



IFAC Workshop on Smart Energy Systems for Efficient and Sustainable Smart Grids and Smart Cities

Politecnico di Bari | ITALY
June 18-20, 2025

The **2025 IFAC Workshop on Smart Energy Systems for Efficient and Sustainable Smart Grids and Smart Cities – SENSYS 2025**, will take place in Bari, Italy, from June 18 to June 20, 2025.

Hosted under the auspices of the **International Federation of Automatic Control – IFAC**, this workshop will explore advanced decision and control techniques and applications within smart energy systems to enhance the efficiency and sustainability of infrastructures, ecosystems, and urban areas of the future. Attendees will benefit from a rich program featuring technical sessions, keynote lectures, and opportunities for networking with leading experts, industry professionals, and policy-makers.

We invite submissions for Open Invited Track, Regular Contributions, Discussion Contributions and Dissemination Contributions that align with the workshop's topics.

The proceedings are published online in partnership with Elsevier in the open access journal **IFAC-PapersOnLine**. Each paper is uniquely identified by a DOI (Digital Object Identifier), the current standard for electronic papers citation. IFAC-PapersOnLine is indexed by Scopus, the Web of Science (WoS), and Google Scholar.

We look forward to welcoming you to Bari, Italy!

Main IFAC sponsoring Technical Committees

- TC 6.3. Power and Energy Systems

IFAC Co-sponsoring Technical Committees

- TC 8.3. Modelling and Control of Environmental Systems
- TC 9.3. Control for Smart Cities

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Topics

Workshop topics include but are not limited to:

- Distributed and decentralized control and management
- Intelligent control in smart grid
- Wide-area monitoring and control
- Virtual power plants
- Design of energy markets for smart grid
- Fault detection, supervision, and safety
- Modelling and control of prosumer resources
- Smart design and control of energy storage systems
- Artificial Intelligence in control systems
- Non-linear dynamic modeling
- Multi-objective and multi-criteria optimization
- Agent-based and participatory modeling
- Integrated assessment modeling
- Uncertainty management
- Decision support systems

Application fields

- Smart grids
- Smart districts and buildings
- Smart cities
- Energy communities
- Green hydrogen
- Renewable energy
- Sustainable development
- Resource management (water, atmosphere, and land)
- Biotechnological systems
- Environmental systems and energy nexus
- Natural risk management (floods, forest fires, hurricanes, earthquakes, etc.)
- Power electronics & energy conversion
- Electrical machines & industrial drives
- Smart mobility & transportation electrification
- Electronic system on chip & real-time embedded control
- Industrial processes & manufacturing

Deadlines and Other Dates

- 10 November 2024 – Submission Management System opens
- 15 January 2025 – Open Invited Track submission deadline
- 15 February 2025 – Regular Paper initial submission deadline
- 15 March 2025 – Discussion and Dissemination contributions submission deadline
- 31 March 2025 – Acceptance notification
- 15 April 2025 – Final submission deadline
- 30 April 2025 – Early registration rate expires
- 1 June 2025 – Normal registration rate expires
- 18 June 2025 – Late registration rate expires
- 18-20 June 2025 – Workshop dates



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Workshop Website

<https://conferences.ifac-control.org/sensys2025>