

Special Issue

Recent Advancement of Thermal Fluid Engineering in the Supercritical CO₂ Power Cycle

Message from the Guest Editors

This Special Issue is a compilation of the recent advancements in thermal fluid engineering related to supercritical CO₂ power cycle development. The supercritical CO₂ power cycle is considered to be one of the promising power cycles for distributed power generation; waste heat recovery; and a topping cycle of coal, nuclear, and solar thermal heat sources. While the cycle benefits from dramatic changes in CO₂ thermodynamic properties near the critical point, the design and analysis of the power cycle and its major components also face certain challenges due to the strong real gas effect. This Special Issue will present a series of recent research results in heat transfer and fluid flow analyses and experimentation so that the accumulated knowledge can accelerate the development of this exciting future power cycle technology.

- Supercritical CO₂
- Real gas effect
- Compact heat exchanger
- Turbomachinery

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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