



an Open Access Journal by MDPI

Fabrication and Properties of Bio-Coatings and Their Applications

Guest Editors:

Dr. Yuyun Yang

Institute of Surface/Interface Science and Technology, Department of Material Science and Chemical Engineering, Harbin Engineering University, Harbin 15001, China

Dr. Maizlinda Izwana Idris

Department of Manufacturing Engineering, Faculty of Mechanical and Manufacturing Engineering, Universiti Tun Hussein Onn Malaysia, 86400 Parit Raja, Batu Pahat, Johor, Malaysia

Deadline for manuscript submissions: closed (31 March 2024)

Message from the Guest Editors

Dear Colleagues,

Bio-coatings are coatings with favorable biocompatibility or bioactivity, and their targeted application is in the biomedical field. This Special Issue will serve as a forum for papers covering the following themes:

- Exploration of optimal bio-coatings' fabrication techniques.
- Organic, inorganic, or composite bio-coatings manufactured by chemical or physical vapour deposition, laser cladding, plasma deposition, thermal spraying, anodization, sol-gel method, 3D printing, etc.
- Novel characterization methods applied to assess the bio-coating system.
- Property measurement and evaluation of the biocoatings in the proposed application.
- Reliability or failure behaviour and their failure mechanism of bio-coatings under specific service environment.
- Machine learning predicting and verifying the relationship between the fabrication process and bio-coatings' properties.
- Biological characterization on the coating system.
- Evaluation of biocompatibility, bioactivity, and biotribological properties of the coating.
- Assessment of the antibacterial coatings.

We look forward to receiving your contributions.





mdpi.com/si/172194





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