Special Issue

Advancements in Sustainable Thermal Engineering and Computational Fluid Dynamics Applications

Message from the Guest Editors

This Special Issue focuses on recent advancements in sustainable thermal engineering and the application of computational fluid dynamics (CFD) to address complex environmental and energy challenges. The primary goal is to explore how CFD simulations can enhance the efficiency, sustainability, and environmental friendliness of thermal systems. This Special Issue focuses on the sustainable design and optimization of thermal systems: CFD applications in renewable energy technologies (e.g., solar, wind, geothermal).

Energy-efficient HVAC systems and green building technologies.

CFD-driven pollutant mitigation and environmental impact reduction.

Integration of CFD with AI for sustainability-driven solutions.

Urban flow dynamics and environmental challenges: A focus on managing environmental flows in dense urban settings to mitigate pollution and improve urban air quality.

Energy management in urban transport: CFD applications in improving energy efficiency in transportation systems, enhancing the sustainability of smart cities.

Materials for energy efficiency and Climate-resilient infrastructure.

Guest Editors

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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.

Editor-in-Chief

Prof. Dr. Marc A. Rosen

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