

## Advances in Films and Coatings for Biomedical Application

Guest Editors:

**Dr. Evgeniia S. Vikulova**

Nikolaev Institute of Inorganic Chemistry, Siberian Branch of Russian Academy of Sciences, Novosibirsk 630090, Russia

**Dr. David Sergeevichev**

“E.Meshalkin National Medical Research Center” of the Ministry of Health of the Russian Federation, 15, Rechkunovskaya st., Novosibirsk 630055, Russia

Deadline for manuscript submissions:

**closed (30 September 2023)**

### Message from the Guest Editors

Dear Colleagues,

The development of materials for biomedicine is one of the most important trends in modern material science. The application of films and coatings here presents an attractive way to modify the surface of biomedical products to improve their characteristics, such as biocompatibility, osseo- and tissue integration, corrosion resistance, electrochemical properties, and others. Moreover, such an approach makes it possible to impart new additional properties to a traditional bulk biomaterial; for example, the antibacterial or antifungal ones. Permanent and biodegradable materials are in demand in the relevant fields of biomedicine.

Advances in nanotechnology make it possible to obtain a variety of films and coatings, including metal, oxide, ceramic, glass, polymer, organic layers, and nano-objects (nanoparticles, nanotubes, etc.). Specially designed composite and hybrid materials are of particular interest here. Understanding the mechanisms behind the desired enhanced functional response of surface materials is the key to the development of this substantial field.



## 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 called for to produce technologies and improve knowledge 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 at the center of most contemporary research. Surface science and engineering play a key role in this regard. Refining surfaces and their modifications provides new materials, architectures and processes with a huge potential to aid most societal challenges. *Coatings* is a well-established, peer-reviewed, online journal that focuses on the dissemination of publications in the field of surface science and engineering. *Coatings* publishes original research articles that report cutting-edge results and review papers on the hottest 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 (*Materials Science, Coatings & Films*) / CiteScore - Q2 (*Surfaces and Interfaces*)

## Contact Us

---

*Coatings* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/coatings  
coatings@mdpi.com  
X@Coatings\_MDPI