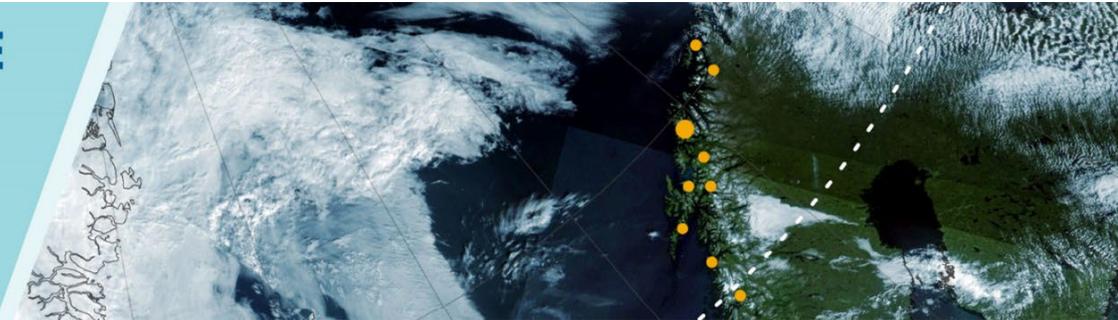




WEEPE 2023

Workshop on Electrochemical Energy Conversion and Power Electronics

June 19-23, 2023
Narvik, Norway



Call for paper

Welcome to the WEEPE 2023, a workshop hosted by UiT The Arctic University of Norway and the Arctic Centre for Sustainable Energy (ARC) focusing on popular topics such as hydrogen fuel cells, batteries and power electronic energy conversion.

Our goal is to gather academia, industry and government for a four-day workshop where you will get the latest news from both an industry and research perspective, with the possibility to expand your network and make new contacts. The workshop will feature keynote speakers, invited industrial presentations and presentation of scientific papers.

ORGANIZATION AND VENUE

The event is hosted by UiT in our campus in Narvik June 19-23, 2023.

The following main structure is planned for the event:

- Part 1:** Invited industrial and government presentations, panel discussion and open popular science talks.
- Part 2:** Presentations and discussions with a multidisciplinary aspect, main focus on topic 1-4.
- Part 3:** Technical scientific presentations and discussions, main focus on topic 4-7.
- Part 4:** Industrial visits and tour of UiT in Narvik.

IMPORTANT DATES

- Extended abstract: April 1st, 2023
- Full-paper submission: April 1st, 2023
- Acceptance notification: April 15th, 2023
- Final paper submission: May 1st, 2023

See more details and submission guidelines in the "Authors" page on the WEEPE2023 website <https://uit.no/weepe2023>.

TOPICS

The use of technologies such as fuel cells and battery energy storage are seen as important for technologies in our transition to a more sustainable society through electrification and use of renewable energy sources. Topics in this workshop will not only include the main technologies, but also related challenges such as risk, security, regulations, societal impact, and real-world experiences.

Authors are invited to submit their work either as a full scientific paper, or as an extended abstract. Accepted work must be presented at the workshop, where full papers will be uploaded to IEEExplore®. The final presentation form (oral or poster) will be decided by the workshop chair and committees.

The workshop will focus on the following topics that includes, but not limited to, the keywords in italic:

- 1. Society, Politics, Standards and Regulations**
Societal impact, energy transition, energy politics, standardization.
- 2. Risk and Security Management**
Risk and security analysis, risk assessment, risk and security management, operations and maintenance, resilience assessment.
- 3. Demonstration and prototype experiences**
Marine systems, fuel cells in vehicles, fuel cells in aviation and mobile energy supply units.
- 4. System Integration**
Hybrid energy systems, energy & power management systems, redundance, real-time simulation and hardware-in-the-loop.
- 5. Energy Conversion Systems and Applications**
Converter topologies, low level control, electrical system modelling, common mode challenges.
- 6. Fuel Cell Technology**
Low and high temperature fuel cells.
- 7. Battery Technology**
Materials and design, packing, applications, life cycle.

