Special Issue

Sustainable Air Quality: Studies Based on Fluid Mechanics and Compressor-Less Water-Based Cooling

Message from the Guest Editors

Driven by economic development and the growing demand for thermal comfort, the energy consumption of Ventilation and Air Conditioning (HVAC) systems is rapidly increasing. The utilization of HVAC has improved people's quality of living, but it has also produced some negative effects on the natural environment. This Special Issue is organized to add recent advances to the information on the studies based on fluid mechanics and compressor-less water-based cooling. We invite the authors to raise awareness of different aspects of the problem or to contribute relevant knowledge on (but not limited to) any of the aspects mentioned below:

- Advanced compressor-less water-based cooling system technologies and applications;
- Novel materials and structures for water-based evaporative cooling devices;
- Sustainable multi-stage hybrid cooling systems;
- Surface wettability theory;
- Indoor air quality;
- System optimal control method;
- Fluid flow, heat transfer, and mass transfer analysis;
- Energy, economy, and environment analysis;
- Manufacturing and commercialization.

Guest Editors

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Deadline for manuscript submissions

closed (31 October 2023)

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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

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