



Biomedical Applications of Mixed-Charge Nanomaterials

Guest Editors:

Dr. Kristiana Kandere-Grzybowska

1. Center for Soft and Living Matter, Institute for Basic Science (IBS), Ulsan 44919, Republic of Korea

2. Department of Biomedical Engineering, Ulsan National Institute of Science and Technology (UNIST), 50 UNIST-gil, Ulsan 44919, Republic of Korea

Dr. Marta Siek

Center for Soft and Living Matter, Institute for Basic Science (IBS), Ulsan 44919, Republic of Korea

Deadline for manuscript submissions:

closed (20 August 2023)

Message from the Guest Editors

This Special Issue will collect research articles and high-quality review papers reporting preparation methods, characterization techniques, computational modeling studies, and biological applications of synthetic or biologically derived nanoparticles with tunable surface charge.

Authors are encouraged to submit papers of selective interactions of such nanoparticles with the biological system(s), including complex protein mixtures in extracellular fluids (e.g., formation of the biomolecular corona), organelle-specific targeting, or biological effects in *in vivo* systems, as well as selective anticancer, antibacterial, or antiviral effects.

Some examples of materials of interest include but are not limited to:

Mixed-charge nanoparticles (with various core materials: gold, silver, iron oxide, mesoporous silica, and others);
Surface-charge engineered protein nanoparticles;
Protein-like nanoparticles from mixtures of oppositely charged polymers;
Hybrid nanosystems;
Patchy, striped, Janus nanoparticles;
Catanionic liposomes;
Mixed-charge exosomes.





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Editor-in-Chief

Prof. Dr. Pankaj Vadgama

School of Engineering and
Materials Science, Queen Mary
University of London, London, UK

Message from the Editor-in-Chief

The biomaterials field is one of the largest and fastest growing research areas both in the scientific community and in the industrial one. Biomaterials are the result of collaborations between different disciplines: chemistry, medicine, pharmacology, engineering and biology. The objective of this collaboration is to lead to the implementation of new devices to restore form and human body functions. The mission of the *Journal of Functional Biomaterials (JFB)* is to focus attention on physico-chemical characteristics and their importance in the interactions between biomaterials and living tissues. *JFB* seeks to publish studies on the preparation, performance and use of biomaterials in biomedical devices, as well as regarding their behavior in physiological environments. We are pleased to welcome you as our authors.

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Journal of Functional Biomaterials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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