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Modelling Power Converters in DC Distribution Systems for Telecom, Aerospace, Automobile, etc., Applications

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Deadline for manuscript submissions:

closed (10 September 2019)

Message from the Guest Editors

DC power distribution systems are currently applied in many industrial applications, such as telecom, aerospace, automobile, and so on, as well as in data centres, and, more recently, in DC microgrids. In these systems, most of the units are connected to the DC buses using power converters, which play a significant role in the system dynamics.

In order to estimate the system behaviour and its stability, power converter models able to represent all of their operating conditions are required. In this Special Issue, we invite papers that describe the most recent and advanced modelling techniques for power converters in DC power distribution systems in any application field.

The topics of interest in this Special Issue include, but are not limited to, the following: Advanced small-signal modelling techniques; Stability analysis at system level; Black-box modelling techniques; Modelling techniques for bidirectional converters; Modelling battery chargers/dischargers; Modelling protection strategies for power converters; Monitoring strategies for DC distribution systems and Modelling the effect of communication systems.



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Special Issue



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Message from the Editor-in-Chief

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