Information about the Second StoRIES Summer School 2024 Speakers

- Speakers on Monday, 3 June 2024:

- **Prof. Stefano Passerini**, KIT

Stefano Passerini is the Coordinator of StoRIES project. He obtained his PhD in Electrochemistry from Sapienza University of Rome (Italy) in 1992. After international research positions at the University of Minnesota Twin Cities (Minneapolis, USA, 1993–1999) and Waseda University (Tokyo, Japan, 2000), he returned to Italy and joined ENEA in Rome (1996–2008). His research interest led him to Münster, Germany, as co-founder of the MEET Battery Center (2010–2014), and since 2014 to the Helmholtz Institute Ulm. He received numerous awards, e.g. from the Electrochemical Society Inc. (2012) or Ministry of Innovation, and Research North Rhein-Westfalia (2012). He is member of the Electrochemical Society Inc., International Society of Electrochemistry, and Leopoldina Akademie. Finally, he is Editor-in-chief of the Journal of Power Sources.
His research interests and work cover basic and applied research devoted to the study and characterisation of materials and systems for electrochemical energy storage. His main topics are polymer electrolytes, inorganic sol-gel materials and ionic liquids, and lithium and sodium batteries.
Stefano Passerini is author/co-author of almost 800 publications in peer-reviewed international scientific journals (>50’000 citations; H-Index: 121 SCOPUS 05/2024)), 10 book chapters, and about 40 international patents.

- **Dr. Myriam E. Gil Bardají**, KIT

Myriam E. Gil Bardají is a senior research manager and business developer at the Karlsruhe Institute of Technology in Germany. She has been working in the field of energy storage for more than 15 years. Skilled in energy research, third party funds acquisition and European affairs. She is contributing author of the Joint EASE/EERA Energy Storage Technology

Development Roadmap (2017) and the mission-oriented Study on Energy Storage to speed up the Energy Transition (2018).
Experienced research programme manager who has participated in more than 10 European projects on energy storage, including three as co-coordinator. Currently she is deputy coordinator of the H2020 project StoRIES fostering a European eco-system of industry and research organisations on hybrid energy storage technologies.
In 2022 she was elected as leader of the Joint Programme on Energy Storage within the European Energy Research Alliance, establishing a long-term coordinating research effort in the field of energy storage at European level.
Talk Title: StoRIES Overview

- **Monica Spada,** Eni

Monica Spada, Civil Engineer and MBA in Management & Economics of Energy & Environment at Eni Corporate University.
With almost 16 years of experience in Eni S.p.A., Monica Spada has been covering relevant managerial roles within different Eni areas of business.
In November 2021 she became Head of Research & Technological Innovation.
Former Head of Oil and Products Portfolio Optimization and Supply in the Green/Traditional Eni Refining & Marketing department.
Previously she served as Head of Bio-Development, Sustainable Mobility & Circular Economy department of the company and was responsible for the Long-Term Positioning Initiatives Coordination activities with particular reference to those relating to Carbon Neutrality.
Her earlier position as Responsible of the Office of the CEO introduced her to an extensive knowledge of the energy sector.
She is currently member of the Board of several companies, including Milazzo Refinery, Eni Rewind and Eni Trading & Shipping; she is also Chair of Industrial Advisory Board of MOST (Centro Nazionale per la Mobilità Sostenibile). Since February 2024 she is also Chairman of the Scientific Committee of ROAD (Rome Advanced District).
Talk Title: Eni's vision for storage

- **Dr. Roberto Scipioni**, SINTEF

Roberto Scipioni is an experienced research scientist with over 12 years of expertise in the field of energy conversion and storage technologies for both mobile and stationary applications. He is part of the Energy Storage group at SINTEF Energy Research in Norway, where his current projects center on pioneering long-duration energy storage technologies. His areas of interest span advanced materials for Li-ion and redox flow batteries, as well as polymer electrolyte and solid oxide fuel cells. He is the coordinator of the HEU-funded project ReZilient, focused on the development of hybrid metal-air flow batteries for long duration energy storage.
Actively involved in shaping the future of energy technology, he is currently leading the coordination of the Technology Roadmap and Strategic Research Agenda on Hybridisation of Energy Storage Technologies in StoRIES. He also serves as the Technical Leader of Batteries Europe ETIP, the European Technology & Innovation Platform on Batteries.
Talk Title: StoRIES: Developing the Roadmap and SRIA for Hybridisation of Energy Storage

- Speakers on Tuesday, 4 June 2024:

