



## Nanotechnology for Green Chemical Engineering

Guest Editors:

**Prof. Dr. Gloria Villora**

Chemical Engineering  
Department, University of Murcia,  
Murcia, Spain

**Dr. Mercedes G. Montalbán**

Chemical Engineering  
Department, University of Murcia,  
Murcia, Spain

Deadline for manuscript  
submissions:  
**closed (28 January 2022)**

### Message from the Guest Editors

Recent years have witnessed a worldwide increase in concern for our footprint in the natural environment. The reduction of generated waste during chemical processes and the reasonable use of natural resources are both important issues to consider. Nanotechnology can greatly contribute to these purposes because there are several application areas of nanomaterials with great promise for green chemical engineering.

Recently, significant advances have been achieved in the synthesis of biodegradable nanoparticles or nanocomposites in the field of nanomedicine as drug nanocarriers, which can lead to a sustained and targeted release. Another example of the research activity concerning biopolymers in nanotechnology is their use during the synthesis of metal nanoparticles as reducing and stabilizing agents avoiding the use of toxic chemical agents.

This Special Issue aims at collecting a compilation of original research papers that cover these aspects but also many others which strongly demonstrate the continuous efforts in developing nanomaterials following the principles of green chemical engineering.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Shirley Chiang**

Department of Physics, University  
of California Davis, One Shields  
Avenue, Davis, CA 95616-5270,  
USA

## Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal-organic frameworks, membranes, nano-alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

## 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), PubMed, PMC, CAPlus / SciFinder, Inspec, and other databases.

**Journal Rank:** JCR - Q2 (*Chemistry, Multidisciplinary*) / CiteScore - Q1 (General Chemical Engineering)

## Contact Us

*Nanomaterials* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/nanomaterials](http://mdpi.com/journal/nanomaterials)  
[nanomaterials@mdpi.com](mailto:nanomaterials@mdpi.com)  
[X@nano\\_mdpi](https://twitter.com/nano_mdpi)