



## Water Desalination: Most Available Alternative over the Earth for Covering the Freshwater Shortage

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### Message from the Guest Editors

The fresh surface water is very limited as it is around 0.3% of earth water. The groundwater withdrawal and glaciers melting may provide some resources for fresh water, but they are not available everywhere. Seawater desalination may introduce the best solution for providing freshwater as access to saltwater is available for most countries. The process is usually costly and extensively consumes energy resources. The challenge is to find new technologies providing a high enough quantity of water with low-cost and eco-friendly applications. For example, using direct solar energy for the desalination of seawater may introduce the best low-cost and clean option; however, the main disadvantage of this process is the low productivity. Thus, intensive research work is needed to solve all these difficulties and introduce an updated process, which will provide the world with the magic solution for the water shortage. The scope of this special issue, therefore, is to review the current desalination processes, identify the advantages and disadvantages of the processes, and explore new





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