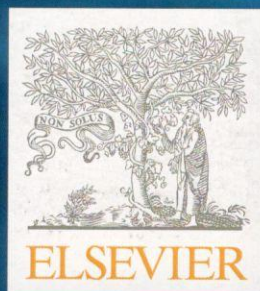


# 3<sup>RD</sup> INTERNATIONAL CONFERENCE ON DESALINATION USING MEMBRANE TECHNOLOGY

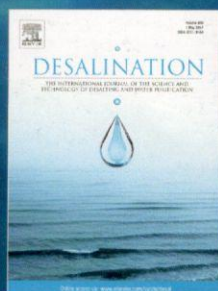
2-5 APRIL 2017, GRAN CANARIA, SPAIN

## PROGRAMME BOOKLET

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## Welcome

Dear participants,

On behalf of the organizing and scientific committees, we are delighted to welcome delegates from all over the world to Singapore for the **3<sup>rd</sup> International Conference on Desalination using Membrane Technology, MEMDES 2017**. This exciting forum is entirely dedicated to recent developments in membrane desalination and related technologies.

This conference is held in Canary Islands, which are very well known in the desalination market due to their role as pioneers in the use of all the desalination technologies.

The international journal *Desalination* is supporting this conference. *Desalination* reaches a milestone, it is amazing to think of all that we have achieved so far. The publication speed for our journal is considered one of the best of Elsevier's journals and the number of citations is increasing rapidly and the number of downloads also increased to over 1.3 million in the last 12 months. The 2014 ISI web of science reported an impact factor of 2.756. This increase in impact factor is due to the improvement in the quality of papers published through strict refereeing and examination of the papers submitted resulting in a current rejection rate of 81%. We are delighted to say that this is in no small part due to the hard work of you, the editorial board and reviewers, in not only refereeing the papers submitted but raising the standard of the quality of papers that we publish. To all of the editorial board and reviewers we give our thanks and congratulations.

The conference committee has put together a truly unique programme that addresses the cutting edge in desalination and water treatment and related techniques. A series of state-of-the-art plenary presentations will be presented by internationally renowned experts. This will be accompanied by breakout sessions of oral presentations. Posters have been organised to be easily accessible for viewing during sessions, refreshment breaks and lunches.

It is a great pleasure for us to invite you all to join us for intensive academic discussions in a stimulating atmosphere in the Canary Islands, which have desalination experience of more than 40 years.

### Conference Chairs

Nidal Hilal, *CWATER, Swansea University, UK* (Editor-in-Chief of *Desalination*)  
Antonio Casañas, *Dow Chemical Ibérica, S.L. - Dow Water & Process Solutions, Madrid, Spain*



