Special Issue

Advances and Applications in Heat Exchanger Networks for Chemical Engineering

Message from the Guest Editor

The chemical industry has a lot of energy-intensive processes that should be optimized. However, this is a challenging task to achieve due to complexity and high interconnectivity up- and downstream. Many researchers have carried out studies aimed at minimizing the energy of chemical processes. Heat exchanger networks (HENs) are a major technique for energy saving in chemical processes. HEN synthesis is heat integration between hot and cold process streams to reduce heating and cooling utility consumption in industrial processes. Recently, new approaches with HEN synthesis problems such as machine learning and AI have been suggested, with both conventional and typical research still actively taking place. In this regard, therefore, HEN approaches for energy the efficiency of chemical engineering are being reorganized, and new approaches with HEN are suggested for the future. The aims of this Special Issue are to provide a comprehensive coverage of advances and applications in HEN for chemical engineering. Therefore, we invite authors to contribute papers on novel HEN applications for energy efficiency, including reviews and case studies.

Guest Editor

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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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