

Special Issue

Bio-Based and Bio-Inspired Polymers and Composites

Message from the Guest Editors

The current global trends in plastic waste generation, energy demand, petroleum depletion, world population growth, food supply, and the constant need to develop more sustainable and efficient industrial systems promotes uncertainties about our future. Nevertheless, significant progress in the chemistry and engineering of bio-based systems has been made over the past few decades, giving hope for the widespread implementation of more sustainable practices in the near future. This Special Issue on “Bio-Based and Bio-Inspired Polymers and Composites” encompasses the latest advancements made in the research of bio-based polymeric materials, including all aspects of polymers and composites prepared from bio-renewable resources. Works using biological molecules and their derivatives as matrix and/or reinforcement are welcome. Likewise, reports on systems and architecture designs inspired from biological systems will also be considered. While the main focus of this Special Issue is the disclosure of original research, comprehensive literature review works are of interest as well.

Guest Editors

Dr. Rafael L. Quirino

Department of Chemistry, Georgia Southern University, Statesboro, GA 30460, USA

Prof. Dr. Thomas Garrison

King Fahd University of Petroleum & Minerals, Dhahran, Saudi Arabia

Deadline for manuscript submissions

closed (20 June 2025)



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/35343

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

[mdpi.com/journal/
coatings](https://mdpi.com/journal/coatings)





Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



[mdpi.com/journal/
coatings](https://mdpi.com/journal/coatings)



About the Journal

Message from the Editorial Board

Now more than ever, research is asked to deliver knowledge and technologies to solve the major challenges faced by our society. The development of new materials and devices for (without the ambition to be exhaustive) energy, health and food technology, together with the need for establishing processes that reduce the impact on critical resources and the environment, is indeed in the spotlight of most contemporary research. Surface science and engineering play a key role in this regard, with an incredible potential in delivering new and deep scientific understanding and technical solutions essential to solve most of the major societal challenges.

Coatings is a well-established, peerreviewed, online journal dedicated to the vibrant field of surface science and engineering. Coatings publishes original research articles that report cutting-edge results and review papers that make the point on the hottest research topics.

Editors-in-Chief

Prof. Dr. Wei Pan

State Key Laboratory of New Ceramics and Fine Processing, School of Materials Science & Engineering, Tsinghua University, Beijing 100084, China

Dr. Emerson Coy

NanoBioMedical Centre, Adam Mickiewicz University in Poznań, ul. Wszechnicy Piastowskiej 3, 61-614 Poznań, Poland

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), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q2 (Surfaces, Coatings and Films)