



Coatings: Status, State of the Art Manufacture, Applications and Future Trends

Guest Editors:

Prof. Dr. Sylvester Abanteriba

School of Aerospace, Mechanical and Manufacturing Engineering, RMIT University, Melbourne, Australia

Dr. Subir Ghosh

PTI Pacific, Westside Drive, Laverton North VIC 3026, Australia

Dr. Chi Yang

CRRC Changchun Australia Rail Pty Limited, 205 Oakview Lane, Nar Nar Goon, VIC 3812, Australia

Deadline for manuscript submissions:

closed (30 November 2021)

Message from the Guest Editors

Dear Colleagues,

Over the years, industry and medical use of coatings has grown exponentially. This growth has been accompanied by an increase in the complexity and variety of the coatings, to meet diverse demands. Different manufacturing techniques and processes have been developed to produce coatings of a varied nature to meet the requirements of the gamut of operating regimes, such as ceramic coatings, to provide thermal protection in automotive components. The high-temperature operating regime of the reciprocating engine, a result of the protection of its metal components by the ceramic coatings, enables efficient operation of the vehicle and leads to a reduction in emissions.

This Issue seeks papers including, but not limited to, studies on the following coatings: ceramic coatings, thermal barrier coatings, solid lubricant coatings and diamond-like carbon coatings, discussed under one, or a combination, of the following headings:

- Status
- State-of-the-Art Manufacturing Techniques
- Applications
- Future trends
- Theoretical Modelling and Prediction of Coatings Failure/Reliability and Experimental Validation Methods





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

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.

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, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Physics, Applied*) / CiteScore - Q2 (*Surfaces, Coatings and Films*)

Contact Us

Coatings Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/coatings
coatings@mdpi.com
X@Coatings_MDPI