



Graphical Abstracts

Special Issue: Membrane Science and Engineering. A Tribute to the **Takeshi Matsuura's** Pioneering vision

Editorial Note

Membrane Science and Research: A Tribute to Professor Takeshi Matsuura

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Invited Letter

A Letter for Honoring Prof. Takeshi Matsuura

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Invited Letter

Professor Takeshi Matsuura: An Inspiration to Young Membranologists

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Invited Letter

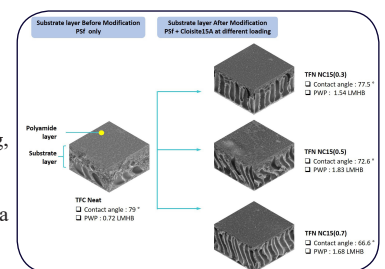
Takeshi Matsuura: A Truly Inspirational Friend and Membrane Scientist

Ahmad Fauzi Ismail

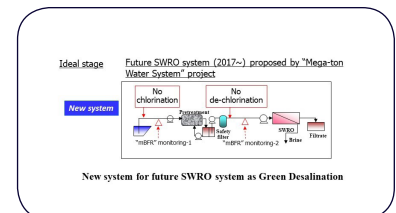
Advanced Membrane Technology Research Centre (AMTEC), Universiti Teknologi Malaysia, 81310 Johor, Malaysia

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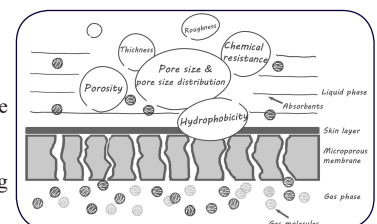
Research Paper

Effect of Organoclay on the Performance of Reverse Osmosis MembraneMohamed Afizal Mohamed Amin ^{1,2}, Pei Sean Goh ¹, Ahmad Fauzi Ismail ^{1,*}¹ Advanced Membrane Technology Research Centre (AMTEC), School of Chemical and Energy Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, 81310, Johor Bahru, Johor, Malaysia² Department of Chemical Engineering and Sustainability Energy, Faculty of Engineering, Universiti Malaysia Sarawak, 94300, Kota Samarahan, Sarawak, MalaysiaE-mail: afauzi@utm.my (A.F. Ismail)

Engineering Advance

Sustainable Seawater Reverse Osmosis Desalination as Green Desalination in the 21st CenturyMasaru Kurihara ^{1,*}, Yohito Ito ²¹ Toray Industries, Inc., 2-1-1 Nihonbashi-muromachi, Chuo-ku, Tokyo 103-8666, Japan² Toray Industries, Inc., 3-2-1 Sonoyama, Otsu, Shiga 520-0842, JapanE-mail: masaru.kurihara.z9@mail.toray (M. Kurihara)

Research Paper

Correlating Physicochemical Properties of Commercial Membranes with CO₂ Absorption Performance in Gas-Liquid Membrane ContactorYilin Xu ^{1,2}, Chandresh Malde ³, Rong Wang ^{2,4,*}¹ Interdisciplinary Graduate School, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, Singapore² Singapore Membrane Technology Centre, Nanyang Environment and Water Research Institute, Nanyang Technological University, 1 Cleantech Loop, Singapore 637141, Singapore³ Johnson Matthey Technology Centre, Reading RG4 9NH, United Kingdom⁴ School of Civil and Environmental Engineering, Nanyang Technological University, 50 Nanyang Avenue, Singapore 639798, SingaporeEmail: rwang@ntu.edu.sg (R. Wang)

Graphical Abstracts

Seawater Desalination by Using Nanofiltration (NF) and Brackish Water Reverse Osmosis (BWRO) Membranes in Sequential Mode of Operation

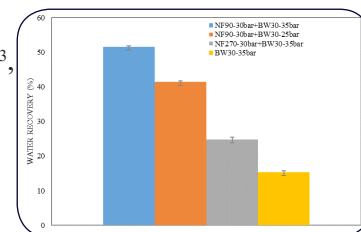
Cüneyt Kaya ^{1,2}, Yakubu Abdullahi Jarma ¹, Ali Mohammed Muhidin ¹, Enver Güler ³, Nalan Kabay ^{1,*}, Müşerref Arda ², Mithat Yüksel ¹

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Study on commercial membranes and sweeping gas membrane distillation for concentrating of glucose syrup

Mohammad Mahdi A. Shirazi ^{1,2,†}, Ali Kargari ^{3,*}, Dariush Bastani ⁴, Mansooreh Soleimani ⁵, Leila Fatehi ²

