# Special Issue

# Polyphase Insulation and Discharge in High-Voltage Technology

## Message from the Guest Editors

High-voltage devices play a pivotal role in the realms of electric and electronic engineering. The dire requirement for mechanical support and for isolation among distinct gas or liquid chambers necessitate the adoption of polyphase insulation structures within these devices. These structures encompass gas-solid, liquid-solid, or solid-solid interfaces with diverse materials or phases. Moreover, advantages such as compact geometry and better cooling also encourage researchers and engineers to design and incorporate polyphase insulation structures into their novel prototypes. We welcome submissions of original research articles and reviews in areas including (but not limited to) the following:

- Novel design methods of polyphase insulation structures;
- Electrical, mechanical, and thermal properties of polyphase dielectrics;
- Fundamental characteristics of polyphase discharge and resultant plasma;
- Innovative diagnosis methods of polyphase insulation structures;
- Simulation and experimental approaches for polyphase insulation;
- Utilization of advanced polyphase insulation in high voltage technology.

## **Guest Editors**

Dr. Wendong Li

Dr. Junbo Deng

Dr. Daning Zhang

## Deadline for manuscript submissions

15 August 2025



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## Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

### Editor-in-Chief

Prof. Dr. Flavio Canavero

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