

Special Issue

Entropy and Thermodynamics in Desalination Systems II

Message from the Guest Editors

Desalination systems consume large amounts of energy to separate pure water from dissolved matter. Whatever the separation method used to desalinate water, there is a large amount of entropy generation due to irreversibility in each process. Reducing entropy generation will decrease the energy consumed in the desalination process. Energy and exergy analyses, as well as entropy generation minimization, are vital thermodynamic tools in the design and analysis of desalination systems. This Special Issue specifically emphasizes research that addresses entropy generation and the thermodynamic analysis of desalination systems, by presenting an analysis of novel desalination processes, improved performance, new techniques, such as fog harvesting, water from thin air, and desalination by freezing. Other disciplines are also welcome, such as salinity gradient energy, energy recovery devices in desalination systems, optimization, and entropy generation minimization.

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Message from the Editor-in-Chief

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.

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