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# Design and Optimization of Integrated Desalination and Carbon Capture, Utilization and Storage Processes

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Deadline for manuscript submissions:
**closed (30 October 2023)**

## Message from the Guest Editors

Dear Colleagues,

As a result of the enormous world population and economic development growth, the supply of water, food and energy constitutes the main challenge of the 21st century, there has been an increase in the number of regions with chronic levels of water scarcity.

In recent years, coal has attended to more than half of the world's energy demand, the dramatic rise in coal consumption implied a record increase in greenhouse gas emissions of approximately 33 GtCO2. Thermal-process-based seawater desalination (multistage flash (MSF) and multieffect distillation (MED) desalination processes) and membranes (reverse osmosis (RO) units), including hybrid processes (MSF/RO, MED/RO or MSF/MED /RO) play a key role in fresh water supply. The operation of desalination processes requires high energy consumption; requirements mainly satisfied through the use of fossil fuels.

Based on the above-mentioned points, the intention of this Special Issue is to investigate sustainability seawater desalination processes. We aim to promote the development of seawater desalination systems to help reduce greenhouse gas emissions.

We look forward to receiving your contributions.

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## Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

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