

Special Issue

Polymeric Edible Coatings: Synthesis, Properties, and Cross-Industry Applications

Message from the Guest Editors

The themes of this special issue include but are not limited to:

- Biopolymer Synthesis and Modification: Novel green routes for chitosan, starch, alginate, PLA, PHA derivatives.
- Nanomaterial Reinforcements: Metal (Ag, Cu), metal-oxides (ZnO, NiFe₂O₄), carbon hybrids.
- Structure–Property Relationships: Linking nanoscale dispersion to mechanical, barrier, and antimicrobial performance.
- Horticulture and Food Packaging: Edible films for disease prevention and controlled release of natural antimicrobials.
- Catalysis and Filtration: Functional thin films with catalytic/antimicrobial dual roles.
- Wear-Resistant and Anti-fouling Systems: Coatings for flexible electronics and biomedical devices.
- Sustainability Assessments: Biodegradation studies, life-cycle analysis, eco-toxicology.
- Scale-up and Implementation: Pilot-scale coating techniques, regulatory considerations.

We look forward to receiving your contributions.

Assistant

Guest Editors

Dr. Dilawar Hassan

School of Science and Engineering, Tecnológico de Monterrey, Av. Lago de Guadalupe KM 3.5, Margarita Maza de Juárez, Ciudad López Mateos 52926, Mexico

Dr. Ayesha Sani

School of Science and Engineering, Tecnológico de Monterrey, Av. Lago de Guadalupe KM 3.5, Margarita Maza de Juárez, Ciudad López Mateos 52926, Mexico

Deadline for manuscript submissions

28 May 2026



Coatings

an Open Access Journal
by MDPI

Impact Factor 2.8
CiteScore 5.4



mdpi.com/si/243272

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

Journal Rank:

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