



## Functional Nanomaterials and Polymer Nanocomposites: Current Uses and Potential Applications

Guest Editor:

**Dr. Raghvendra Singh Yadav**

Centre of Polymer Systems,  
Tomas Bata University in Zlin,  
Trida Tomase Bati 5678, 76001  
Zlin, Czech Republic

Deadline for manuscript  
submissions:

**closed (30 May 2022)**

### Message from the Guest Editor

Dear Colleagues,

Recently, smart nanoparticles have received a great deal of attention among researchers and academicians due to their unique physical properties and wide applications, including drug delivery, biomimetic devices, contrast agents in magnetic resonance imaging, hyperthermia, cell manipulation, security systems, information storage devices, quantum computing, magnetic sensors and actuators, energy harvesting, catalysis and magnetic separation, spintronic-based devices, electronic devices, lasers, Li-ion batteries, solar cells, bio-imaging, thermal therapy, etc.

This Special Issue aims to cover a broad range of subjects, from smart nanoparticles and polymer nanocomposite synthesis and the study of their fundamental properties to the fabrication and characterization of devices and emerging technologies with smart nanoparticles and polymer integration. We invite authors to contribute original articles or review articles covering the most recent progress and new developments in the synthesis of smart nanoparticles. Manuscripts can be submitted in the following formats: full research papers, communications, and reviews.

Dr. Raghvendra Singh Yadav  
Guest Editor



[mdpi.com/si/90084](https://mdpi.com/si/90084)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Maurizio Battino**

Department of  
Odontostomatologic and  
Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of  
Medicine, Università Politecnica  
delle Marche, Via Ranieri 65,  
60100 Ancona, Italy

## Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

## 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, MEDLINE, Embase, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Biochemistry & Molecular Biology*) / CiteScore - Q1 (*Inorganic Chemistry*)

## Contact Us

*International Journal of Molecular  
Sciences* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/ijms  
ijms@mdpi.com  
X@IJMS\_MDPI