Special Issue

Soil and Pitting Corrosion of Steel

Message from the Guest Editor

Dear colleagues, Soil and pitting corrosion of steel structures is a major problem for many industries—from oil and gas to infrastructure to utility transmission. Despite extensive studies, many aspects of soil corrosion remain unclear as soil is a complex, porous, and discontinuous environment comprised of inorganic and organic solid phases, a water-based liquid phase, air, and other gas phases, all of which present challenges for research. Similarly, several aspects of pitting corrosion are still unexplored. This Special Issue of *Metals* aims to cover all aspects of soil and pitting corrosion of steel, with a special interest in the following topics:

- Pitting corrosion of additive manufactured alloys;
- Microstructure/pitting corrosion relationship of steel;
- Multiscale modeling for corrosion prediction;
- Soil corrosion in pipeline and infrastructure;
- Soil corrosion—risk assessment and mitigation;
- Corrosion inhibitors.

Guest Editor

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Deadline for manuscript submissions

closed (25 February 2022)



Metals

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/49543

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Message from the Editorial Board

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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