

News

JP ES Event 2023: 'Exploring similarities, synergies and perspectives of open electrochemical reactors for long duration energy storage', 14 September 2023, Capri, Italy

The JP ES Event 2023 consists of joint workshop organized in the frame of SP1, SP2 and SP6. The workshop would like to bring together experts in the field of these semi-open electrochemical cells to exchange on cutting-edge research and developments and to answers the following questions: What are the perspectives for each or a combination of these technologies? What are the scientific-technical challenges? How sustainable are current concepts, and how can this be assessed? Which application areas benefit from which power and storage scale? The workshop will be held as a side event to EFC 2023 in Capri. Registration includes also access to the EFC 23 on Thursday Sept 14th. Participants interested to attend also the EFC 23 conference may benefit for a reduced registration rate to EFC 23. Read more here.

Registration open now until 25 August 2023 here.

JP ES Workshop on 'Hybridization in Energy Storage', 20 September 2023, Rome

The JP ES SP1, SP3 and SP4 sub-programmes will organize a session entitled 'Hybridization in Energy Storage' at Nanoinnovation Conference 2023. This session will feature presentations providing a comprehensive overview of the current state of the technology, its potential for future development, and its role in the transition to a more sustainable energy future. More information will be made available soon at the JPES website.

Joint EERA JP EEIP-ES-GE Workshop on 'Applications for Industrial Thermal Energy Storage', 7 November 2023, Utrecht, Netherlands

In December 2022, the White Paper on "Industrial Thermal Energy Storage - Supporting the transition to decarbonise industry", developed within the scope of activities of the European Energy Research Alliance (EERA), was launched. As a follow up, and in collaboration with the EERA Joint Programmes Energy Storage-SubProgramme 3 (JP ES-SP3), Geothermal (JP GE) and Energy Efficiency in Industrial Processes (JP EEIP) a workshop on Applications for Industrial Thermal Energy Storage is foreseen. The event will be held on 7 November 2023 in Utrecht, The Netherlands. Read more <a href="https://example.com/here-new-market-new-mar

JP ES 23st Steering Committee Meeting alongside a StoRIES Workshop on 'Environmental, Techno- and Socio-Economic Assessment of hybrid ES Systems', 4-6 December 2023, Vienna, Austria

The next JP ES Steering Committee Meeting (SCM#23) is planned on 5 December 2023 in Vienna (Austria). Please save-the-date in your calendar. Detailed information about agenda and location will be given after the summer break.



Ongoing Activities

JP ES Mobility Scheme

The first publication out of the JP ES mobility programme run in 2021 between UNIBO (IT) – KIT (DE) entitled 'Influence of Vacancies in Manganese Hexacyanoferrate Cathode for Organic Na-Ion Batteries: A Structural Perspective' has been published by Min Li et al. The manuscript can be found here.

The mobility scheme is one of the activities of the EERA JP ES to support young researchers in the field of energy storage, as we consider very important to ensure the next generation of scientists in this field. The 2023/2024 call for applications is now open. All members (full and associate) can take advantage of this opportunity.

Read more information here.

JP ES Award

Between 19 and 20 April a workshop on Supercapacitors and Energy Storage took place in Bologne. During the workshop EERA JP ES provided awards for the Best Posters. The 250€ awards went to: Niyaz Ahmad from the University of Parma in Italy and to Luigi Mattiafrom the University of Salerno in Italy.

JPES Advisory Board

The JP ES Advisory Board (AB) counts currently on 6 members, namely

- Magdalena Graczyk-Zajac (EnBW, Germany)
- Stefano Saguatti (MANZ, Italy)
- Karin Rindt (Energy Solutions at Beyernwerk, Germany)
- Alex Campbell (International Hydropower Association)
- Gianni Grasso (ASG Superconductors S.p.A., Italy)
- Christian Doetsch (Fraunhofer, Germany)

The first meeting between the AB members and SC members is planned on 5th December 2023 in Vienna, Austria.

JPES at LinkedIn

A dissemination campaign was launched in 2022 with the first <u>JP ES Video</u>. In 2023, these efforts will be continued. Several video interviews of JP ES members speaking about trending topics related to energy storage will be regularly published on LinkedIn.

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Sub-Programme Update

SP2- Chemical Energy Storage – Coordinator: P. Holtappels (KIT)

SP2 met in conjunction with the Steering Committee meeting and Energy Conversion and Stories days at KIT in March 2023 and welcomed the new members CIIAE-Iberian Centre for Research in Energy Storage (acc. SCM#22) and Helmholtz Institute Berlin (since SCM#21). Direct electroreduction of CO2 and also CO₂ capture technologies are emerging among the SP2 partners. The subprogramme also contributes substantially to the JP ES workshop in conjunction with EFC 23 on: "Exploring similarities, synergies and perspectives of open electrochemical reactors for long duration energy storage". (see above *News*).

