"> GRID: Group 1 (15') + Group 2 (15') GRID: Q&A (10') |



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| | <p>hybridization – Dr. Davide Aloisio, CNR ITAE (45')</p> <ul style="list-style-type: none"> Hybrid hydrogen-battery storage systems for communities: analysis from field experiences and sizing optimization – Prof. Massimo Santarelli, Polito (45') | <p>Integration in Industrial Grid – Prof. Asmae Berrada, UIR (45')</p> <ul style="list-style-type: none"> The role of Energy Storage with Renewable Electricity Generation – Dr. Giacomo Gorni, Eni (45') | <ul style="list-style-type: none"> IND: Group 3 (15') + Group 4 (15') IND: Q&A (10') Evaluation of presentations (5') <p>12:50 Summer School Closing Remarks</p> <ul style="list-style-type: none"> Prof. Stefano Passerini, KIT (10') |
| | 13:00 Lunch | 13:00 Lunch | 13:00 Lunch |
| | <p>14:00 Session 4 (TRA):</p> <ul style="list-style-type: none"> Vehicle Grid Integration Technologies: how unlock value of EV batteries by providing flexibility services – Dr. Davide De Michino, Enel X (45') Electric energy storage for future aero mobility – Dr. Francesco Mastropierro, AIT (45') | <p>14:00 Group Work: Case Studies</p> <p>Day 2</p> <p>Group 1: GRID</p> <p>Group 2: GRID</p> <p>Group 3: IND</p> <p>Group 4: IND</p> | Departure |
| 15:30 Registration | 15:30 Coffee Break | 16:00 Transfer to meeting point for the Social Event (in your own) | |
| <p>16:00 Session 1 (HES):</p> <ul style="list-style-type: none"> Welcoming – Prof. Stefano Passerini, KIT (15') Eni's vision for storage – Dr. Alessandra Tacca or Monica Spada, Eni (20') StoRIES Overview – Dr. Myriam E. Gil Bardají, KIT (20') StoRIES: Developing the Roadmap and SRIA for | <p>16:00 Group Work: Case Studies</p> <p>Day 1</p> <p>Group 1: BUIL</p> <p>Group 2: OFF</p> <p>Group 3: TRA</p> <p>Group 4: TRA</p> | <p>16:30 Social Event</p> <p>City Tour</p> <p>Meeting Point: Circus Maximus</p> <p>Via del Circo Massimo 21</p> | |

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| Hybridisation of Energy Storage – Dr. Roberto Scipioni, SINTEF (20') | | | |
| 17:15 Speed Poster Presentations (1 minute each) | | | |
| 18:15 Poster Session & Dinner (Finger Food) | 18:00 Free Time | | |
| 21:00 Free Time | | 20:30 – 22:30 Networking Dinner Restaurant: Gli Specialisti Piazza in Piscinula 50, 00153 Roma | |

