



Laboratoire Systèmes Electrotechniques  
et Environnement



apime

Association pour la Promotion de l'Innovation des Matériels Electrique

# E D2E 2021

International Conference on

# E CO-D design in E lectrical E ngineering

## Arras

12<sup>th</sup> & 13<sup>th</sup> October



## WELCOME TO ED2E

It is our great pleasure to invite you to participate to the international conference on **Eco-Design in Electrical Engineering**. It will be held in Arras, France, the **12<sup>th</sup> and 13<sup>th</sup> of October 2021** in the campus of the Artois University, **Arras, France**.

## SCOPE

In the general context of sustainable development, the conference will focus on eco-design of electrical equipment in connection with the development of renewable energies and energy efficiency. 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.

## OBJECTIVE

The evolution of the electrical equipment and their constituent materials and their inclusion in the current and future power grids show prospective. The time frame tied to that context justifies the consideration of technical and economic constraints to investment, operating costs and recycling.



## TOPICS

### 1. Materials

**Ecological impact of electrical engineering materials (insulation, conductor, magnetic)**

- ◇ Existing materials performance improvement
- ◇ Low environmental impact materials
- ◇ New materials : nano-materials, superconductive

### 2. Equipment

**Ecological impact of electrical equipment (Production, Transmission, Distribution, Use)**

- ◇ Motors & Generators
- ◇ Transformers & Circuit breakers
- ◇ Limiting current / voltage devices
- ◇ Power electronics converters

### 3. Grids & Renewable energy

**Insertion constraints of equipment in the grid**

- ◇ Public & Isolated grids, Smart Grids
- ◇ Photovoltaic production
- ◇ Wind farms (on & off-shore)
- ◇ Energy storage
- ◇ Hydro-electricity

### 4. Economics & Regulations

**Life cycle management of the networks considering regulation aspects and environmental impacts through economic approaches**

- ◇ Eco-design & End of life management
- ◇ Limitation of non-renewable materials
- ◇ Life cycle forecast
- ◇ Maintenance strategies
- ◇ Technical-and-economic assessment, Regulations

### 5. Energy Efficiency

**Review the potential energy efficiency improvement**

- ◇ The economic potential of loss-saving
- ◇ Barriers and incentives to minimise losses
- ◇ Considering the losses in the network design

## SOCIAL EVENT

The conference will be punctuated by a gala dinner and a visit (included in the fees) of the experiments platform of the research lab LSEE.

## LANGUAGE

The English language will be the official language of the conference. It will be used for both sessions and the communication text in the final proceeding.

## ABSTRACT SUBMISSION

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

<https://ed2e-2020.sciencesconf.org/>

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

An **award** and a price of 500€ for **the best paper presented by a young researcher** will be offered by an ED2E sponsor: EDF.

## IMPORTANT DATES

**15<sup>th</sup> march :** Abstract submission deadline

**1<sup>st</sup> may :** Notification of acceptance

**1<sup>st</sup> september :** Full paper submission deadline

**12<sup>th</sup> & 13<sup>th</sup> October :** ED2E 2021



## CHAIRMAN

Jean Luc Bessède APIME

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## REGISTRATION FEES

Participant	250 €
Student	50 €

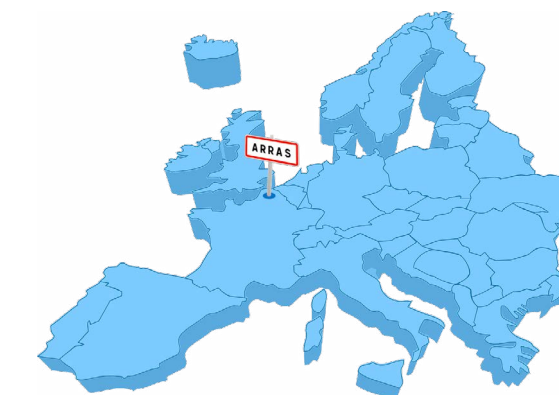
## LOCATION

The technical program of the ED2E 2020 will be held in the amphitheater Jacques Sys, also known as «Le Dôme» inside the campus of the Artois University, which is situated in the centre of Arras and thus in the middle of all city activities.



## VENUE

Arras is located less than 50 minutes from Paris Charles de Gaulle airport by high speed train (TGV) and 30 minutes from Lille airport by car.



## CONTACT

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