



## New Trends in Precision Machining Processes

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### Message from the Guest Editors

This Special Issue is dedicated to the latest advancements and innovations in precision machining and its impact on the production of high-quality components. The collection of articles in this issue addresses a range of topics, including the development of new machining processes, the application of advanced materials, and the integration of cutting-edge technologies. Topics include, but are not limited to, the following:

- Hybrid machining processes;
- Ultra-precision machining;
- High-precision machine tools;
- Modeling and simulation of machining processes;
- Micro and nano machining;
- Machining of novel materials like composites, ceramics, and superalloys;
- Automation and robotics in precision machining;
- Implementation of artificial intelligence and machine learning for process optimization and predictive maintenance;
- Enhancing the sustainability of precision machining processes through the reduction in waste and energy consumption;
- Eco-friendly cutting fluids and lubrication methods;
- Practical applications of precision machining in various industries, such as aerospace, automotive, and biomedical engineering.





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### Message from the Editor-in-Chief

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