



23<sup>rd</sup> - 26<sup>th</sup> October 2023 Grenoble, France

Powering solutions for decarbonized and resilient future smartgrids

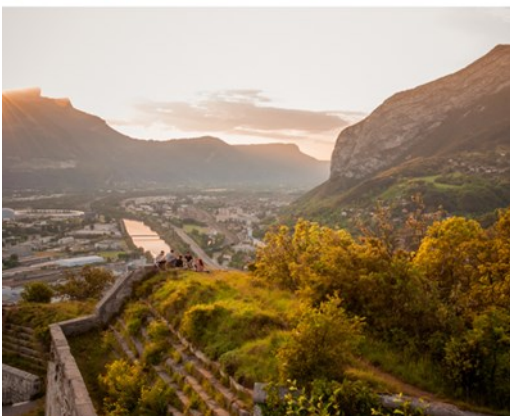
## Call for papers

ISGT Europe 2023 will feature keynotes, plenary sessions, panels, industry exhibits, paper and poster presentations by worldwide experts on smart grid and related technologies. Researchers, practitioners, industrials and students worldwide are invited to submit papers for consideration. The selected papers will be presented at the conference, along with discussions on the latest trends and emerging and innovative technologies for grid modernization.

The IEEE PES ISGT Europe conference is one of the two IEEE PES flagship conferences organized in Europe and has established a strong reputation in recent years. It focuses on industrial and manufacturing theory, and considers applications for the wide use of information and communication technologies, integrated renewables, and distributed energy sources on the electric grid.



### Venue: Grenoble, France



Rhône-Alpes is one of Europe's most prosperous and dynamic regions. It ranks as the second most prosperous region in France, after Paris-Ile-de-France, with a gross domestic product per capita 6% higher than the European Union average. The land surface of Rhône-Alpes is equivalent to that of Belgium, Switzerland or the Netherlands, with a population of 6,068,000, comparable to Denmark and Finland.

The reputation of Grenoble-Isere stems from its exceptional natural environment and varied urban and cultural activities. The many lakes, and the Mediterranean Sea close by, offer a wide range of superb locations to water sport lovers.

Ranked in the top 5 most innovative cities in the world, Grenoble is constantly reinventing the future. With a rich scientific and industrial culture, the region offers a unique setting in the heart of the Alps. As a prime destination for hosting business and scientific events, the Grenoble-Alpes metropole offers quality support and increasingly attractive, effective solutions.

## Topics of the conference

The conference will feature keynote and plenary sessions, panel sessions, and technical papers presented in poster sessions, as well as pre-conference tutorials.

The Conference Organizing Committee invites practitioners and researchers worldwide to submit papers and panel proposals on conference topics outlined by the following three tracks:

Track 1: Sustainable energy infrastructures

Track 2: Technologies and processes for flexible and resilient grids

Track 3: Latest industrial developments towards resilient grids

Each track will cover topics among the following:

### Components

- Smart substations
- Diagnostic, aging models, reliability and lifetime extension
- Circular economy, eco-design and component recycling
- Advancements in power electronics for smart grids

### Power systems management strategies

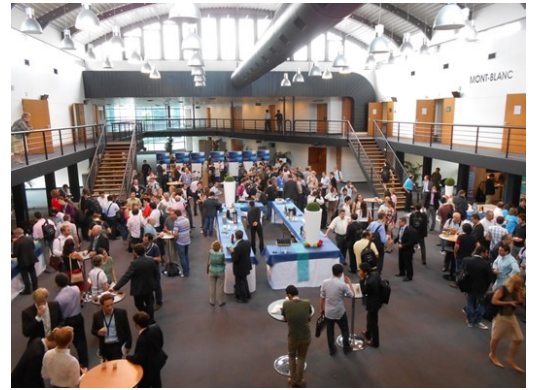
- Integration and management of energy storage systems
- Integration and operation of power electronics-interfaced resources
- Advancements in ADMS, DERMS, EMS, and OMS solutions: solutions for microgrids
- Distribution and transmission system coordination
- Multi-energy systems: power-to-X storage, etc.

### Protection, ICT & automation

- Cybersecurity
- Protection
- Resilience regarding data exchanges
- Automation of active power systems
- Communication and real-time connectivity in smart grids
- Interoperability, standards and norms

## Chairs of the conference

- **Conference Chair** : **Bertrand RAISON**, Professor Université Grenoble Alpes, SMIEEE
- **Conference Honorary Chair** : **Nouredine HADJSAID**, Professor Grenoble-INP, LFIEEE
- **Industry Chairs** : **Gabriel BAREUX**, RTE-R&D Director & **Pierre MALLET**, ENEDIS-R&D and Innovation Director
- **General Secretary and Finance Chair** : **Marie-Cécile ALVAREZ-HERAULT**, Associate Professor Grenoble-INP
- **Technical Program and Track 1 Chair** : **Vincent DEBUSSCHERE**, Associate Professor Grenoble-INP
- **Track 2 Chair** : **Georges KARINIOTAKIS**, Professor MINES ParisTech/ARMINES, SMIEEE
- **Track 3 Chair** : **Marc PETIT**, Professor Centrale-Supelec
- **Publications Chair** : **Jérôme BUIRE**, Associate Professor Grenoble-INP
- **Academic Chair** : **Delphine RIU**, Professor Grenoble-INP



### Planning

- AC, DC, and hybrid power systems
- Uncertainty management
- Forecasting methodologies for grid planning & operation
- Prospective studies: pathways for low-carbon and sustainable energy systems

### Innovative methods and tools for power systems

- Low-inertia and inertia-free power systems
- Grid resilience evaluation and improvements
- Digital twins and computer modelling
- Data science for power systems: the use of artificial intelligence for smart grids - edge computing and autonomous control

### Market design, end-users, regulation, prosumers

- Demand response and demand side management
- VxG and prosumer commitment
- Local energy communities, transactive energy systems
- Future energy markets and energy policy
- Energy sufficiency and social prosumer incentives

### Towards the large-scale deployment of new solutions

- Lessons learned/best practices from demonstrators of smart grid technologies
- Illustration of high TRL industrial developments
- Benchmarks, reviews and open data sharing



### Key dates for papers

Full paper submission 17<sup>th</sup> April 2023  
Notification of decision 21<sup>st</sup> July 2023

### Key dates for panels

Panel proposal submission 17<sup>th</sup> April 2023  
Notification of decision 21<sup>st</sup> July 2023

### Key dates for registrations

Early-bird registration opens 30<sup>th</sup> July 2023  
Standard registration opens 30<sup>th</sup> September 2023

### Conference dates

23<sup>rd</sup>-26<sup>th</sup> October 2023