Rapidly increasing scarcity of water usable for drinking, irrigation, industry, and general sanitation, caused by rising use and pollution of existing fresh water sources, have created an enormous rise (lately of around 14%/year) in water desalination. Water desalination consists of separation processes that produce new fresh water from seawater and other water sources which are too saline for use. Having started on large commercial scale only about 50 years ago, it now produces about 40 million m³/day of desalted water, with forecasts of at least doubling within 10 years and an expected investment of around $60 billion.

Water desalination consumes large amounts of energy and materials, and has an associated important impact on the environment. Research and development, improved construction, operation and financing methods, and information exchange must continue to be advanced to reduce the cost of the produced water and improve process sustainability.

Advances in Water Desalination is designed to meet the knowledge needs in this rapidly advancing field, and consists of one book volume per year, containing 5-7 invited high quality timely reviews, each treating in depth a specific aspect of the desalination and related water treatment field, and written by invited top experts in the field. All aspects will be addressed, to include science, technology, economics, commercialization, environmental impact, and sustainability.

The series is going to be useful for desalination practitioners in industry and business, scientists and researchers, and students.

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