

Special Issue

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

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:

- Process optimization for metal additive manufacturing to build parts faster with minimal wastage;
- Employment 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.

Guest Editors

Dr. Jinoop Arackal Narayanan

Dr. Farzaneh Kaji

Dr. Sunil Pathak

Prof. Dr. Ehsan Toyserkani

Deadline for manuscript submissions

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
sustainability@mdpi.com

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Message from the Editor-in-Chief

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Editor-in-Chief

Prof. Dr. Steve W. Lyon

School of Environment and Natural Resources, Ohio State University,
Columbus, OH 43210, USA

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