Category	Membrane distillation
[P1.18]	<b>Effect of pretreatment and operation conditions on the performance of membrane distillation for the treatment of shale gas produced water</b> H.R. Cho*, Y.J. Choi, S.H. Lee, <i>Kookmin University, Republic of Korea</i>
[P1.19]	<b>Desalination of petrochemical reverse osmosis brine using direct contact membrane distillation: An experimental and mathematical approach</b> M.S. Osman*, V. Masindi, A. Abu-Mahfouz, <i>Council for Scientific and Industrial Research (CSIR), South Africa</i>
[P1.20]	<b>Effect of operation condition on membrane distillation process : Fouling and cleaning concepts</b> K.D. Park*, B.C. Kim, J.S. Choi, S.H. Kim, <i>Korea Institute of Civil Engineering and Building Technology, Republic of Korea</i>
[P1.21]	<b>Mathematical modelling of membrane distillation pore wetting phenomenon</b> M.R. Qtaishat, <i>The University of Jordan, Jordan</i>
Category	Module design
[P1.22]	<b>Numerical investigation of membrane module design for desalination</b> J. Seo*, Y. Kim <sup>2</sup> , J.H. Kim <sup>1</sup> , <sup>1</sup> <i>Gwangju Institute of Science and Technology (GIST), Republic of Korea</i> , <sup>2</sup> <i>Korea Research Institute of Chemical Technology, Republic of Korea</i>
Category	Nanofiltration, ultrafiltration, microfiltration
[P1.23]	<b>Surface modification of ultrafiltration membranes for enhanced humic acid removal</b> N. Bin Darwish*, H. Al Abdulgader <sup>2</sup> , H. Al Romaih <sup>1</sup> , A. AlAlawi <sup>1</sup> , <sup>1</sup> <i>King Abdul Aziz City for Science and Technology (KACST), Saudi Arabia</i> , <sup>2</sup> <i>King Faisal University, Saudi Arabia</i>
[P1.24]	<b>The comparison of commercial spiral wound nanofiltration membranes for desalination and concentration of liquid dye</b> J. Cuhorka*, P. Mikulášek, <i>University of Pardubice, Czech Republic</i>
[P1.25]	<b>Application of carbon based membranes for desalinization of sea water</b> C. Daulbayev*, M. Seitzhanova, T. Dmitryev, E. Aliyev, Z. Mansurov, <i>Institute of Combustion Problems, Kazakhstan</i>
[P1.26]	<b>Comparison of feed pretreatment by organic and inorganic coagulants and their combination on membrane microfiltration of titanium dioxide dispersions</b> M. Grulich*, P. Mikulášek, <i>University of Pardubice, Czech Republic</i>
[P1.27]	<b>Use of the micellar-enhanced ultrafiltration (MEUF) for fluoride removal from aqueous solutions</b> M. Grzegorzec*, K. Majewska-Nowak, <i>Wroclaw University of Science and Technology, Poland</i>
[P1.28]	<b>Antibacterial activity and membrane morphology of ultrafiltration membrane based on IKI immobilized Chitosan-PEG-MWCNT composites</b> F. Khoerunnisa*, H. Hendrawan, Y. Sonjaya, D.R. Primastari, W. Rahmah, R. Agiawati, <i>Indonesia University of Educaton, Indonesia</i>
[P1.29]	<b>Algae induced fouling of UF/MF Membranes: Identification of critical influence factors</b> S. Laksono*, J.A. Wawensyah, L. Landwehrkamp, S. Panglisch, <i>University of Duisburg-Essen, Germany</i>
[P1.30]	<b>One pot preparation of polysulfone-silica nanoparticle ultrafiltration membranes for water filtration</b> X. Li <sup>1,2</sup> , B.P. Tripathi <sup>1</sup> , M. Stamm <sup>1,2</sup> , <sup>1</sup> <i>Leibniz-Institutes für Polymerforschung Dresden, Germany</i> , <sup>2</sup> <i>Technische Universität Dresden, Germany</i>
[P1.31]	<b>Evaluation of nanofiltration membranes for recovery and concentration of rare earth elements from acidic waters</b> J. López*, M. Reig <sup>1</sup> , E. Licón <sup>1</sup> , O. Gibert <sup>1,2</sup> , A. Yaroshchuk <sup>1,3</sup> , E. Torres <sup>4</sup> , C. Ayora <sup>4</sup> , J.L. Cortina <sup>1,2</sup> , <sup>1</sup> <i>Chemical Engineering Dept. UPC-Barcelona TECH, Spain</i> , <sup>2</sup> <i>CETAQUA, Spain</i> , <sup>3</sup> <i>Catalan Institute for Research and Advanced Studies (ICREA), Spain</i> , <sup>4</sup> <i>Institute of Environmental Assessment and Water Research IDAEA, Spain</i>
[P1.32]	<b>Characterization of the effectiveness of cleaning agents on polyethersulfone (PES) membrane performance</b> B. Malczewska, <i>Wroclaw University of Environmental and Life Sciences, Poland</i>
[P1.33]	<b>The influence of nanoparticle type on the organic-inorganic membranes used for wastewater treatment</b> S.C. Pintilie*, L.G. Tiron, A.L. Lazar, M. Vlad, I.G. Birsan, S. Balta, <i>Dunarea de Jos University, Romania</i>
[P1.34]	<b>Marble slurry as a potential ceramic water filtration material: Comparative analysis with machined Fe powder and clay ceramics for effectiveness in As removal from water at point of use</b> A. Kaurwar, S. Gupta, R. Satankar, A. Plappally*, <i>Indian Institute of Technology Jodhpur, India</i>
[P1.35]	<b>Fabrication and characterization of polyurethane shape memory polymer membranes by phase inversion technique</b> B. Soltannia, G. Chen, M. Sadrzadeh*, <i>University of Alberta, Canada</i>