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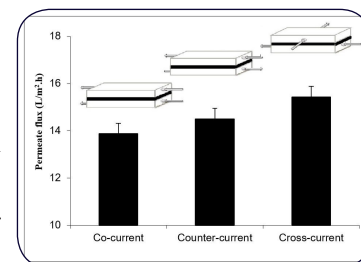
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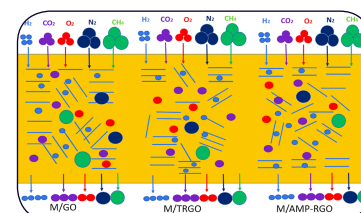
Gas Separation Properties of Mixed Matrix Membranes Based on Polyimide and Graphite Oxide

Xiao Yuan Chen ^{1,*}, Nguyen Tien-Binh ¹, Amaya Romero ², Antonio Patón ², Luz Sanchez-Silva ², Jose Luis Valverde ², Serge Kaliaguine ¹, Denis Rodrigue ¹

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The Ultrafiltration Performance of Cellulose Acetate Asymmetric Membranes: A New Perspective on the Correlation with the Infrared Spectra

Ana Sofia Figueiredo ^{1,2}, Ana Rosa Garcia ^{3,4}, Miguel Minhalma ^{1,2}, Laura Ilharco ³, Maria Norberta de Pinho ^{1,*}

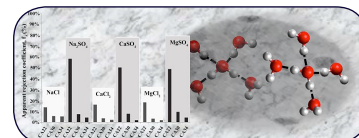
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Research Paper

Membrane Condenser for Particulate Abatement from Waste-Gaseous Streams

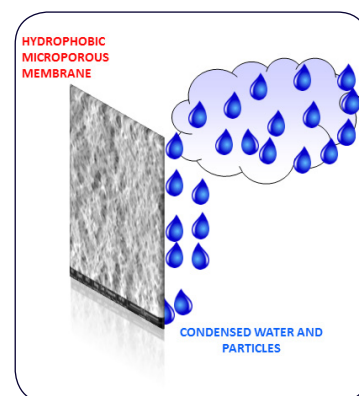
Mirko Frappa ¹, Adele Brunetti ¹, Enrico Drioli ^{1,2}, Zhaoliang Cui ³, Jun Pan ³, Francesca Macedonio ^{1,*}

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Research Paper

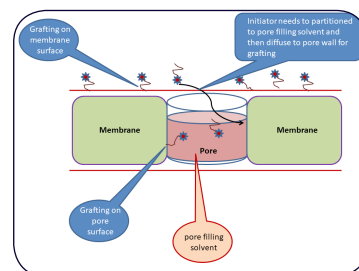
Activator Generated Electron Transfer Combined Atom Transfer Radical Polymerization (AGET-ATRP) for Controlled Grafting Location of Glycidyl Methacrylate on Regenerated Cellulose Ultrafiltration Membranes

Arijit Sengupta ^{1,2,*}, Sumith Ranil Wickramasinghe ¹

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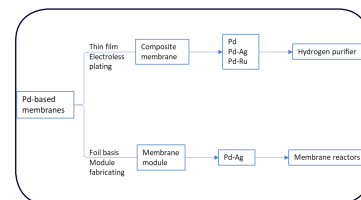


Research Paper

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Engineering Advance

Development of Palladium-Alloy Membranes for Hydrogen Separation and Purification

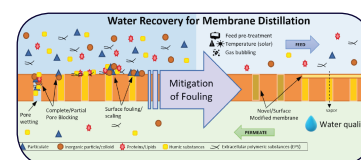
Anwu Li ^{1,2,*}, Tony Boyd ¹, Jim Lim ², John R. Grace ²¹ NORAM Engineering and Constructors, 200 Granville St., Vancouver, Canada V6C 1S4² Chemical and Biological Engineering, University of British Columbia, 2360 East Mall, Vancouver, Canada V6T 1Z3E-mail: ali@noram-eng.com (A. Li)

Review Paper

Membrane Distillation for Water Recovery and Its Fouling Phenomena

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Research Paper

Gas Permeation Modeling through a Multilayer Hollow Fiber Composite Membrane

Abtin Ebadi Amooghin ^{*1}, Saman Mirrezaei ¹, Hamidreza Sanaeepur ¹, Mohammad Mehdi Moftakhari Sharifzadeh ²¹ Department of Chemical Engineering, Faculty of Engineering, Arak University, Arak 38156-8-8349, Iran² Department of Petroleum and Chemical Engineering, Science and Research Branch, Islamic Azad University, Tehran, IranE-mail: a-ebadi@araku.ac.ir (A.Ebadi Amooghin)