# **Special Issue**

# Advances in Natural Fiber Composites and Their Interfacial Adhesion

## Message from the Guest Editors

In the last two decades, the growing environmental issues have triggered the replacement of synthetic fibrous materials with lignocellulosic fibers characterized by biodegradability, easy availability, environmental friendliness, and good specific mechanical properties. Despite these benefits, their poor compatibility with polymer matrices still represents a major limitation for their industrial exploitation. In fact, their peculiar hydrophilic properties and surface characteristics prevent them from achieving a proper interfacial adhesion to hydrophobic polymer matrices. which leads to composites with poor mechanical properties. This Special Issue is aimed at collecting advancements made in the field of natural fibers and composites, including fiber-polymer interfacial strength. The aim is to increase our knowledge about the interfaces in natural fiber-reinforced polymer composites. Fundamental studies on fiber sizing or treatments at different scales (single fiber bundles or laminates) are particularly desirable. Both original research papers and reviews are welcome.

### **Guest Editors**

Dr. Pietro Russo

Institute for Polymers, Composites and Biomaterials, National Research Council, Via Campi Flegrei 34, 80078 Pozzuoli, NA, Italy

Prof. Dr. Fabrizio Sarasini

Department of Chemical Engineering Materials Environment, University of Rome La Sapienza, 00184 Roma, Italy

### Deadline for manuscript submissions

closed (31 December 2019)



## **Molecules**

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/26534

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 experimental organic chemistry, and now in its 25th 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 multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all 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).