As regards recent developments, a 250 kW Solid Oxide Electrolyser for steam and carbon dioxide electrolysis has been recently installed at the Energy lab at KIT. This electrolyser complements the existing steam and water electrolysers and allows to supply syngas directly to the power-to-fuels plants.

SP3- Thermal Energy Storage – Coordinator: S. Vasta (CNR)

SP3 is organising the Workshop on Applications for Industrial Thermal Energy Storage together with the EEERA JP EEIP and JP GE. In addition, SP3 is organizing a session at Nanoinnovation conference 2023. The session will focus on Hybrid Energy Storage Systems and it will feature presentations providing a comprehensive overview of the current state of the technology, its potential for future development, and its role in the transition to a more sustainable energy future (see above *News*). Finally, a sub-programme 3 meeting (2 hours) is going to be organised in Vienna on Monday, December, 4, at the next SCM#23. A registration form will be arranged soon.

SP4- Mechanical Energy Storage – Coordinator: A. Harby (SINTEF)

The SP4 on Mechanical Storage including hydropower, flywheels and compressed and liquid air energy storage have made several reports and factsheets describing the state-of-the-art within these technologies. We would now like to update these documents and revitalise the work within Mechanical Storage. We also think mechanical storage plays a crucial role in the hybridization of energy storage and energy systems, answering to the needs for flexibility and storage at multiple timescales. We encourage participants to join SP4 meetings in conjunction to the JP Energy Storage Steering Committee meeting 4-6 December in Vienna, Austria.

SP6- Technoeconomics and Sustainability – Coordinator: Y. Lechón (CIEMAT)

Within the frame of the EERA Annual Strategy Meeting in June 2023 in Madrid, the JP ES-SP6 and JP e3s a joint workshop entitled "ENERGY FOR THE FUTURE - Exploring not-technical factors for Energy Storage deployment" which took place in Madrid on Friday 16th June 2023 from 9.00 to 13.15. The workshop was preceded by a site visit on the afternoon of 15 June at the Control Centre of Renewable Energies of Red Eléctrica de España (Spanish TSO). The workshop aimed at contributing to build a multidisciplinary bridge through the promotion of a concrete dialogue and practical exchange of knowledge, information and perspectives among the members of the two EERA Joint Programmes Energy Storage and e3s-clean Energy tranSition for Sustainable Society. A report summarizing the workshop results will be published soon. Read more here.



EU Project Update

StoRIES third call for Transnational Access (TNA) is now open

StoRIES project has launched its thirs Transnational (TNA) call for research and innovation projects. The call topic, "*Solutions for Hybrid Energy Storage Systems*", The call topic is open to different sources of innovation: material research, development and testing of a component, device or device cluster, simulation of systems or system components, etc. and the integration of the innovation in the energy system. All researchers from academia and industry are invited to submit their proposals via the <u>StoRIES website</u> by **August 31, 2023**.

Read more here.

RISEnergy proposal has been invited to prepare the Grant Agreement

RISEnergy proposal has been positively evaluated by the European Commission. This project led by Karlsruher Institut für Technologie (KIT), brings together 69 organisations from 22 countries and will count on a budget of € 14,5 million for the next 4,5 years. Among ESFRI landmarks, national institutions, research organizations and industry partners, RISEnergy counts with the participation of EERA and several of its Joint Programmes: JP Energy Storage, JP Wind,JP Bioenergy, JP Photovoltaics, JP Concentrated Solar Power, JP Fuel Cells and Hydrogen, JP Ocean Energy, JP Smart Grids, JP AMPEA, JP Digitalization for Energy.

Read more here.

Upcoming Events in 2023 at a glance

- 7-8 August 2023: 2nd Seminar in Hydrogen Research Forum Finland, LUT (FI). More info here.
- 14 Sept 2023: JPES Workshop 'Exploring Similarities, Synergies and Perspectives of Open Electrochemical Reactors for Long Duration ES, Capri (IT). More info here.
- 20 Sept 2023: JPES Workshop on 'Hybridization in Energy Storage', Rome (IT).
- 10-12 Oct 2023: Energy Storage Global Conference EASE, Brussels (BE). More info here.
- 17 Oct 2023: EERA's High Level Policy Conference, Brussels (BE).
- 7 Nov 2023: JPES-JPEEIP-JPGE Workshop on 'Application for Industrial Thermal ES', Utrecht (NL). More info here.
- 9-10 Nov 2023: SET-Plan conference, Barcelona (ES).
- 5 Nov 2023: JP ES SCM-#23, Vienna (AT).
- 6 Nov 2023: StoRIES Workshop 'Setting up a common base for environmental, technoeconomic and socio-economic assessment to unlock the potential applications for hybrid ES systems', Vienna (AT).