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# **Optimization and Control of PV and Modern Power Systems**

Guest Editors:

### Dr. Krzysztof Lowczowski

Department of High Voltage and Electrotechnical Materials, Faculty of Environmental Engineering and Energy, Institute of Electrical Power Engineering, Poznan University of Technology, 60-965 Poznan, Poland

## Prof. Dr. Zbigniew Nadolny

Department of High Voltage and Electrotechnical Materials, Faculty of Environmental Engineering and Energy, Institute of Electrical Power Engineering, Poznan University of Technology, 60-965 Poznan, Poland

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closed (12 March 2024)

# **Message from the Guest Editors**

Dear Colleagues,

The optimization of renewables and power networks, as well as increasing the share of renewables is a big challenge because of many technical issues among which one can mention the high voltage level, asymmetry, overloading of the power network, PQ issues like voltage variation, negative consequences of harmonics etc. In order to solve these problems, it is necessary to address many technical issues, including:

- Active optimization of the coordination between volt/var and power flow control devices, which can adjust to new operating conditions faster and better than existing systems;
- Effective utilization of novel functionalities and methods of integration of novel functionalities with the network (e.g., Q at night and other functionalities which often remain inactive);
- Specification of new energy sources and auxiliary devices functionalities;
- Development of the set of rules and control algorithms which in optimal network conditions would make it possible to reduce constraints put on renewables to maximize energy production

Dr. Krzysztof Lowczowski Prof. Dr. Zbigniew Nadolny *Guest Editors* 











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## **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

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