Special Issue

Thermodynamic Analysis and Process Intensification: Second Edition

Message from the Guest Editor

Thermodynamic analysis (TA) may include energy and exergy analyses, the equipartition principle, pinch analysis, second law analysis, entropy production minimization, and thermodynamically coupled processes. Process intensification (PI) focuses on considerable improvements in the manufacturing sector through modifications leading to more precise, efficient, economical, and safer processes. PI principles may include spatial, thermodynamic, functional, temporal, and knowledge domains. The thermodynamic domain focuses on energy conversion and transfer with minimal energy loss and emissions. The knowledge domain focuses on data-driven decisions enabled by machine learning that is directed toward intensified equipment, methods, and plant design. PI can be a design strategy with data-driven models enabled by machine learning that is directed toward intensified equipment/unit, method, and plant design. This special issue invites the scientific community to submit manuscripts to emphasize thermodynamic analysis and process intensification toward smart design with energy and resource conservation.

Guest Editor

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Deadline for manuscript submissions

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The concept of entropy is traditionally a quantity in physics that has to do with temperature. However, it is now clear that entropy is deeply related to information theory and the process of inference. As such, entropic techniques have found broad application in the sciences.

Entropy is an online open access journal providing an advanced forum for the development and/or application of entropic and information-theoretic studies in a wide variety of applications. *Entropy* is inviting innovative and insightful contributions. Please consider *Entropy* as an exceptional home for your manuscript.

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