



## Multifunctional Coatings on Medical Devices

Guest Editor:

**Prof. Dr. Margareta Gabriela Ciobanu**

Department of Organic, Biochemical and Food Engineering, Faculty of Chemical Engineering and Environmental Protection “Cristofor Simionescu”, “Gheorghe Asachi” Technical University of Iasi, Prof. dr. doc. D. Mangeron Street, no. 73, 700050 Iasi, Romania

Deadline for manuscript submissions:  
**closed (31 December 2023)**

### Message from the Guest Editor

Dear Colleagues,

This Special Issue is dedicated to highlighting the important progress achieved in the development of multifunctional coatings on the surface of biomaterials used in medical devices, such as implants, scaffolds for tissue engineering, etc. Multifunctional coatings can give an implantable system certain properties, depending on the function and location of the medical device. Thus, many coatings on implantable devices can promote interactions with adjacent cells and tissue fluids. For this Issue, the following biomaterials are considered, but not limited to: metals (Ti, Mg, etc.) and their alloys, polymers, ceramics, hydroxyapatite.

Potential topics:

The scope of this Special Issue will serve as a forum for papers in the following concepts regarding multifunctional coatings on the surface of the biomaterials used in medical devices, such as implants, scaffolds for tissue engineering, and others:

- Composite coatings;
- Smart coatings;
- Antimicrobial coatings;
- Antifouling coatings;
- Immobilization of biofunctional molecules and biomolecules to form biofunctional coatings;
- Drug delivery coatings.





## 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), Ei Compendex, 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