

Special Issue: Sustainable Life Cycle Engineering

This special issue on Sustainable Life Cycle Engineering was jointly sponsored by the ASME Design Engineering Division (DED) and Manufacturing Engineering Division (MED) with the aim of disseminating the latest research findings on various design and manufacturing-focused principles related to sustainability, such as reduction of materials and energy use, reduction of undesirable environmental emissions, closing the product lifecycle loop, and new business models and paradigms to influence sustainable manufacturing practices.

Submissions to the special issue covered a wide range of topics ranging from new design principles and novel lifecycle assessment methods to emerging computing technologies and engineering education. We have received a considerable number of submissions from the community. The quality of the submissions and the active participation was wonderful. Through a rigorous peer review process twenty-two submissions were ultimately selected for publication.

While the selected submissions for inclusion in the special issue cover research across various sustainability-related considerations, the topics can be categorized under three main groups: (1) studies that focus on reduction of manufacturing energy consumption and optimization of manufacturing process parameters for reduced environmental impacts, (2) studies that address end-of-use product recovery activities, particularly disassembly proc-

esses, and (3) studies that highlight the role of product life cycle data and information sharing platforms.

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Similarly, we are grateful for all of those who responded to the call and participated in the special issue with their submissions. We also owe special gratitude to the reviewers who generously gave their time, and brought the appropriate scope and depth to the evaluation process. Our thanks also go out to the committees of ASME DED and ASME MED, who spread the word about the special issue to their respective communities.

Our hope is that this special issue can serve as a preliminary step toward further research on sustainable design and manufacturing topics. We also hope this special issue has opened lines of research dissemination for the bright-minded change leaders from different areas who are and will be influential leaders in sustainable life cycle engineering research in our society.



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