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Advancements in Technologies for Water Treatment

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Abstract : Seawater desalination and wastewater treatment for its reuse are rapidly evolving technologies as water crisis is one of the major issues around the globe. Different purification technologies and advancements in the processes, for instance variation in pretreatments for a better separation process and other related aspects are the areas frequently worked on. Evolution of water treatment techniques over last 40 years is fairly vast and new ideas related to nanotechnology are emerging in the industries with a view of more efficient functioning. The article focusses on the large scale water treatment techniques, their characteristics, relative principles, methodology and evolution. It also indicates the variety of membranes manufactured by established company over the years and emphasizes on their different properties and applications with changing compositions. The article narrows down to concentrate on the membrane separation processes as they are globally popular techniques in bulk water treatment.

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