



Lecture Notes in Mechanical Engineering

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# Proceeding of 6th International Conference on Advances in Manufacturing and Materials Engineering

ICAMME 2024, 13–14 August,  
Kuala Lumpur, Malaysia

# Lecture Notes in Mechanical Engineering

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# Preface

The 6th International Conference on Advances in Manufacturing and Materials Engineering (ICAMME2024) was organized as part of the KOE IIUM Congress 2024. This year, our theme, Advances in Manufacturing and Materials Technologies for a Sustainable Future reflects the growing global imperative to merge technological innovation with environmental responsibility.

ICAMME2024 is a pivotal platform that unites researchers, industry experts, and academicians from around the world to explore cutting-edge advancements in manufacturing and materials. The conference is dedicated to showcasing innovations that promise not just progress, but also sustainability. The paper includes key areas such as lean manufacturing, digital manufacturing, traditional manufacturing, 3D and 4D printing, advanced composite, ceramics, metallic materials, green materials, and other technologies that are reshaping the industrial landscape toward a more sustainable future.

The demand for intelligent manufacturing and sustainable solutions has never been greater, ICAMME2024 highlights the role of digital technologies and advanced materials in driving Industry 4.0 and beyond. The future of manufacturing lies in harnessing the power of smart systems, automation, and sustainable materials. These advancements—from digital twins and intelligent simulation to innovations in 3D and 4D printing—are redefining traditional materials and manufacturing processes, pushing industries to adopt greener, more efficient materials and methods.

We are deeply grateful to our co-organizers, sponsors, and supporters for their unwavering dedication, which has made this event possible. We also extend our heartfelt thanks to the members of the Organizing Committee, the International Advisory Committee, and the Reviewers, whose meticulous efforts have ensured the highest standards of scientific quality and integrity.

Our sincere appreciation goes to the authors, whose timely submissions of innovative research have made these proceedings possible. Their work fuels the conversation and accelerates the advancements we so urgently need in today's evolving industrial landscape.

We hope that ICAMME2024 inspires and empowers all participants, fostering collaborations that will drive the future of sustainable manufacturing and materials technologies.

August 2024

Publication Team  
ICAMME2024

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