

Host:

Flexible Electrical Networks Research Campus

Administration:

Flexible Electrical Networks FEN GmbH
Campus-Boulevard 79
52074 Aachen

Tel.: +49 241 80 22471

Mail: info@FENaachen.net

Webseite: www.fenaachen.net

General Notice:

The event is planned to take place in person.

Reservation of Right to Modify:

The organizer strives to conduct the program as announced. However, in the event of unforeseen circumstances, the organizer reserves the right to modify the program or schedule. The organizer cannot be held liable for any loss or consequences arising from such changes.

Scientific Board:

- Prof. Stefan Kornhuber, Zittau/Görlitz University of Applied Sciences
- Prof. Rik W. De Doncker, RWTH Aachen University

Program Committee:

- Prof. Cezary Dzienis, Zittau/Görlitz University of Applied Sciences
- Benjamin Jacobsen, M.Sc., Chemnitz University of Technology
- Prof. Maria Kosse, Dresden University of Technology
- Dipl.-Ing. Mark Richter, Fraunhofer IWU
- Prof. Peter Schegner, Dresden University of Technology
- PD Dr. habil. Stephan Schlegel, Dresden University of Technology
- Prof. Uwe Schmidt, Zittau/Görlitz University of Applied Sciences

Contact:

Erika Fontanesi
Tel.: +49 241 80 22471
Email: info@dc-verteilnetztagung.de

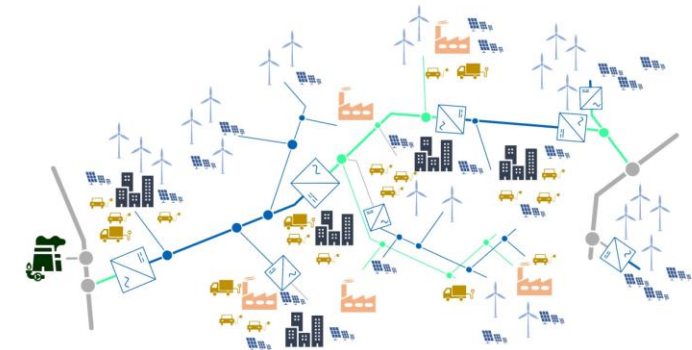
Conference Venue: Aachen

Conference Language: English

Conference Office:

Until 15 April 2026:
Flexible Electrical Networks FEN GmbH
Campus-Boulevard 79
52074 Aachen

On 16 and 17 April 2026:
From 9:00 a.m. at the conference venue

Call for Papers

3rd Conference on DC Distribution Grids

**Innovations
Challenges
Perspectives**

16-17 April 2026
Eurogress Aachen



**RWTH AACHEN
UNIVERSITY**

**RESEARCH
CAMPUS**
Public-Private Partnership
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With funding from the:



Federal Ministry
of Research, Technology
and Space

The DC Distribution Grids Conference

DC transmission technology has been successfully applied at the high-voltage level for many years. Its advantages have also been demonstrated in industrial settings, as exemplified by the DC Industry 1 and 2 projects.

The direct integration of renewable energy sources, as well as the connection of storage systems and loads to DC networks, has sparked increased discussion and a re-evaluation of the potential of DC technology for the distribution of electrical energy. Inspired by larger industrial installations, the shared use of DC infrastructure is becoming increasingly important for medium-sized enterprises. Furthermore, advancements in DC technology are opening up numerous new applications for the distribution of electrical energy at medium- and low-voltage levels.

The questions and challenges arising for components and systems in this context are presented at the Conference on DC Distribution Grids, along with current solution approaches and ongoing developments.

Objective

The conference is aimed at research institutions, manufacturers, end-users, consulting firms, and other relevant organizations. DC distribution networks, from system-level considerations to individual components in various configurations, will be discussed in depth.

The conference provides a platform for presenting and discussing current issues in both practical applications and research. Lectures and poster presentations serve as stimuli for discussions on current and future challenges as well as potential solutions. Additionally, the event offers opportunities to exchange experiences in an open and collaborative atmosphere.

Call for Papers

We warmly invite you to participate in the conference. Please submit the abstract of your paper by the deadline below. Papers will be showcased as a 20-minute presentation or as a poster. All papers will be published in the conference proceedings.

Submissions can be made and presented in English. Simultaneous translation will not be provided. All publications will be available as Open Access.

Deadlines

Please note the following dates:

31.01.2026	Submission of preliminary abstract (approx. 500 words, DOCX or PDF) to: info@dc-verteilnetztagung.de
22.02.2026	Notification of paper acceptance
31.03.2026	Submission of manuscripts (4–6 pages)

For more information, please visit:

<https://www.dc-verteilnetztagung.de>

Agenda

Thu, 16 April 2025, Start: 09:30

- Opening
- Presentations on key topics
- Guided poster sessions
- Joint evening event

Fri, 17 April 2025, Start: 08:30, End: 14:00

- Presentations on key topics
- Lunch break
- Closing

Key Topics

1. System Characteristics of DC Distribution Networks

- System layout
- Multi-terminal system operation and power flow control
- Voltage and current quality in DC networks
- Multi-vendor DC systems
- DC currents in the ground
- Operational concepts for hybrid AC/DC systems
- Integration of renewable energy converters and storage systems
- Control and stability analysis

2. Protection Concepts for DC Distribution Networks

- Fault detection
- Personnel safety
- Fault clearing depending on network configuration
- Reliability and resilience

3. Components in DC Distribution Networks

- Requirements and lifetime of insulation systems
- Current-carrying capacity and heating
- Monitoring and diagnostics of components

4. DC Distribution Networks in Practice

- Current standards and regulations
- Industrial applications
- Applications in power supply

5. Economic Assessment of DC Systems

- Life-cycle costs
- Cost comparison between AC and DC systems