## **Special Issue**

# Novel Nanocomposite: Synthesis and Application

## Message from the Guest Editors

The development of nanocomposites (NCs) and polymer nanocomposites (PNCs) represents a breakthrough in the application of novel materials in academia and industrial environments. Both NCs and PNCs exhibit remarkably enhanced properties with respect to their parent matrices, in terms of structural and mechanical properties, flame resistance, and electrical behavior, providing further outstanding functionalities to the materials. This Special Issue is focused on the most recent advances in the synthesis, characterization, and applications of nanocomposite materials. We invite original contributions and review articles addressing recent progress in the field of NCs and PNCs, including systems designed for advanced structural applications or endowed with novel, exciting functional properties. e.g., self-healing and shape memory, as well as responsive nanocomposites, whose properties and functions can even be controlled remotely by physical. chemical, or biological external stimuli. Progress in this field is rapidly expanding, and advanced nanocomposite systems hold great promise for breakthroughs in materials science and energy, environmental, health, and biomedical applications.

#### **Guest Editors**

Dr. Pierfrancesco Cerruti

Institute for Polymers, Composites and Biomaterials (IPCB)—CNR, Via Campi Flegrei, 34, 80078 Pozzuoli, Italy

Dr. Arash Moeini

School of Life Sciences Weihenstephan, Technical University of Munich. 85354 Freising, Germany

## Deadline for manuscript submissions

closed (31 October 2022)



## **Molecules**

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/80015

Molecules
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
molecules@mdpi.com

mdpi.com/journal/molecules





## **Molecules**

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



## **About the Journal**

## Message from the Editor-in-Chief

As the premier open access journal dedicated to molecular chemistry, now in its 29th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts, and novel materials. Pushing the boundaries of the discipline, we invite papers on all major fields of molecular chemistry and multidisciplinary topics bridging chemistry with biology, physics, and materials science, as well as timely reviews and topical issues on cutting-edge fields in all of these areas.

#### Editor-in-Chief

Prof. Dr. Thomas J. Schmidt

Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

#### **Author Benefits**

## **High Visibility:**

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

## Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

## **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

