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Advances in Friction Stir Processing and Surfacing

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Deadline for manuscript submissions:

closed (20 January 2026)

Message from the Guest Editors

Friction stir processing (FSP) and friction surfacing (FS) techniques have revolutionized material processing and surface engineering, sparking widespread interest across industries.

This Special Issue aims to bring together cutting-edge research, innovative methodologies, and practical applications, fostering a comprehensive understanding of the capabilities and limitations within this field. Within this Special Issue, an emphasis is placed on showcasing the innovations of new experimental techniques and configurations for tools and workpieces within FSP and FS techniques. By providing a platform for researchers, this Special Issue seeks to advance the knowledge frontier, stimulate interdisciplinary collaboration, and address critical challenges in the realm of FSP and FS.

Topics of Interest:

- Novel Approaches and Advanced Techniques
- Microstructural Transformations, Phase Evolution, and Property Enhancements
- Material Compatibility and Application Specificities
- Surface Modification and Property Development
- Developments in Process Monitoring, Control, and Optimization
- Advances in Numerical Modeling and Simulation
- Real-world Applications and Case Studies





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Message from the Editor-in-Chief

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