

Inside this issue

- Message from the MSA President
- Mentorship Program
- MSA Funding Program
- MSA Travel Award Program
- Innovators Corner
- Conference Report:
 - 3rd MSA Workshop
 - 4th ECR Membrane Symposium
- Call for MSA Board Nomination

Message from MSA President

Welcome to our first *express* newsletter edition of 2015 that concisely highlights current membrane news in Australasia. In this edition, we detail our new programs, report on conferences and present our new Innovators Corner for promoting new inventions. Enjoy!

-Aaron Thornton, MSA Chairman

Mentorship Program

Mentoring is an important part of a scientists’ career development. The MSA has a broad range of members who have excelled in their career and are now willing to give back to community. During the past few months, the MSA has successfully paired mentors with early career researchers and here is some of the feedback: “It is



“It is such a fantastic experience”

such a fantastic experience”, “Their comments are very helpful for me to build up my academic career” and “I can discuss common problems/queries/thoughts which is helpful”. This mentorship is casual and can take the form of a phone call or a chat over a coffee.

Please find further information on the MSA website (<http://www.membrane-australasia.org/mentoring-program/>). If you are interested in this program, please contact the MSA and we will attempt to match you with a motivating mentor.

MSA Funding Program

The MSA has established a new funding program to support membrane-related events that are held in Australasia. The aim of the program is to promote innovative membrane research and industry activities that are beneficial to the membrane community in Australasia. These activities include:

Upcoming events:

- 4th MSA Workshop: Advances in pretreatment processes for desalination, UNSW, Sydney, 26th Feb 2015
- AMS9 Taipei, Taiwan, 19th-21st July 2015
- 2nd International Conference on Desalination using Membrane Technology, Singapore, 26th - 29th July 2015
- Euromembrane, Aachen, Germany, 6th-10th Sep 2015

- **Workshops** that share knowledge on one particular topic related to membrane technology in the laboratory, pilot or full scale level;
- **Seminars** for high profile guest speakers;
- **Symposia** for the dissemination of results/outcomes at the end of a project and highlight future trends;
- **Showcase** events promoting new technologies and activities; and
- Other networking events that benefit the membrane community.

More information can be found on the website: <http://www.membrane-australasia.org/funding-support/> - Emmanuelle Filloux, University of Queensland, MSA Funding Program Coordinator

3rd MSA workshop: Integration of Oxidation and Membrane Technologies

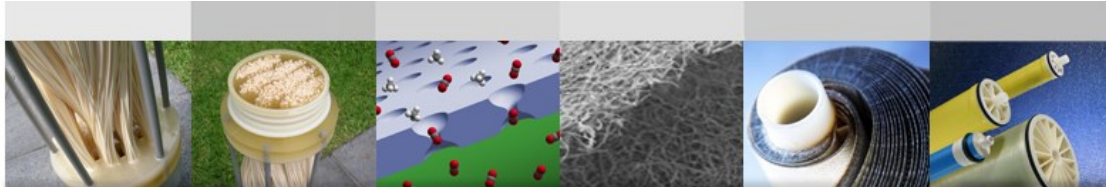
The MSA hosted its third workshop entitled “Integration of Oxidation and Membrane Technologies” on the 18th of November at Victoria University (VU). The MSA also offered remote members a chance to participate in the workshop via video conferencing from either the University of Technology (Sydney) or the University of Queensland (Brisbane). The workshop brought together a range of delegates from industry and 10 different universities, with 20 delegates participating at VU and 12 delegates participating remotely.

Overall, the presentations agreed that oxidation processes may be a beneficial addition to the membrane treatment train, with potential improvements in filtered water quality and membrane fouling mitigation. The organisers thank all of the speakers and attendees for making the event a success, and look forward to welcoming you at the next MSA workshops in 2015.

- Zenah Bradford-Hartke, University of New South Wales



“Oxidation may be beneficial to the membrane treatment train”



Innovators Corner

MSA member Cher Hon (Sam) Lau from the CSIRO has invented a new gas separation membrane that improves over time. Industrial membranes suffer a performance loss over time as a result of physical aging. But like fine wine, Sam's membranes just get better with age. By incorporating porous frameworks into super glassy polymers, Sam has revitalized commercial interests in these age-prone polymers for industrial applications ranging from high speed CO₂ capture from flue gases to H₂ purification from ammonia cracking to clean up biofuels. See publication "Gas-separation membranes loaded with porous aromatic frameworks that improve with age" in *Angewandte Chemie International*

Membrane that improves with age "like fine wine"



4th Early Career Researcher Membrane Symposium

The 4th Membrane Society of Australasia Early Career Researcher Symposium took place between the 19th and the 21st of November 2014 at the Institute for Frontier Materials, Deakin University. This year, a record number of 78 researchers attended and actively participated in the Symposium including international delegates from USA, UK, Denmark, Malaysia, and New Zealand.



There was a strong industry presence at the Symposium, both through sponsorship and attendance. Sponsors of the event include MDPI, the MSA, Deakin University, the European Membrane Society, Peter Walker Consultants Ltd., Jiangsu Jiuwu Hi-Tech Co., Evoqua, the CSIRO, Hatch Ltd., Carrickmore Ltd., and Poseidon Ltd. The event would not have been possible without their continuous help and motivation to promote ECRs.

The MSA board and the European Membrane Society generously offered a total of 7 travel awards to attract young talent from Australasia and overseas to the Symposium. Attendees also participated in a proposal writing exercise, which was a highlight of the event. Best poster presentations were awarded after a highly intense brain-storming poster session.

I would like to heartfully thank the organizing committee which included Anthony Ike, Joel Yong, Li He, Amos Branch, Rachel Reis, Yang Xing, Francois-Marie Allieux, Bao Lin, Andrea Merenda, Elise des Ligneris, Hortense Alglave, Harish Ravishankar, Katrin Doederer, Jingshi Wang, Shengan Wang, Kha Tu, Xia Wei Tew, and Nicholas Low, for their help, hard work and dedication.

The proceedings will be published in the journal *Membranes*. If you wish to contribute please contact the organizing committee for advice – deadline is the 30th of March 2015. For a full report please visit <http://ecr2014.membrane-australasia.org/>

-Ludovic Dumeé, Deakin University

MSA Travel Awards

It was with great pleasure that we announced the winners of the MSA Travel Award for students and ECRs travelling to the 4th IWA Regional Conference on Membrane Technology in Ho Chi Minh City, Vietnam. Congratulations go to:

Congratulations!
Amos Branch
and
Leonard Tijing



Amos Branch of the University of New South Wales. Mr Branch presented on the "impact of chemical cleaning on membrane bioreactor log removal at a full-scale plant and the implications for water recycling."

Leonard Tijing of the University of Technology, Sydney. Dr Tijing presented on "superhydrophobic PVDF-co-HFP nanofibrous membrane containing MWNTs for desalination by direct contact membrane distillation."

Thank you to all who applied and to our judges and don't forget to look for future MSA Travel Awards!

- Nicholas Milne, Victoria University, MSA Treasurer

Call for Board Nomination

A number of Board Positions are open - Members are encouraged to get involved and nominate themselves or colleagues. Contact the secretary (secretary@membrane-australasia.org) for more information by Friday 13th March 2015.

Editors: Kha Tu & Huanting Wang

Please contact the editor to contribute to future editions. Email: newsletter@membrane-australasia.org