



Recent Advances in Smart Multifunctional Anticorrosion Coatings: From Materials to Applications

Guest Editor:

Dr. Judit Telegdi

1. Faculty of Light Industry and
Environmental Engineering,
Óbuda University, Doberdó u. 6,
1034 Budapest, Hungary
2. HUN-REN Research Centre for
Natural Sciences, Magyar
Tudosok Krt. 2., H-1117
Budapest, Hungary

Deadline for manuscript
submissions:

28 February 2025

Message from the Guest Editor

Dear Colleagues,

All over the world researchers and industrial specialists have undertaken titanic efforts in order to decrease undesired degradation resulting from corrosion. For the best approaches to resolving these issues through the application of resistant materials and the reduction of aggressive environments, it is imperative that we first learn as much as possible about the basic chemical, electrochemical, and microbiological degrading processes. It is also necessary to diminish the harmful environmental impacts caused by special anticorrosion chemicals. This is why the inhibition of different types of corrosion by multifunctional inhibitors/coatings is important, as they can control not only metal dissolution but can also decrease microbial adhesion and could function as biostatics or biocides. This Special Issue seeks to gather together papers on advanced, multifunctional smart coating materials and on their application in order to engage with new trends that help advance understanding of degrading mechanisms as well as the inhibition potentials for different types of corrosion.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New
Ceramics and Fine Processing,
School of Materials Science &
Engineering, Tsinghua University,
Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam
Mickiewicz University in Poznań,
ul. Wszechnicy Piastowskiej 3, 61-
614 Poznań, Poland

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

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), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Surfaces, Coatings and Films*)

Contact Us

Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/coatings
coatings@mdpi.com
X@Coatings_MDPI