

Durability of Transmission Lines

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Message from the Guest Editors

Climate and environmental factors such as icing, corrosion, pollution, heat and UV can be detrimental to outdoor transmission lines (including overhead wires and insulators). Advanced functional coatings have distinguished application prospects in improving anti-icing, anti-corrosion, and anti-fouling properties, among others. However, their effectiveness and durability in the operation of transmission lines are still insufficient. Due to the importance of durability for transmission lines, we invite you to submit your recent research work to the Special Issue titled “Durability of Transmission Lines”.

This Special Issue aims to gather the latest innovations in the field, regarding the following:

- Corrosion behavior of transmission lines and corrosion resistance;
- Anti-icing surfaces/coatings for overhead line conductors and insulators;
- Pollution flashover of insulators and antifouling coatings;
- Corrosion resistant coatings, antiultraviolet ageing coatings, anti-thermal coatings;
- Advanced functional surfaces and interfaces;
- Durability of surfaces/coatings.

We look forward to receiving your contributions.



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Special Issue

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Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

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