- **Dr. Peter Fischer**, Fraunhofer ICT

Peter Fischer made his PhD in Physical Chemistry/ Laser Spectroscopy at HHU Düsseldorf. Since 2005 he worked on optical analytics for Fuel Cells. Since 2011 he is group leader of the Redox Flow Battery Group at Fraunhofer ICT. His group developed several hybrid storage solutions, e.g. a supercap-RFB UPS-Solution. In project Biflow, they developed a new high-temperature vanadium electrolyte, which is used in the demonstrator of a VRFB/LIB hybrid storage, where the electrolyte is applied as a heat storage medium, making waste-heat utilization possible. The project has been installed at a student dormitory in the city of Bruchsal. Lately in the EU project HYFLOW they installed a VRFB-supercap hybrid in combination with a wind turbine and a solar field for demonstrating virtual inertia on larger scale (2MW).
Lecture Title: Hybridisation of vanadium flow batteries

- **Prof. Linda Barelli**, Uni. Of Perugia

Linda Barelli, PhD. Associate Professor of Electric Systems for Energy at University of Perugia since 2008.
Deputy coordinator of the Sub-programme 2 within the EERA Joint Programme on Energy Storage. Scientific responsible of the e-StorHy (e-energy storage and hydrogen) laboratory at University of Perugia. Her field of research includes energy storage technologies and their integration in stationery and transportation applications; renewable power generation integration in power system; fuel cell/electrolyzer and open/closed battery technologies; exploitation of reactive metals as dense energy carriers.
She currently coordinates the activities of University of Perugia's research group within StoRIES (101036910), RISEnergy (101131793), LIFE3H (LIFE20 ENV/IT/000575), GreenSkills4H2 (101056448) European projects as well as national research projects focused on energy storage topics. Authors of 167 scientific papers indexed in Scopus (h-index 35)
Lecture Title: Integration of battery-flywheel energy storage systems in residential micro-grid

- **Dr. Davide Aloisio**, CNR ITAE

I'm an electronic engineer with a temporary research contract at CNR ITAE, mainly involved in energy systems testing, development and management. In particular, the main activity of my research group is focused on hydrogen technologies development and use in real applications, electrochemical (batteries) and electrical (supercapacitors) storage devices testing and integration in energy systems. Also systems modeling and energy management algorithms are developed in our activities. Co-authors of 56 Documents, with 421 citations and H-index 12 (source Scopus).
Lecture Title: Hybrid systems in Off-grid and Energy Islands: comparison of case studies with and without hybridization

- **Prof. Massimo Santarelli**, Polito

Prof. Massimo Santarelli, Full Professor of Thermodynamics and Heat Transfer, Energy Department, Politecnico di Torino. Author of 312 papers in international journals (h-index 56). The main research activity is related to the topic of complex innovative systems (thermochemical and electrochemical processes) applied to the energy sector.
Coordinator of the HySyLab (Synergies of Thermochemical and Electrochemical Electrical Systems) and of the CO2 Circle Lab of the Politecnico di Torino. Coordinator of EU projects SOFCOM (FCH1-JU Call 2010), DEMOSOFC (FCH2-JU Call 2014), REMOTE (FCH2-JU Call 2017). Partner in several EU projects (AMPS, TULIPS, H2SHIFT ELECTROLIFE, BEST4Hy, SUBLIME, ICO2CHEM, COMSOS, TEACHY, ENEFIELD, ENFICA-FC, BRISK II, …), Coordinator of several national projects. Member for Italy of ISO / TC 197 "Hydrogen Technologies" and of IEC-TC 105 "Fuel Cells". Coordinator of the Erasmus+ MSc HySET (Hydrogen Systems and Enabling Technologies).
Lecture Title: Hybrid hydrogen-battery storage systems for communities: analysis from field experiences and sizing optimization

- **Dr. Davide De Michino**, Enel X

Management Engineer with almost two decades of experience in the energy sector, Davide De Michino had several roles in the Enel Group. After ten years in the electricity market and flexibility services, he drove the development and launch of the first Global Smart Home product at Enel X in different countries.
Currently Davide is the Global Head of Products and Energy Services solutions in the e-mobility department, driving the team that create products to help Enel customers in the e-Mobility transition. Davide is also responsible for VGI solutions, trying to extract short term commercial value while design a long-term strategical role of EVs into flexibility value stream, also participating in the regulatory advocacy activities: he is the leader in the Grid Integration & Energy Focus Group at CharIN and is part of the e-Mobility Task force at SmartEN.
Lecture Title: Vehicle Grid Integration technologies: how unlock value of EV batteries by providing flexibility services

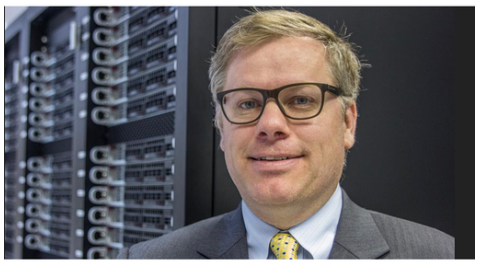
- **Dr. Francesco Mastropierro**, AIT

I graduated with PhD in Aerospace Engineering (Cranfield University UK, preliminary design of hybrid electric propulsion system). After it, I joined AIT in 2021 as member of the Hybrid Electric Aircraft Technology group. Among other topics, my work involves the modelling and the simulation of multifunctional energy storage and battery system as a whole for aviation application. I am involved into several EU-funded action on batteries (e.g. SOLIFLY/MATISSE for multifunctional energy storage, ORCHESTRA for high-density battery systems).

