



[www.2023.matpost.org](http://www.2023.matpost.org)

7<sup>th</sup> EUROPEAN CONFERENCE  
ON SUBSTATION EQUIPMENT

22<sup>TO</sup> 24  
NOVEMBER  
LYON  
DOUBLE MIXTE

## The year 2023 is a historic opportunity for MatPost...

### ► Energy debates focus on decarbonization pathways

The migration of uses to electricity leads to the search for ways to support this transition, with strategies to be put in place at all levels, from the exploitation of deposits and the saving of materials, to digitalisation.

The stakes and challenges are major to face this new electrification revolution, but also for sustainable electronics in an increasingly digital world.

The means of nuclear and renewable production are inseparable from the development and adaptation of the networks, which is the guarantee of the electricity mix expected to meet environmental and sustainable challenges.

### ► Electricity is at the heart of this future of energy and digitalization

It is imperative to succeed in combining all the constraints linked to access to resources over the long term for a sustainable future, with the deployment of energy infrastructures requiring real-time control of operations, by integrating uncertainty into Planning.

Not only the infrastructures and networks must allow these guarantees of quality and durability but the materials that compose them must themselves also meet these criteria of preservation of the environment in their operation (releases, emissions, waste, ... ) and in their design (materials, eco-design, etc.).

After periods of questioning and recent difficulties, the resolutely affirmed orientations for the 2030 horizons for mobility and 2050 for the energy future and the decisions taken in 2022 both for energy and for digitalization show the way forward and set the requirements for designers and users of electrical network equipment and... for MatPost.

## A pursuit of change for MatPost2023

As an extension of the developments already undertaken in previous editions, MatPost2023 will bring together, within the framework of technical conferences, electricity producers, network managers and equipment manufacturers.

For the profession as a whole, whether it is the operators of electrical networks, the manufacturers of components and systems for these networks, but also all the players in research centers, universities, test laboratories, all are mobilized on these issues, in particular through consortia. The drastic improvement in energy efficiency is a major challenge.



➤ Also, the next MatPost2023 Congress is committed to the objective:

## “Major infrastructure projects for a carbon-free world and their impact on Substation equipment”

The messages of our previous edition have been reinforced.

Each component, in Medium or High Voltage, from the power transformer through the entire control protection system, has both an electrotechnical functional role but also becomes a connected object. The post becomes the place of collection, of synthesis of valorization at the crossroads of these two networks. Today’s electrical system is indeed a network of objects connected by a double channel: energy, the traditional way, but also information.

In 2022, physical data, for the most part, is generated by machines.

Operation, storage and processing, transmission to the processing unit make this local processing necessary.

Analyzing this exponentially growing data, also via the cloud and other related technologies to enable this shift from data to insights and results are all key technologies for digital transformation. Businesses around the world are investing in the Internet of Things.

Cybersecurity is a critical area. Cyber threats to the Industrial Internet of Things (IIoT) are real and global.

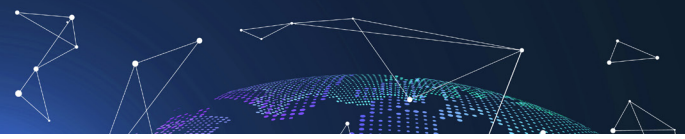
The integration of intermittent renewable decentralized electricity production as well as electric vehicles are major challenges for the electricity system. This variability requires permanent control of the overall stability between production and consumption.



### The eight plenary sessions of the MatPost2023 Congress will address these challenges\* for HV and MV substation equipment:

- Integration into the electrical networks of renewable energy and its production, large solar and wind farms on land and at sea, development of interconnections, storage, hydrogen production.
- The electricity network for sustainable mobility, with the impact of electric vehicles on all charging infrastructures,
- Direct current and the performance of power semiconductors, converters, new use cases and associated technologies,
- Maintenance of facilities, behavior laws, aging laws,
- Asset management, condition monitoring, supervision, the contribution of Artificial Intelligence to the management of these assets, the means of controlling the system.
- The digital era, with the explosion of connected objects and the impact on cybersecurity, digital twins, properties and catalog data, communication networks,
- Eco design and sustainable development, circular economy, reparability, dismantling and rare materials, Life Cycle Assessment (LCA), and ownership costs, new SF6 replacement solutions, new technologies, Energy Efficiency,
- Changes in standards and regulation, with coordination between committees, interoperability, upward compatibility, «Grid Codes».

\*Without forgetting the prospects for changes in current professions and the creation of new professions to arouse vocations among young people and to find in the training systems the development of the necessary skills.



➤ **A content for experts but also a communication towards young people**

During the two days of plenary sessions, the technical exhibition of the MatPost congress which brings together the main players always arouses the interest of visitors. The visit to the exhibition is a must for the conviviality made possible by the size of the event, the spaces for discussion around the themes of the Congress and the presence on the stands of experts in the fields presented.

This exhibition is an excellent complement to the rich scientific and technical program presented during the plenary sessions of the congress and will be a guarantee of success after the long period at a distance.

Located at the door of the University of La Doua and in the immediate vicinity of engineering schools and laboratories, this 2023 session offers an opportunity for exchanges and contacts between these two generations, professionals, participants and exhibitors, and students at looking for their future...

Technical visits will be offered on the third day,

Detailed information on MatPost2023 is available on the Congress website.



**Where?**

DOUBLE MIXTE  
Campus de la Doua  
19 Av. Gaston Berger  
69100 Villeurbanne  
Lyon - France

**Contact**

MatPost2023 / SEE Office:  
matpost2023@see.asso.fr

**Organizer**



[www.2023.matpost.org](http://www.2023.matpost.org)

