



## Editorial Note

## Professor Ahmad Fauzi Ismail: A remarkable individual, educator, mentor, and a dear friend

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Ahmad Fauzi Ismail is Professor at School of Chemical and Energy Engineering, Faculty of Engineering, Universiti Teknologi Malaysia (UTM). Ahmad Fauzi obtained his PhD in Chemical Engineering in 1997 from University of Strathclyde and MSc. and BSc. from Universiti Teknologi Malaysia in 1992 and 1989, respectively. Currently Ahmad Fauzi is the Deputy Vice Chancellor of Research and Innovation, UTM. He is the founder of Advanced Membrane Technology Research Center (AMTEC) which is recognized as Higher Education Centre of Excellence (HiCoE) at the national level. His research interests include the development of polymeric, inorganic and novel nanocomposite membranes for water desalination, wastewater treatment, gas separation processes, membrane for palm oil refining, photocatalytic membrane for removal of emerging contaminants, development of haemodialysis membrane and polymer electrolyte membrane for fuel cell applications. He is a Fellow of The Academy of Sciences Malaysia, Chairman of the ASM Southern Region Chapter since 2016, Founding President of Malaysia Membrane Society (MyMembrane) since 2018, Founding Vice President Japan Society for the Promotion of Science (JSPS) Alumni Association Malaysia, 2019, Chartered Engineer in the UK (CEng) and a Fellow of the Institution of Chemical Engineers (FIChemE) since 2012. He has won many prestigious awards including The World Academy of Sciences (TWAS) Prize in Engineering Sciences (2019), Malaysia's Merdeka Award, Malaysia (2014), Highly Cited Researcher 2019, Web of Science Group, Clarivate Analytics, just to name a few.

Prof. Fauzi has more than 26 years of integrated experience in the academic and research environment. Throughout these years, he has played multiple roles as an academician and a researcher. The contribution of Prof. Fauzi to scholarly research and the development of membrane technologies is tremendous. His commitment in membrane science and technology research has resulted in many remarkable scientific discoveries which contributed to the enhancement of scientific knowledge. Prof. Fauzi is not only a scientist, but also a teacher and a mentor. With his life-long passion and dedications, he has inspired people, especially many young researchers in this field.

In the year 2003, one of the guest editors (T. Matsuura) had an opportunity to visit several Malaysian universities where active membrane researches were going on. During this tour he met Prof. Fauzi for the first time at the Universiti

Teknologi Malaysia (UTM). After returning to Canada he had only few opportunities to revisit the South Asian region, therefore, it was a surprise for him when he suddenly received an invitation from UTM in 2006 to come to Malaysia as distinguished visiting professor. Thus, his long friendship with the Malaysian membrane research group began upon his arrival at UTM, Johor Bahru, in 2007. When he looks back to those years, the group led by Prof. Fauzi was still relatively small of about 10, including all the technical and managerial staff and the graduate students. Well, according to the North American standard, it is not necessarily small. Who could imagine at that time that the number would grow to more than 100, including academic, technical, managerial staff and graduate students, under the name of Advanced Membrane Technology Research Centre (AMTEC) housed in its own institute building?

It is needless to say that the growth owes Prof. Fauzi's academic excellence evidenced by his astounding publication record of research and review papers as well as many books, which have resulted in the countless awards he has received, as well as his administrative capacity that has promoted him quickly to one of the highest position of UTM. To date (September, 2020), he has published more than 900 research/review articles with Scopus H-index of 78. But we believe that it owes, more than others, his warm personality. Since the beginning of our interaction with Prof. Fauzi, we kept being impressed by his sincere efforts to make the people who surround him as happy as possible through research. He also cared about the personal well-being of the individual group members. Indeed, in the early days Prof. Fauzi often talked about his concern over the future of the graduate students whom he was supervising single-handed. But now, many of them, including one of the co-editors (PS GOH), have become either professors or lecturers at UTM and other universities, leading their own research groups. It is not surprising therefore that AMTEC of UTM is now being recognized as one of the largest and the most active membrane schools in the world.

Holding the life principle of 'do the right things right', one of Prof. Fauzi's aspirations is to promote transformation and translation of the innovations created in universities for the benefits of society, industries and wealth creation. Prof. Fauzi and his team has actively involved in translational research where the research output has been successfully used for the welfare

of the community and nation of Malaysia. Prof. Fauzi and his team have successfully developed Malaysia's first commercial-scale seawater desalination system in Kampung Pantai Senok, Bachok Kelantan. The main purpose of the desalination plant is to provide fresh water from the seawater obtained from the coastal area. As a source independent of weather fluctuations, the desalination plant can provide insights to create value and offer innovative and competitive solutions for environmental infrastructure essential to combat clean water shortage issues in Malaysia that have arisen from climate change, natural disasters and urbanisation. In the past 5 years, Prof. Fauzi has led a Corporate Social Responsibility (CSR) team, which has contributed to the disaster relief through the installation of a few number of wastewater treatment system at disaster areas to provide clean water supply to the victims. Compact and portable wastewater treatment system have been designed, fabricated and deployed to the disaster-affected areas to provide immediate relief to the victims by providing fresh and safe drinking water.

This special issue is dedicated to honoring of Professor Ahmad Fauzi Ismail for his contribution to the development of membrane science and research. This special issue encompasses 12 contributions with 10 research articles and 1 review article. The articles cover a broad spectrum of important aspects in membrane science and technology, including the development of novel membranes, optimization and modelling of membrane processes for gas separation and wastewater treatment.

We are very happy that a special issue of *Journal of Membrane Science and Research* is dedicated to Prof. Ahmad Fauzi Ismail, who definitely deserves the honor as a remarkable individual, an administrator but, first of all, as a true educator.

*Guest Editors*



A handwritten signature in black ink that reads "Takeshi Matsuura".

Takeshi Matsuura



A handwritten signature in black ink that reads "Pei Sean".

Pei Sean Goh