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Railway Traction Power Supply

Guest Editor:

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Deadline for manuscript submissions: closed (31 March 2023)

Message from the Guest Editor

Nowadays, electrified railway networks are considered one of the most environmentally friendly transportation systems. In the context of the need for increased rail transportation both for freight and passenger services, the efficiency of the electric traction system, from the power supply to the rolling stock, is of central concern. This Special Issue will focus on advances in the domain of railway traction power supply at different aspects levels: modelling, technologies, converters and systems. All electrification systems, both Direct Current and Alternating Current, are addressed.

Papers on the following topics are welcome:

New solutions for interconnection to public grid (reversible substation, voltage balancer, frequency changer ...);

New solutions for power supply (FACTs, three-wire DC power supply, MVDC power system, Integration of renewable energy sources, Energy storage systems ...);

Interactions between rolling stock and power supply (low frequency stability, harmonics interactions ...).









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Message from the Editor-in-Chief

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