The 26th International Conference and Exhibition on Electricity Distribution

Europe's leading international conference & exhibition on power distribution

Advance Preview Programme

Palexpo Conference Centre
Geneva, Switzerland

Register your place at www.cired2021.org
Welcome to CIRED 2021

From Lukas Küng, Chairman of the CIRED 2021 Organising Committee

The venue for CIRED 2021 is the Palexpo, Geneva, with outstanding facilities ideal for this highly important and dynamic CIRED event. Palexpo is located within walking distance of the international airport of Geneva and has a train station with connections to all neighbouring countries. Geneva is at the outer West of Switzerland, people speak French, but as it is the seat of many UN Organisations you will feel perfectly comfortable using English as well. Geneva is home to some stunning views from the glorious Lake Geneva to the snowy mountain tops of the Swiss Alps.

Pandemic
Due to the COVID-19 pandemic we have moved the event from June to September 2021 so that we are able to both confidently and safely plan an event which many people within the power distribution industry look forward to every other year.

At CIRED 2021 we will put in place all measures necessary to guarantee a safe and productive conference and are fully prepared to adapt to the global climate as it develops.

The Programme
The Programme for CIRED 2021 reflects the ever-changing business and political demands of all aspects of electricity distribution. It represents the interests of all sectors of the industry – utilities, regulators, manufacturers, consultants, start-ups, universities, and research centres. From engaging round tables to the famous CIRED posters, you are sure to find something for you!
Opening forum
The opening forum will feature strategic presentations and discussions on climate change, a topic which remains at the forefront of the minds of innovators, regulators, and executives around the world.

The keynote presentations will focus specifically on the ever-changing nature of energy production and consumption by customers, including distributed generation and electric vehicles. Leading figures drawn from the different sectors of our industry will then respond to the keynote, giving delegates an insight into future challenges from a variety of perspectives. The keynote presentations are immediately followed by a panel discussion. Delegates will also have the opportunity to question panel members and contribute to this discussion.

Delegate choice
Delegate choice is a major factor in the success of CIRED and this will be no different in Geneva! The well-developed CIRED format includes presentations and discussions led by expert Chairs and Rapporteurs, poster sessions, round tables, tutorials, and a major international exhibition with countless well-known organisations as well as a start-up village!

CIRED 2021 is made possible by the tireless efforts of many contributors. I would like to thank the National and Liaison Committees, the Technical Committee, the Directing Committee, the authors who have provided an excellent number of abstracts and papers, and my colleagues of the Organising Committee.

I look forward to welcoming you to Geneva in September 2021.

Lukas Küng,
Chairman,
CIRED 2021 Organising Committee
What is CIRED?

CIRED, the leading forum where the electricity distribution community meets, holds the major International Electricity Conference & Exhibition every two years in different venues across Europe, with worldwide perspective and participation.

CIRED works for the purpose of increasing the business relevant competencies, skills and knowledge of those who see themselves as a part of the electricity distribution community, whether they are from the utility, product, consultancy, service, business or academic sectors.

Conference format

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20-23 SEPTEMBER 2021
Important Participant Information

Registration
The registration fee entitles the attendee to the following:

- attend all the conference sessions
- participate in the discussions
- visit the exhibition and poster sessions
- access all of the reports presented during the technical sessions in advance of the conference
- receive the Special Reports in advance of the conference
- the conference discussion recording published on the website after the conference
- the delegate bag handed out upon registration
- lunch, morning and afternoon refreshments
- attend the opening forum on Monday 20 September 2021

Official language
English will be the official language for both spoken and written literature. No translations will be provided.

WiFi
WiFi will be provided throughout the Conference.

Gala dinner
The CIRED 2021 gala dinner will be taking place at the Domaine du Grand Malagny which offers breathtaking views over Lake Geneva and Mont-Blanc. The dinner will take place on Wednesday 22 September 2021 at 7pm.
CIRED 2021 will be officially launched by a series of premier speakers on Monday 20 September 2021 with the world renowned CIRED Opening Forum. The opening forum will commence at 15:00 in the main congress centre of Palexpo and all attendees are welcome to attend. The topic of the opening forum is Climate Change, hear from our guest speakers and put your questions to the expert panel.

15.00 hrs  **Introductions and welcome**
Chair: Lukas Kung, *Chairman of the CIRED 2021 Organising Committee*

15.05 hrs  Emmanuel De Jeager, *Chairman of CIRED*

15.15 hrs  Antonio Hodgers, *Council of State, Department of Planning, Housing and Energy (DALE), State of Geneva*

15.35 hrs  State Grid of China

15.55 hrs  Shay Bahramirad, *Vice President - Engineering and Smart Grid, ComEd, USA*

16.15 hrs  **Panel discussion and questions**

16.55 hrs  **How CIRED 2021 will work**
Chair: Lukas Kung, *Chairman of the CIRED 2021 Organising Committee*
A series of tutorials will be held on Monday 20 September 2021 to offer attendees the opportunity to enhance their knowledge in specific areas.

