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Advances in Transformer Technology: Intelligent Condition Monitoring and New Materials

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Deadline for manuscript submissions:

closed (10 October 2023)

Message from the Guest Editors

Transformers constitute the heart of the power system. High attention and due emphasis are being laid by transformer owners and utility engineers to optimize the technical and financial aspects of the energy transition. In view of the diversity in the use of condition monitoring technologies, and progress in the use of alternative insulating materials, a careful understanding of the evolving technologies is essential to adapt transformer utilization to the context of the network of the future. Therefore, this Special Issue aims to combine new trends in transformer digitalization and new materials for improved insulation system performance. Such a combined lecture will be helpful for researchers and engineers to better understand the rapid advancements in technologies that will improve asset management, operational reliability, and safety.

Topics of interest for publication include, but are not limited to:

- Transformer modelling, digital twins
- Intelligent condition assessment and monitoring
- Diagnosis and prognosis of power transformers
- New materials to improve transformer performance
- Low pour-point liquids for transformers



mdpi.com/si/134741

Special Issue



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Message from the Editor-in-Chief

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Journal Rank: CiteScore - Q1 (*Engineering (miscellaneous)*)

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