



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

Guest Editors:

Dr. Jinoop Arackal Narayanan

Dr. Farzaneh Kaji

Dr. Sunil Pathak

Prof. Dr. Ehsan Toyserkani

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.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and
Applied Science, University of
Ontario Institute of Technology,
Oshawa, ON L1G 0C5, Canada

Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Environmental Studies*) / CiteScore - Q1 (*Geography, Planning and Development*)

Contact Us

Sustainability Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/sustainability
sustainability@mdpi.com
X@Sus_MDPI