



Call for Papers for the Special Session on Smart Grids and Sustainable Energy Integration: Innovations, Challenges, and Future Directions

Renewable Energy Sources are increasingly recognized as one of the main pillars of global climate change mitigation. Over the last years a paradigm shift can be observed, from central generation units to distributed ones, where consumers and communities become producers of their own energy. However, in order to increase the utilization of that energy, part of it known as intermittent, new methods of optimization and control should be developed. This special session will explore research and technological innovations in Smart Grids, aimed at enhancing the efficiency, resilience, and sustainability of energy systems. Relevant topics include, but are not limited to: development of local energy communities, demand response solutions, hydrogen generation and integration in electrical grids, electric mobility and charging, energy storage advancements, AI-driven optimization, IoT-enabled energy management, and policy frameworks for sustainable energy transitions.

Special Session Organizers

- Jânio Monteiro, CISCA & CINTAL, University of Algarve, Portugal, jmontei@ualg.pt
- Ascensión Zafra Cabeza, University of Sevilla, Spain, asunzafra@us.es
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Important Dates

- Paper and Abstract submission deadline: **January 31th, 2025**
- Notification of acceptance: **March 15th, 2025**
- Final paper submission deadline: **May 1st, 2025**
- Early bird registration deadline: **April 30th, 2025**
- Regular registration deadline: **June 29th, 2025**
- Conference and onsite registration: **from 1st to 4th, July, 2025**

Participation

Authors can participate in this Special Session of INCREaSE 2025 by submitting a full paper of 10-16 pages, using the format available in INCREaSE web site ([word](#) or [latex](#)), and accepted papers will be invited to present (in-person or online) a 15-minute oral presentation and will be indexed by Springer.

Link for Submissions: <https://meetinghand.com/e/increase-2025/abstract>

INCREaSE 2025 Conference

The International Congress on Engineering and Sustainability in the XXI cEntury – INCREaSE 2025 is a congress with the aim to bring together valuable and novel scientific contributions to the sustainable development in a multidisciplinary way. This 4th edition of INCREaSE will be a hybrid event, held during July 1-4, 2025, in Faro, Portugal, organized by the Institute of Engineering and hosted by University of Algarve.



<https://increase.ualg.pt/>

