Guest Editorial

Special Issue: Manufacturing Science Engineering Conference 2022

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The 17th ASME International Manufacturing Science and Engineering Conference (MSEC 2022), sponsored by the Manufacturing Engineering Division (MED) of ASME, was held from June 27, 2022 to July 1, 2022, in West Lafayette, IN. MSEC 2022 received 263 submissions. After rigorous peer review, 229 technical papers were accepted for publication. The technical papers had global representation, with authors from the US (56%), India (13%), China (11%), Korea (4%), Japan (3%), Canada (3%), Germany (2%), and several other countries from Asia, Europe, and South America. Among the accepted technical papers, MSEC symposium organizers nominated 56 candidate papers to be fast-tracked to the ASME *Journal of Manufacturing Science and Engineering* (JMSE). All the candidate papers, together with their reviews, were sent to the JMSE Editor-in-Chief for a new round of journal paper review. The JMSE Editor-in-Chief invited 21 papers, including two state-of-the-art review papers, to be further reviewed by the journal. A total of 15 top MSEC papers received positive journal reviews and were compiled and published in this JMSE Special Issue on MSEC 2022.

The papers selected for this special issue cover a wide range of topics. They come from seven technical tracks of the ASME MED, including Additive Manufacturing, Biomanufacturing, Life Cycle Engineering, Manufacturing Equipment and Automation, Manufacturing Processes, Manufacturing Systems, and Nano/Micro/Meso Manufacturing. As a leading international conference held annually on manufacturing technology, MSEC acts as a global bridge between industries, government laboratories, and academic institutions. This Special Issue showcases recent manufacturing research advancements presented in MSEC 2022. This Special Issue also provides a platform for researchers and practitioners to widely disseminate their research findings and innovative practices that may inspire future scientific and technological breakthroughs.

We would like to thank all the symposium organizers of MSEC 2022 for their dedicated management of the symposia and for guarding the quality of the papers to be fast-tracked, which has contributed a great deal to the success of this special issue. We would also like to thank all the reviewers of the paper submissions for their detailed suggestions to improve the papers' quality. Special thanks are due to the ASME MED Executive and Technical Committees and the ASME staff, especially Lori Lee and Emily Bosco, throughout the paper review and production processes. Their outstanding contributions in managing the submitted technical papers ensure the high-quality publication of this special issue for MSEC 2022.

JMSE seeks close partnerships with MED and MSEC to serve our manufacturing community. This Special Issue marks a milestone in which top papers submitted to MSEC are selected, reviewed, and published in a Special Issue in JMSE. Starting in MSEC 2023, papers accepted by JMSE will be able to present in MSEC. This will open the opportunity for colleagues in our manufacturing community to first submit their top research papers to JMSE and then disseminate them in a presentation to our manufacturing community in MSEC.

We hope this Special Issue marks a small but important step for JMSE to connect with MED, MSEC, and colleagues in our manufacturing community. JMSE seeks top research papers from our colleagues and strives to serve our community as a platform for timely publication of high-impact research work. JMSE has three upcoming Special Issues in 2023 on Human-Robot Collaboration for Futuristic Human-Centric Smart Manufacturing, Semiconductor Manufacturing, and State-of-the-Art in European Manufacturing Research. JMSE is changing. We welcome your ideas and look forward to the discussion on how we may better connect MED, MSEC, and JMSE.

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