

Simon Judd is Professor in Membrane Technology at the Centre for Water Science, Cranfield University, and has been on the staff at the Centre for Water Science since 1992.



He has 20 years post-doctorate experience in academic and industrial R&D incorporating all aspects of water and wastewater treatment technology. Simon has an extensive network of contacts within the UK and European water industry which has arisen from managing 10 large collaborative R&D programmes, and many more smaller ones, over the past 15 years. He has procured and/or managed almost all biomass separation Membrane Bioreactor (MBR) programmes conducted within the School. He has been principal or co-investigator on three major UK research council-sponsored programmes dedicated to MBRs with respect to in-building water recycling, sewage treatment and contaminated groundwaters/landfill leachate, and was co-initiator of the multi-centred EU-sponsored EUROMBRA project. As well as publishing extensively in the research literature, Simon has co-authored three textbooks in membrane and MBR technology. Invited presentations at international membrane conferences have included six keynote papers. Simon has also provided consultancy, principally on MBR technology, to clients based in Europe, the Far East, the Middle East and North America.

### Venue:

Institut Català de Recerca de l'Aigua (ICRA). Edifici H<sub>2</sub>O - Parc Científic i Tecnològic de la Universitat de Girona. c/ Emili Grahit 101 - 17003 Girona (Spain). [www.icra.cat](http://www.icra.cat)

### Course registration:

General registration fees: **200 euros** (VAT, documentation, coffee breaks and lunch are included). Maximum 40 attendants.

### Registration form (before June 30th):

Bank transfer (concept: MBR + full name + company):  
IBAN: ES43 2041 0168 11 0040008089  
SWIFT/BIC: CECAESMM041  
Bank: Caixa Manresa

Once paid, please confirm the registration sending an e mail to: [irodriguezroda@icra.cat](mailto:irodriguezroda@icra.cat)

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# Short Course

# MBR

## Getting them

## working,

## keeping them

## running

Girona, 14th July 2010



Immersed membrane bioreactors (MBR) have been used commercially for almost 20 years. Market analyst reports indicate that the MBR market has experienced more rapid growth than any other advanced water treatment market sector, driven by the requirement to conserve freshwater supplies through wastewater recovery and reuse

The MBR courses developed by Cranfield University bring together relevant biological and membrane technology fundamentals, MBR process design and operation principles and the latest process development and operational experiences from around the world. It was the first course globally to bring all this knowledge together, has run successfully since 2000, and can be supplemented by the benchmark reference book *The MBR Book*.

The Catalan Institute for Water Research (ICRA) is a research centre created in October 2006 by the Catalan Government within the framework of the Research Centres Network Programme (CERCA). The ICRA's Research Plan is structured around three main research areas: Technologies and Evaluation, Quality, and Resources and Ecosystems.

MBR research activity at ICRA is carried out in close cooperation with LEQUiA-UdG. Biofouling mechanisms, energy optimization, modeling, integrated operation, water reuse and knowledge-based supervision are the main topics within this research line. [www.colmatar.es](http://www.colmatar.es)

The **one-day seminar** provides the latest information on design and operation of MBRs adopting a "bottom up" approach to the subject. It is intended for process scientists and technologists, consultants and researchers, though regulators, contractors and other stakeholders should also benefit from attending. The seminar opens with a brief commercial status appraisal and continues with underpinning membrane and biological process technology fundamentals required to understand the MBR process. There follows an insight into MBR process design and operating principles and factors impacting on costs. The remainder of the seminar focuses on commercial technologies and case studies, with a Q&A session. The emphasis of the course is very much on the practicalities of the process, its operation and maintenance in maintaining throughput, and its relevance to water scarce regions.

The seminar leader, Professor Simon Judd, is a leading areaspecialist, and has authored/co-authored three books on membrane technology. The Centre for Water Science at Cranfield University, <http://www.cranfield.ac.uk/sas/water/>, is an internationally-recognised centre of excellence for applied water and wastewater treatment research and development, including MBRs. The close links of the Centre with industry means that extensive knowledge and experience of the main commercial systems has been gained over the course of the Group's 20-year MBR research programme.

## PROGRAMME

| Time  |       | Presentation                                      |
|-------|-------|---|
| From  | To    |   |
| 9:30  | 10:00 | Registration, welcome and coffee                  |
| 10:00 | 10:45 | The commercial status of MBRs                     |
| 10:45 | 12:00 | Membrane & biotreatment technology fundamentals   |
| 12:00 | 13:15 | MBR technology design & operating principles      |
| 13:15 | 14:30 | Lunch   |
| 14:30 | 15:30 | MBR commercial process technologies               |
| 15:30 | 16:45 | Case Studies: municipal & industrial applications |
| 16:45 | 17:15 | Coffee  |
| 17:15 | 17:45 | The future of MBRs                                |
| 17:45 | 18:00 | Q & A, close                                      |
| 18:00 |       | Disperse  |

The course will be given in English. A translation service will be provided to facilitate Q&A.

More information:  
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