Special Issue

Innovative Fluid Dynamics Applications for Sustainable Renewable Energy Development

Message from the Guest Editors

As the demand for sustainable energy solutions increases worldwide, fluid dynamics has become essential in advancing renewable energy technologies. Renewable energy systems—such as wind, wave, hydroelectric, and solar thermal power—depend on a thorough understanding and careful optimization of fluid flow dynamics to improve energy capture and conversion. This Special Issue seeks to showcase cutting-edge research and technological advancements in fluid dynamics as applied to renewable energy systems. We invite submissions that focus on fluid mechanics, turbulence modelling, and thermal transfer processes within renewable energy frameworks. Relevant studies may include, but are not limited to, wind turbine aerodynamics, tidal and wave energy converters, hydroelectric power optimization, and solar thermal energy applications. Contributions emphasizing computational modelling, simulation techniques, experimental methods, and field applications are encouraged, especially those that align with the concepts of sustainability and sustainable development.

Guest Editors

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Deadline for manuscript submissions

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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

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