



## Nanomaterials and Nanoparticles: Sources, Toxicity, and Impacts on the Environment and Health

Guest Editor:

**Prof. Dr. Eleonore Fröhlich**  
Center for Medical Research,  
Medical University of Graz

Deadline for manuscript  
submissions:

**closed (30 June 2019)**

### Message from the Guest Editor

Dear Colleagues,

As a result of the broad use of nanoparticles in industry, cosmetics, and domestic articles, exposure to the general population has increased over the years. In addition to directly affecting humans, accumulation in the environment and the risk of potentially adverse effects in natural systems have become issues of concern. Particle properties generally change when in contact with biological materials, and the characterization and quantification of nanoparticles in complex matrixes remains a challenge for analysis. The adsorption of contaminants at a large particle surface may enhance their biological effects. Biological effects may be due to nanoparticles and their specific properties, but may also be caused by ions released from the particles. Furthermore, the physiological aspects of the different exposure routes have to be taken into account.

This Special Issue is open to original research, review articles, case reports, and meta-analyses that help to understand the exposure levels, accumulation, effects, and modes of action of nanoparticles present in the environment.

Prof. Dr. Eleonore Fröhlich

*Guest Editor*





an Open Access Journal by MDPI

## Editor-in-Chief

**Prof. Dr. Paul B. Tchounwou**  
RCMI Center for Urban Health  
Disparities Research and  
Innovation, Richard N. Dixon  
Research Center, Morgan State  
University, Baltimore, MD 21251,  
USA

## Message from the Editor-in-Chief

Addressing the environmental and public health challenges requires engagement and collaboration among clinicians and public health researchers. Discovery and advances in this research field play a critical role in providing a scientific basis for decision-making toward control and prevention of human diseases, especially the illnesses that are induced from environmental exposure to health hazards. *IJERPH* provides a forum for discussion of discoveries and knowledge in these multidisciplinary fields. Please consider publishing your research in this high quality, peer-reviewed, open access journal.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, PubMed, MEDLINE, PMC, Embase, GEOBASE, CAPlus / SciFinder, and other databases.

**Journal Rank:** CiteScore - Q1 (Public Health, Environmental and Occupational Health)

## Contact Us

---

*International Journal of  
Environmental Research and Public  
Health* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

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

mdpi.com/journal/ijerph  
ijerph@mdpi.com  
X@IJERPH\_MDPI