



March 15–19, 2026

San Diego Convention Center
and Hilton San Diego Bayfront
San Diego, California, USA

#TMSAnnualMeeting

SUBMIT AN ABSTRACT FOR THE FOLLOWING SYMPOSIUM

MATERIALS SYNTHESIS AND PROCESSING

Advances in Surface Engineering VIII

The symposium aims to explore and highlight the latest advancements in the field of surface engineering of materials, encompassing a broad spectrum of topics such as processing techniques, characterization methods, simulation and modeling approaches, and innovative applications. This symposium seeks to foster collaboration and knowledge exchange among researchers, industry professionals, and academics who are pushing the boundaries of surface engineering technologies.

Key topics to be covered include, but are not limited to:

- Coatings: Advances in metallic, ceramic, organic, and composite coatings, focusing on their development, properties, and performance.
- Surface Protection: Innovations in protecting surfaces from wear and corrosion to enhance durability and functionality.
- 2D Materials and Thin Films: Progress in the synthesis, characterization, and application of two-dimensional materials and thin films.
- Surface Characterization Techniques: Exploration of advanced methods to analyze and understand surface properties and behaviors.
- Surface Alloying and Microstructural Modifications: Techniques to alter and optimize surface compositions and structures for improved performance.
- Functionally Graded and Nanostructured Coatings: Development of coatings with tailored properties to meet specific application requirements.
- Coatings for Extreme Environments: Innovations in coatings designed to withstand extreme thermal, radiation and other environmental conditions.
- Additive Manufacturing and Solid-State Processing of Coatings: Emerging techniques for producing advanced coatings using additive manufacturing and solid-state processes.

By exploring these critical areas, this symposium will serve as a platform for presenting pioneering research, discussing practical challenges, and envisioning future trends in surface engineering.

SPONSORED BY:

TMS Materials Processing & Manufacturing Division; TMS Surface Engineering Committee

ORGANIZED BY:

- **Bharat Jasthi**, South Dakota School of Mines & Technology
- **Ning Zhu**, Baylor University
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