

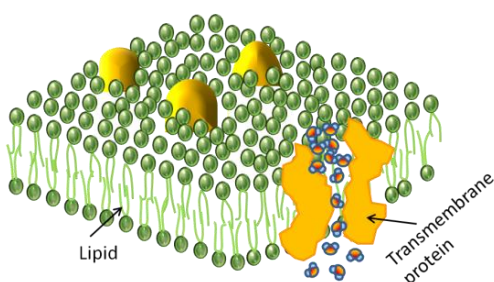
Conference on Advanced Chemical and Membrane Technology – Growth Opportunities in Life Science & Pharmaceuticals, Water Reuse & Desalination and Energy Applications

Tuesday 13 April – Wednesday 14 April 2010, National University of Singapore

This two-day conference is co-organized by *Singapore-MIT Alliance*, *Singapore National Institute of Chemistry*, *NUS Membrane Consortium* and *Department of Chemical & Biomolecular Engineering, National University of Singapore*. Development and innovation in chemical and membrane technologies for applications in life science & pharmaceuticals, water reuse & desalination and energy will be showcased in the conference by the international experts in the respective academic fields. In addition, this event provides a great opportunity for collaboration and networking among researchers.

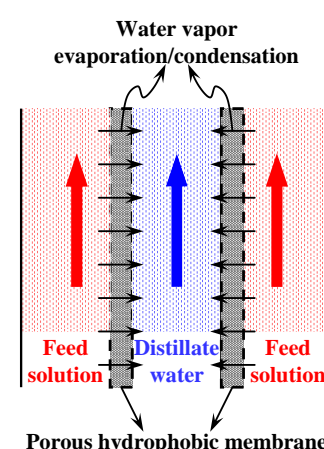
Day 1: Life Science & Pharmaceuticals Date: 13 April 2010 Venue: Engineering Auditorium

- 09:00 **Registration**
- 09:20 **Introduction and Welcome** by *Dr. L. CHAN*, Chief Executive Officer, NUS Enterprise
- 09:30 **Plenary Talk - High Performance Ultrafiltration Membranes: New Approaches and New Opportunities in Bioprocessing**
Prof. Andrew L. ZYDNEY (Chief Editor, *Journal of Membrane Science*), Dept Head and Walter L. Robb Chair, Dept of Chemical Engineering, Pennsylvania State University
- 10:20 **Preparation of Cell-Specific Scaffolds for Bone Regeneration by Peptide Grafting**
Prof. D.-M. WANG, Dept of Chemical Engineering, National Taiwan University
- 10:50 **Morning Break**
- 11:10 **Total Separation of Proteins using Molecularly Imprinted Materials: Surface Imprinted Cellulose Acetate Membranes**
Prof. Y. W. TONG, Dept of Chemical and Biomolecular Engineering, NUS
- 11:40 **Droplet Microfluidics for Chemical Synthesis and Separation**
Prof. Saif A. KHAN, Dept of Chemical and Biomolecular Engineering, NUS
- 12:10 **Surface Modification of Materials and the Applications for Life Science**
Prof. M.-J. WANG, Dept of Chemical Engineering, National Taiwan University of Science and Technology
- 12:40 **The Facile Development of Functionalized Membrane for the Enantioresolution of Pharmaceuticals**
Dr. Y. XIAO, Dept of Chemical and Biomolecular Engineering, NUS
- 13:10 **Lunch**



Day 1: Water Reuse & Desalination Date: 13 April 2010 Venue: Engineering Auditorium


- 14:30 **Functionalized Membranes for Bio- and Water Related Applications**
Prof. D. BHATTACHARYYA, Dept of Chemical and Materials Engineering, University of Kentucky
- 15:00 **Innovative Cleaning Technique for Reverse Osmosis Fouling Control**
Dr. J. J. QIN, Public Utilities Board (PUB), Singapore
- 15:30 **NUS Membrane Consortium-Industry Engagement and Partnership**
Dr. M. S. Peter KEW (Associate Director), Industry Liaison Office, NUS Enterprise
- 16:00 **Final Discussion**



Day 2: Energy, Biofuel & Carbon Dioxide Capture

Date: 14 April 2010

Venue: Auditorium (Prince George's Park Residences)

- 09:00 **Registration**
- 09:20 **Introduction and Welcome**
- 09:30 **Environmental Catalysis - Oxidation & Degradation of Phenol in Aqueous System**
Prof. T. S. Andy HOR, Dept of Chemistry, NUS
- 10:00 **Membrane Formation-Control and Design of Membrane Structure**
Prof. H. MATSUYAMA (Editorial board member, Journal of Membrane Science), Dept of Chemical Science and Engineering, University of Kobe
- 10:30 **Polymer/Ceramic Composite Pervaporation Membrane**
Prof. W. Q. JIN (Editorial board member, Journal of Membrane Science), Nanjing University of Technology
- 11:00 **Morning Break**
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- 11:20 **Fabrication and Application of Novel High Surface Area Inorganic Membranes for Biomass Conversion to Fuels**
Dr. W. LIU, Pacific Northwest National Laboratory, USA
- 11:50 **Enzymatic Preparation of Biodiesel: Improving Biodiesel Properties and Utilizing Cheap Resources**
Prof Z. LI, Dept of Chemical and Biomolecular Engineering, NUS
- 12:20 **Lunch**

Day 2: Energy, Biofuel & Carbon Dioxide Capture

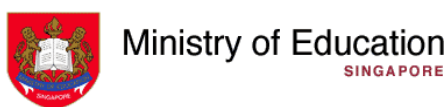
Date: 14 April 2010

Venue: Auditorium (Prince George's Park Residences)

- 13:30 **Introduction to Chemical Hydrides as Hydrogen Storage Materials**
Prof. B.-H. CHEN, Dept of Chemical Engineering, National Cheng Kung University
- 14:00 **Hollow Fiber Membrane Formation**
Dr. N. PENG, Dept of Chemical and Biomolecular Engineering, NUS
- 14:30 **Polymeric Membranes for Hydrogen and Natural Gas Purifications**
Ms. B. T. LOW, Dept of Chemical and Biomolecular Engineering, NUS
- 15:00 **Plenary Talk - Thermally Rearranged Polymer Membranes for CO₂ capture**
Prof. Y. M. LEE (Editor, Journal of Membrane Science), Dept of Chemical Engineering and Energy Engineering, Hanyang University
- 15:50 **Closing**

Registration Fees	
Students	\$20.00 for 2-day
Research Staff	\$70.00 for 2-day
Academic Staff	\$150.00 for 2-day
Industry/ Public	\$120.00 for 1-day \$200.00 for 2-day

Special thanks to :



All fees are nett and quoted in SGD. Only **cash** or **cheque** payments are accepted.

For NUS staff/students, please contact Ms Hew Swee Lim to make payment.

To register, click on this [link](#)

For more information, contact Ms Hew Swee Lim

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