

Special Issue

Innovative Coating Processes to Protect Metals and Alloys from Deterioration

Message from the Guest Editors

Nowadays, the deterioration of metals, alloys and materials is a vital issue that can be mitigated by the use of innovative coating processes for long-term exposure in aggressive environments. The selection of the proper materials for use in the chemical industries, oil and gas, construction, bridges, dams, aerospace, automobile, etc. is also an area of study. The selection of materials depends on the application. Therefore, innovative processes are needed for implementation in recent technologies, which requires new insights in the materials development sector. The main focus of this Special Issue is to provide and publish recent developments in the area of materials technology to protect metals and alloys from corrosion in harsh environments. The topics include, but are not limited to:

- Materials technology;
- Thermal spray techniques;
- Galvanization;
- Sol-gel coating;
- Electroless and electroplating;
- Chemical industries;
- Oil and gas sector;
- Processes to develop innovative coating processes;
- Development of smart materials that can protect the metals and alloys;
- Nanotechnology development in the coating sector;
- Protective methods to mitigate the corrosion of materials.

Guest Editors

Prof. Dr. Han-Seung Lee

Department of Architectural Engineering, Hanyang University, Ansan 15588, Republic of Korea

Dr. Jitendra Kumar Singh

Center for Creative Convergence Education, Innovative Durable Building and Infrastructure Research Center, Hanyang University, Ansan 15588, Republic of Korea

Deadline for manuscript submissions

closed (31 October 2020)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/23702

Coatings
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
coatings@mdpi.com

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





Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



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



About the Journal

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.

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

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), Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Surfaces, Coatings and Films)