Registration includes:
- access to one tutorial
- tutorial slides for your chosen session
- refreshments
- lunch

**Tutorial 1**
*New developments in grounding design including risk analysis*

Katrin Friedl, *Graz University of Technology, Austria*
Theodor Connor, *MTC-Energy, Germany*
Lothar Fickert, *Graz University of Technology, Austria*

**Tutorial 2**
*Measurement and evaluation of 2-150 kHz disturbances (supraharmonics) in distribution networks*

Paul Wright, *National Physical Laboratory, UK*
Jan Meyer, *Technische Universität Dresden, Germany*

**Tutorial 3**
*The connections of Distributed Energy Resources (DER) into unbalanced three-phase MV and LV networks: challenges and solutions*

Dr Kang Ma, *University of Bath, UK*
Prof Luis Nando Ochoa, *The University of Melbourne, Australia and the University of Manchester, UK*
Dr Ignacio Hernandez Gil, *ESTIA Institute of Technology – Recherche, France*
Dr Sasa Djokic, *University of Edinburgh, UK*
Tutorial 4
Network pricing for smarter electricity distribution networks

Furong Li, University of Bath, UK
Christine Brandstaett, Jacob University, Germany
Marangon Lima, Universidade Federal de Itajuba, Brazil
Simon Yeo, Western Power Distribution, UK
Luana Lima, Duke University, United States

Tutorial 5
Optimised life cycle management of MV-Grid components by utilisation of modern diagnostics, digital technologies, and intelligent algorithms

Jan Meyer, Technical University Dresden, Germany
Michael Freiburg, TH Cologne, Germany
Petros Dalamaras, Universität Wuppertal, Germany
Erik Sperling, OMICRON electronics GmbH, Switzerland
Boris Bastigkeit, OMICRON electronics GmbH, Austria
Lars Jendernalik, Westnetz GmbH, Germany
Technical Sessions:
Main, Round Tables and RIF, and Poster Sessions

Three full conference days cover the six main conference themes, namely:

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For more information on topics to be covered in each session, see the Technical Scope.

Main Sessions
Led by expert Chairmen and Rapporteurs, the main sessions comprise of oral presentations by selected authors, along with discussion periods to ensure interesting and balanced debate.

Poster Sessions
Delegates will be able to hear structured and attractive poster sessions covering countless areas of research and ask the authors questions about their work.

Technical Exhibition
A major and up-to-date international industry exhibition is associated with the 26th CIRED Conference, and the opening of the exhibition will follow the welcome reception on Monday 20 September 2021. This is your chance to get a view of the technology of the future.
Technical Visits

Technical Visits have limited availability and can be purchased via the CIRED 2021 registration page.

Technical visit 1 – CERN
CERN, the European Organization for Nuclear Research, is one of the world’s largest and most respected centres for scientific research.

At CERN they probe the fundamental structure of the particles that make up everything around us. Their physicists and engineers do this by using the world’s largest and most complex scientific instruments.

Subatomic particles are made to collide together at close to the speed of light, the process gives us clues about how the particles interact and provides insights into the fundamental laws of nature. CERN want to advance the boundaries of human knowledge by delving into the smallest building blocks of our universe.

This technical visit to CERN will include a video introduction to CERN, followed by a 2-hour tour. Please note you will not get to see all areas of CERN with this time frame. In addition to the tour, you can also explore their permanent exhibitions.

Technical visit 2 - Transports Publics Genevois in collaboration with Hitachi
On this visit to Transport Publics Genevois (TPG) you will get to experience Geneva’s flash-charging electric public transport system. You will travel on a TOSA electric bus to the TPG facility where you will get insight into the charging solution and set up. The TOSA electric buses use a small lightweight battery and a discreet fast-charging infrastructure. On route to TPG there will also be a stop at a charging station where you will get to find out more on the technology involved in the charging process that enables the buses to take only 15 seconds to charge during stationing time at a bus stop.
Technical visit 3 - Alpiq Zentral Veytáx

The visit to the ALPIQ/FMHL (Forces Motrices Hongrin-Léman SA) in Veytaux near Montreux will include a guided tour of the FMHL facilities. You will get to see both the Veytaux I power station which entered service in 1971 and the Veytaux II power station which was commissioned in 2017.

Veytaux’s two pumped storage power plants make a significant contribution towards Switzerland’s security of supply and represents a complementary investment in connection with the fluctuating electricity generation from new renewable energies.

With a capacity of 480 megawatts (MW), of which 60 MW is in reserve, the hydroelectric complex produces approximately one billion kilowatt hours of peak energy per year, equivalent to the consumption of nearly 300,000 households.

*Forces Motrices Hongrin-Léman SA belongs to the shareholders Romande Energie SA, Alpiq Suisse SA, Groupe E SA and City of Lausanne. Alpiq, as owners’ representative, is in charge of FMHL and the operator is Hydro Exploitation SA.*
## Round Tables and RIF sessions

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Sponsorship & Exhibition Opportunities

Bring your brand to the electricity distribution industry’s decision makers, including C-Level executives, DNOs, utilities, innovation managers, business development managers and leading researchers.

With 1,500 conference attendees from 50+ countries and 2,000 exhibition visitors, it is the place to be seen and drive new business.

To find out more about how you can raise the profile of your organisation, please contact our Sponsorship and Exhibition team today:

Paul Skinner
Tel: +44 (0)1438 767241
Email: PaulSkinner@theiet.org
We look forward to welcoming you to the conference

CIRED
20-23 SEPTEMBER 2021
GENEVA, SWITZERLAND

www.cired2021.org