

Special Issue

Recent Advances in Thermal Energy Recovery and Utilization

Message from the Guest Editors

The increase of greenhouse gas emissions has been leading to deep challenges in energy production, mobility, and industrial sectors. Several industrial processes and most of the vehicles equipped with internal combustion engines or gas turbines release heat into the environment, due to heat transfer losses and hot fluids or material dump. Thermal energy recovery of both waste heat or cold energy is a key point to improve the conversion efficiency of existing systems, reduce greenhouse gas emission, and limit the spread of fossil fuels.

This Special Issue would like to encourage original contributions regarding recent developments and concepts related to waste heat and cold energy recovery. Potential topics include but are not limited to advanced thermodynamic cycle architectures, improvement in part load operation of recovery system, advances in thermoelectric and thermoionic generators, advanced production processes reaching high energy efficiency, progress in waste heat and cold recovery system for marine and terrestrial propulsion, and utilization of waste heat or cold energy for trigenerative or polygenerative applications.

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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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