

## Advanced Nanocomposite Coatings for Biomedical Engineering

Guest Editors:

**Dr. Yang Liu**

School of Biomedical  
Engineering, Sun Yat-sen  
University, Guangzhou 510006,  
China

**Dr. Yang Wang**

The Key Laboratory of Synthetic  
and Biological Colloids, Ministry  
of Education, School of Chemical  
and Material Engineering,  
Jiangnan University, Wuxi  
214122, China

**Dr. Jianming Chen**

Biomacromolecules Research  
Team, RIKEN, Saitama 351-0198,  
Japan

Deadline for manuscript  
submissions:

**30 June 2024**

### Message from the Guest Editors

Dear Colleagues,

Nanocomposite coatings are vital for a wide range of biomedical engineering applications as they can mitigate, transform, and modulate the bio-interface formed between the biomedical device and the targeted tissue. A good bio-interface can maintain the proper functions of the biomedical device, enhance the designated functions of the biomedical device, and provide customized functions depending on the final applications.

This Special Issue aims to cover the material design, property characterization, processing, bio-interface, and biomedical applications of advanced nanocomposite coatings for biomedical engineering. The themes of this Special Issue may include but are not limited to the following:

- Antibacterial coatings with superwettability;
- Nanostructured coatings for tissue-electronic interfaces;
- Multifunctional hybrid hydrogel coatings;
- Nanoparticle coatings for photothermal therapy;
- Conductive polymer coatings for neural interfacing;
- Lipid nanoparticles and microcapsules for mRNA therapy.

We look forward to receiving your contributions.

Dr. Yang Liu  
Dr. Yang Wang  
Dr. Jianming Chen  
*Guest Editors*

# Special Issue



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### Prof. Dr. Wei Pan

State Key Laboratory of New  
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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.

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