



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

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, University  
of Newcastle, Callaghan,  
Australia

Deadline for manuscript  
submissions:

**closed (30 September 2021)**

### 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.

