

Special Issue

Corrosion of Steel Reinforcement in Concrete: Furthering Knowledge within and beyond Boundaries

Message from the Guest Editors

Corrosion of steel in reinforced concrete is one of the main contributors to reducing the service life of buildings and civil infrastructure. The complex mechanisms involved in the process of steel reinforcement corrosion are still matter of research, and sometimes subject to erroneous interpretations. One active field is related with the mathematical modelization of both the period of initiation and the period of propagation and damage accumulation due to corrosion. A key area of research is that regarding the prevention of steel reinforcement corrosion and the rehabilitation of structures affected. Especial mention deserves the electrochemical techniques for controlling the corrosion process, like cathodic protection. Interesting research is active on the development of non-destructive techniques for the detection of corrosion and of the damage inflicted to the cementitious composite. The classical electrochemical techniques allow evaluating the damaged areas and the activity of the corrosion process. Other emerging physical techniques, mostly related with the interaction of waves with concrete, allow the early detection of the concrete cover's microcracking.

Guest Editors

Prof. Dr. Miguel-Ángel Climent

Department of Civil Engineering, University of Alicante, Alicante, Spain

Prof. Dr. Carmen Andrade

The International Centre for Numerical Methods in Engineering (CIMNE), S/N 08034 Barcelona, Spain

Deadline for manuscript submissions

closed (31 March 2022)



Corrosion and Materials Degradation

an Open Access Journal
by MDPI

Impact Factor 2.4
CiteScore 5.2



mdpi.com/si/87165

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

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))