Lecture Title: Electric Energy storage for future aero mobility

- Speakers on Wednesday, 5 June 2024:

- **Dr. Randell Johnson**, Acelerex



Dr. Randell Johnson has 25 years of experience in power and electrical engineering, transmission & distribution system management & planning, and energy grid modeling technologies. Dr. Johnson is the inventor of the Acelerex REX technology that includes Grid Analytics, Data Services, and EMS/SCADA/DAS/PPC/MDE as well as grid & nodal-level production cost, transmission expansion, power flow, resource dispatch, revenue forecasting, and asset-level monitoring & control. Dr. Johnson, along with Acelerex, has developed sizing, locations and valuation methodologies for hybrid grids with Genset, PV, and energy storage across 150 plus countries. Dr. Johnson has also led the development of integrated resource plans, detailed electrical and power system engineering exercises, technoeconomic analyses, & grid-level investment analysis and asset valuations. Dr. Johnson has advised infrastructure funds, large independent power producers, governmental agencies, development banks, utilities, and electric grid regulators on energy policy, grid-technologies, energy management systems, resource planning and more.

Lecture Title: Hybrid Renewables with Storage Technology Stack for Valuation, Planning, Design, and Operations

- **Prof. Maria Carmen Falvo**, Sapienza Uni. Of Rome

Maria Carmen Falvo received her Ph.D. in Electrical Engineering in 2007 at University of Rome "Sapienza" (Italy). Since 2008, she is with the Department of Electrical Engineering of the same University, until 2018 as Assistant Professor and now as Associate Professor. From 2024 she is the Coordinator of PhD School in Engineering and Applied Science for Energy and Industry. Since 2011, she works as professor at Polytechnic Engineering School of Gijon at University Oviedo (Spain), where she is teacher for the subjects Electrical Energy for Transport (2011-2012) and Power Systems for Electrical Transportation (from 2013 to 2017). She was visiting professor in 2012 at Instituto de Investigación Tecnológica (IIT) of Universidad Pontificia de Comillas in Madrid (Spain) and in 2013 at Electrical and Computer Engineering Department and at FREEDM centre of North Carolina State University in Raleigh (NC, USA). Her main area of research includes Power Systems Simulation, Transmission&Distribution Grids Planning, Power Systems for Electric Transport, Storage and Smart Grids. She is author of more than 120 papers. She is an IEEE Senior member from 2013.

Lecture Title: Integration of Storage in Transmission & Distribution Grid: why, where and how?

- **Prof. Asmae Berrada**, UIR

Dr. Asmae Berrada is a professor of energy storage and renewable energy at the international university of Rabat (UIR). She has led several research projects and published a number of articles and books. She is currently coordinating a project about the development of gravity energy storage with smart energy management system (GESYS). Another research project led by Pr. Berrada is about the development of smart hybrid power system consisting of PV/Biogas/Battery energy system (SHPS). She is specialized in energy storage, hybrid energy systems, and smart energy management system. She can bring to the summer school her expertise and knowledge, offering attendees valuable perspectives on the opportunities and challenges and in integrating hybrid energy storage solutions for industrial grid applications.

Lecture Title: Hybrid Energy Storage for Renewable Energy Sources Integration in Industrial Grid

- **Dr. Giacomo Gorni**, Eni

Giacomo Gorni is an Electronic Engineer with over 20 years of experience in Industrial R&D. He worked ten years as Project Manager at Pirelli Labs on the development of nanotech optoelectronic devices.
From 2009 to 2018 he was R&D Manager in Tozzi Green, working on organic photovoltaics and energy storage systems.
He joined Eni in 2018, as Head of the R&D Solar Energy department.
In 2020 he became Head of Innovative Technologies Dept for Energy Solutions, focusing on the deployment of innovations in the area of Renewable Energy Power Plants.
He is currently R&D/Business Interface for Renewable Technologies, promoting innovative initiatives on Photovoltaics, Wind Energy and Electrical Storage.
Lecture Title: The Role of Energy Storage with Renewable Electricity Generation