

## Special Issue

# Corrosion and Protection of Steels in Marine Environments: State-of-the-Art and Emerging Research Trends

### Message from the Guest Editors

Marine corrosion is a very ancient topic, as humankind has, since antiquity, struggled with the corrosiveness of seawater to exploit the countless and essential natural resources of the sea. The recent and necessary development of marine renewable energy devices has motivated innovative research. Complete mastery of corrosion issues is a key aspect in the profitability of produced energy. Requirements for environmentally friendly anticorrosion methods and processes are clearly expressed. Numerous and fundamental recent advances in marine corrosion and protection of steels can then be noted. The Special Issue is to acknowledge the recent and sudden increase in the understanding of steel corrosion processes in marine environments and the associated optimization of anticorrosion methods.

- steel corrosion mechanisms in marine environments;
- biocorrosion of steels in marine environments;
- development of new alloys, stainless steels and low alloy steels;
- coatings and surface treatments for marine applications;
- cathodic protection and associated phenomena;
- methods and corrosion tests in marine environments;
- ancient iron artefacts, corrosion mechanisms, protection and restoration.

### Guest Editors

Prof. Dr. Philippe Refait

Laboratory of Engineering Sciences for the Environment (LaSIE),  
Université de La Rochelle, La Rochelle, France

Dr. Igor Chaves

School of Engineering (Civil Engineering), University of Newcastle,  
Callaghan, Australia

### Deadline for manuscript submissions

closed (30 September 2021)



## Corrosion and Materials Degradation

an Open Access Journal  
by MDPI

Impact Factor 2.4  
CiteScore 5.2



[mdpi.com/si/42722](https://mdpi.com/si/42722)

*Corrosion and Materials Degradation*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[cmd@mdpi.com](mailto:cmd@mdpi.com)

[mdpi.com/journal/  
cmd](https://mdpi.com/journal/cmd)





# Corrosion and Materials Degradation

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.4  
CiteScore 5.2



[mdpi.com/journal/  
cmd](https://mdpi.com/journal/cmd)



## About the Journal

### Message from the Editor-in-Chief

---

#### Editor-in-Chief

Prof. Dr. Raman Singh  
Departments of Mechanical & Aerospace Engineering and Chemical  
Engineering, Monash University, Melbourne, VIC 3800, Australia

---

#### Author Benefits

##### High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO,  
and other databases.

##### Rapid Publication:

manuscripts are peer-reviewed and a first decision is  
provided to authors approximately 21.7 days after  
submission; acceptance to publication is undertaken in 4.6  
days (median values for papers published in this journal in  
the first half of 2025).

##### Journal Rank:

CiteScore - Q2 (Materials Science (miscellaneous))