

SATES 23

Symposium on Advanced Technologies
in
Electrical Systems

ARRAS
22nd & 23rd March 2023



WELCOME TO SATES - 2023

It is our great pleasure to invite you to participate to the international **Symposium on Advanced Technologies in Electrical System**. It will be held in Arras, France, the **22nd and 23rd of March 2023** in the campus of the Artois University, Arras, France.

SCOPE

In the general context of **sustainable development and strategic resiliency**, the conference will cover new usages of electricity and renewable energy resources, **from circular economy to safety & security** of electrical supply chain.

The objective is to **connect researchers from industry and academia** in order to encourage them to work together on common themes. All TRL levels will be addressed. Contributions on feedback from experiences will be very useful and will facilitate discussion on common issues **at all levels of maturity and development**.

ABSTRACT SUBMISSION

Prospective authors should submit an abstract of one or two pages (A4) using the online submission system available on this link :

<https://sates-2023.sciencesconf.org/>

The instruction for the preparation of paper will be given on the conference web site. The manuscripts will be evaluated by reviewers.

IMPORTANT DATES

15th September 2022 : **Abstract submission deadline**

15th December 2022 : **Notification of acceptance**

15th February 2023 : **Full paper submission deadline**

22nd & 23rd March 2023 : **SATES 2023**

TOPICS

1. Circular – Economy for electrical system

Systemic approach using different levers:

- » Reusing, Sharing or Leasing
- » Recycling, Repairing or Refurbishing
- » Recycling
- » Eco-design
- » Life Cycle Assessment

2. Electrical Grid Reliability & resiliency

Review the potential energy efficiency improvement:

- » Digital Twin
- » Energy storage
- » Prevention and management of outages
- » Superconductors

3. Re-industrialization for electrical products

Challenges and opportunities to strengthen and develop industry by:

- » Redesigning products
- » New processes or sourcing
- » Access to strategic Materials and components
- » Sustainability

4. Electrical Energy Efficiency

Review the potential energy efficiency improvement:

- » The economic potential of loss-saving
- » Barriers and incentives to minimize losses
- » Considering the losses in the network design
- » Sustainability

5. Security & safety of electrical supply chain

How to insure availability and key functions of electrical supply chain:

- » Cybersecurity
- » Diversification of energy supply
- » Natural risks (seism,...)
- » Emergency management
- » Quality of life vs security & safety

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