



UF/MF Membrane Water Treatment

Principles and Design

Graeme Pearce

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UF/MF Membrane Water Treatment: Principles and Design **Dr Graeme K Pearce, Membrane Consultancy Associates**

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Membranes have been used in water treatment applications for nearly 50 years. However, it took the emergence of drivers for quality improvement and resource development in the 1990s to give rise to the last decade of explosive growth and falling prices. Membranes now compete with conventional technology in many areas, and will play a critical enabling role in meeting the challenges of water supply and wastewater treatment in the 21st century.

This book provides a comprehensive description of the state of the art of ultrafiltration (UF) and microfiltration (MF) membrane technology in water and wastewater applications. The book will give practitioners a comprehensive understanding of all key facets of membranes and their application. The objective of the book is to provide a description and explanation of membrane technology in the water industry, and to improve the experience of trying to implement a scheme. The book will be essential reading for all project and process engineers, plant designers, planners, and operational personnel involved in municipal and industrial membrane projects. Also scientists and academics interested in the application of membranes in the water field will gain insight into latest trends in commercial membrane technologies.

Note on the Author

Dr Pearce has 30 years of experience in the Membrane Industry, and holds a Chemistry degree and Chemical Engineering doctorate from Oxford University. He has worked in membrane research at BP, for a membrane system company at Kalsep, and a membrane manufacturing company at Hydranautics. Currently Dr Pearce is an independent consultant, forming Membrane Consultancy Associates (MCA) in 2005 to specialize in UF/MF technology. MCA helps companies with market analysis, business strategy, technology selection, and problem solving.

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