Special Issue

New Frontiers in Circulating Fluidized Bed Boiler and Thermal Power Plant

Message from the Guest Editors

The application of circulating fluidized bed boiler (CFBB) technology has been under rapid development in the recent decades, due to its various advantages in fuel flexibility, emission control and efficiency. The uniformity in large-scale CFBBs, not only regarding fluidization, but also chemical reaction and heat transfer, still requires further investigation. The topics of interest include, but are not limited to:

The fundamentals of fluidization, including the numerical simulation of combustion, and heat transfer and pollution control in large industrial CFBBs; The design and operation technologies of large CFB boilers; New technologies for the auxiliary system for a CFB boiler; New technologies for the control of pollutants and ultra-low emissions; Flexible and deep load regulation; Coal flexibility and co-combustion; The security of heat transfer surfaces; The hydrodynamics of water wall tubes:

Anti-wear technology; Waste heat recovery and utilization; Energy-saving technologies; Ash characterization and utilization; CFB combustion of high-sodium coal, biomass, industrial waste, municipal sludge and municipal waste.

Guest Editors

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Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

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