Preface

The Fourth Edition of International Conference on Sustainable Goals in Materials, Energy and Environment (ICSMEE’24) was held at department of civil engineering, Mangalam College of Engineering, Kottayam, Kerala on 02 & 03 May 2024. It is with great pleasure that we present the proceedings of ICSMEE’24. This conference brought together researchers, academics, industry professionals, and experts from various fields to discuss and exchange ideas on sustainable practices and innovations. The proceedings of ICSMEE 2024 provides a platform for the researchers to exchange ideas, share insights, and collaborate on innovative solutions that will drive sustainable progress in materials, energy, and the environment. The theme of ICSMEE’24 focused on addressing global challenges related to materials, energy, and the environment through interdisciplinary approaches. The papers included in these proceedings cover a wide range of topics, from sustainable materials development and renewable energy technologies to environmental conservation strategies and policy frameworks.

The theme tracks of this conference are, (i) Reutilization of materials and new advanced materials, (ii) Reduction of Energy Utilization, (iii) Reproduction of Eco-friendly Environment (iv) Advanced Interdisciplinary Approaches. The main objectives of this ICSMEE’24 is to

- Foster efficient collaboration among researchers, practitioners, policymakers, and industry professionals in the field of sustainable materials, energy, and environment.
- Explore innovative approaches and technologies for achieving sustainability goals in materials production, energy generation, and environmental conservation.
- Discuss the latest research findings, trends, and challenges related to sustainable development in materials, energy, and environmental sectors.
- Identify opportunities for interdisciplinary research and cross-sector partnerships to address complex sustainability issues.
- Showcase successful case studies, best practices, and initiatives promoting sustainability in materials, energy, and environmental domains.
- Promote knowledge exchange and networking to enhance the capacity for sustainable development worldwide.
- Encourage the integration of sustainability principles into educational curricula, professional practices, and policy frameworks.
- Facilitate the dissemination of cutting-edge research outcomes and practical solutions for advancing sustainable goals globally.

We received a significant number of submissions from researchers and scholars across different countries, reflecting the growing interest and commitment to sustainability in today’s world. Each paper underwent a rigorous peer-review process, ensuring the quality and relevance of the contributions included in these proceedings. The success of ICSMEE’24 would not have been possible without the dedication and support of numerous individuals and organizations. We extend our heartfelt gratitude to all keynote speakers, session chairs, authors, reviewers, and participants for their invaluable contributions and active participation. Special thanks are due to the organizing committee members, volunteers, and sponsors for their hard work and commitment in organizing this conference. We are also grateful to the scientific community, academic institutions, and industry partners for their continued collaboration and support.

We hope that the papers presented in these proceedings will inspire further research, collaborations, and innovations in the quest for a more sustainable future.
Fourth Edition of International Conference on Sustainable Goals in Materials, Energy and Environment (ICSMEE’24)

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