



an Open Access Journal by MDPI

Corrosion Properties and Mechanism of Steels

Guest Editor:

Dr. Vít Křivý

Department of Building
Structures, Faculty of Civil
Engineering, VSB–Technical
University of Ostrava, L. Podeste
1875, 708 00 Ostrava, Czech
Republic

Deadline for manuscript
submissions:
closed (20 May 2022)

Message from the Guest Editor

Economic losses caused by corrosion are estimated to be 3%–5% of gross domestic product in developed countries. Corrosion damage affects products made of various metallic materials, but the main group of products are structures made of steel. In terms of maintaining the required service life of structures or equipment, it is necessary to understand the corrosion damage mechanism, evaluate the impact on reliable service and propose appropriate measures.

This Special Issue therefore focuses on the interconnection between the corrosion properties, the corrosion damage mechanism of steel structural elements and ensuring the required service life of the structural part or the entire construction. The types of structures are not strictly limited; articles may address the corrosion damage of:

- Bridge constructions;
- Technological constructions and equipment;
- Pipelines;
- Structural or non-structural elements of buildings.

In terms of the material, this Special Issue is limited to various types of steel, in particular to:

- Carbon structural steel;
- Low-alloy steel;
- High-performance steel;
- Stainless steel.



mdpi.com/si/50364



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)