



## Opportunities and Challenges of Utilizing Metal Additive Manufacturing Approaches for Sustainable Engineering

Guest Editors:

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### Message from the Guest Editors

Metal Additive Manufacturing (MAM) technologies have revolutionized industrial manufacturing in the engineering and medical sectors, enabling the production of high-performance components. We invite contributions from all relevant disciplines to shed light on recent advances and potential solutions to sustainability challenges in MAM. Topics of interest include, but are not limited to:

Deadline for manuscript  
submissions:

**10 November 2024**

- Process optimization for metal additive manufacturing to build parts faster with minimal wastage;
- Employability of reused feedstock material for MAM;
- Deployment of machining waste for MAM;
- Effect of process conditions on the process efficiency and quality of MAM components;
- Process monitoring for improving the quality of MAM built parts;
- Non-destructive analysis of MAM built components;
- Sustainable approaches to enhance the performance of MAM components;
- Sustainable post-processing techniques for MAM parts;
- In situ and ex-situ quality control of MAM parts;
- Life cycle assessment (LCA) of MAM components;
- Numerical and analytical modeling of the MAM process to improve process efficiency;
- Comparative studies between different feedstock material sources.





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## Editor-in-Chief

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## Message from the Editor-in-Chief

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