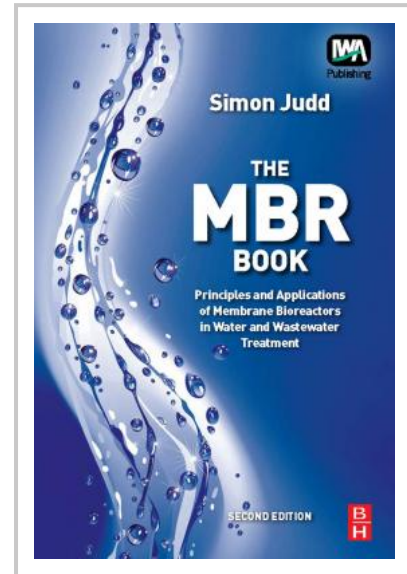


MBR Book, 2nd Edition

A Membrane BioReactor (MBR) is the combination of a membrane process (e.g. microfiltration/ ultrafiltration) with a suspended growth bioreactor. When used with domestic wastewater, MBR processes can produce effluent of high enough quality to be discharged to waterways, or to be reclaimed for urban irrigation. Other advantages of MBRs over conventional processes include small footprint, easy retrofit and upgrade of old wastewater treatment plants.

The MBR Book covers all important aspects of Membrane BioReactors in water and waste water treatment, from the fundamentals of the processes via design principles to MBR technologies. Industrial case studies help interpret actual results and give pointers for best practice. Useful appendices provide data on commercial membranes and international membrane organizations.



The MBR book enables readers to:

- Understand the fundamental processes involved in membrane and biotreatment technologies
- Compare and contrast design options and work through sample calculations
- Review commercial MBR systems in terms of specific applications
- Learn from case studies involving domestic and industrial effluent treatment and recycling
- Analyze process design, operation, performance and maintenance to draw conclusions appropriate to their requirements

New to the second edition:

40% more content than the first edition.

- Over 120 contributors from the municipal/industrial practitioner and academic research communities.
- State-of-the-art in national/international drivers and barriers, available commercial technologies, research and development, and practitioner knowledge
- Review of MBR status in ten countries
- Expanded sections on anaerobic MBRs, micropollutant fate and hybrid systems
- Simplified design methodology, biokinetics for dynamic modelling, and cost benefit analysis
- New operation and maintenance section, informed by an expert panel of practitioners offering more than 50 years combined experience
- Over 40 MBR membrane products described
- Over 50 case studies provided, including key design, performance, and operation and maintenance data in almost all cases

Readership

Chemical and process engineers; environmental engineers; filtration specialists; water and waste companies; consultants

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Co-Published with Elsevier/Butterworth Heinemann

Publication Date: 01/12/2010

ISBN13: 9781843395188

Pages: 528

Print:

Standard price: £131 / €164 / \$197

Member price: £98 / €123 / \$147