



ASX RELEASE | De.mem Limited (ASX:DEM)

De.mem releases first self-developed membrane for commercial sale

- De.mem continues to progress comprehensive portfolio of innovative hollow fibre membranes with the release of in-house-developed ultrafiltration membrane
- Large applicable market including potable water, sewage and industrial waste water treatment, pre-filtration for reverse osmosis and domestic point-of-use applications
- Extensive pilot testing shows strong technical performance with superior quality of filtration at high throughput (flux)
- Self-developed and proprietary to the Company with no royalty obligations
- Tendering activity in Australia and Asia is robust

22 November 2018: Water and waste water treatment company De.mem (ASX:DEM) (“De.mem” or “the Company”) is pleased to report the release of its first in-house-developed hollow fibre Ultrafiltration (“UF”) membrane for commercial sales.

The new membrane has been extensively pilot tested and shows an excellent technical performance. It combines a relatively low pore size, which indicates a strong rejection of contaminants, with high throughput (= flux), which makes the membrane very economical to use. Further details are mentioned below.

This is a particularly noteworthy development for De.mem as it demonstrates the Company’s in-house R&D capabilities and its ability to bring self-developed water & wastewater treatment technology to the market for commercial deployment. The technology comes without any royalty obligations.

De.mem is now marketing the product to potential customers with the application having broad use in potable water, sewage and industrial waste water treatment and domestic point of use applications.

The release of the new UF membrane builds on the Company’s stated objective to build a portfolio of innovative hollow fibre membranes including its proprietary nanofiltration (NF) membrane, forward osmosis membrane and domestic “point of use” filter system. Further updates will be provided to the market in due course.

Comment

De.mem’s Chief Executive Officer Andreas Kroell said: “The introduction of our first self-developed membrane technology for commercial sales clearly illustrates De.mem’s strong internal R&D and technology development capabilities.

“De.mem is delivering on its strategy to build a comprehensive portfolio of technologies and products around hollow fibre membranes. These give the Company a major strategic advantage in water and wastewater treatment markets, and are helping drive deployments in multiple industry sectors, thus translating into new revenue-generating contracts.

“This development in no way diminishes our partnership with Singapore’s Nanyang Technological University (NTU), from which we have licensed a range of different technologies, as our strong in-house technology capabilities enhance and complement this very valuable and long-term relationship.

“De.mem is trading well and bidding activity is favourable in Australia and Asia. We look forward to updating shareholders on quarterly performance and other relevant developments in the next few weeks.”



Background on the new technology and De.mem's broader portfolio

UF is a physical separation process which removes particles with a size range from 0.005 to 0.1 µm from a fluid. UF membranes are deployed for the removal of bacteria, viruses and other particles (see Appendix I) and have applications in potable water, sewage and industrial waste water treatment, key markets for De.mem. The separation technology is also used for the pre-filtration step in Reverse Osmosis ("RO") water treatment plants or for domestic water filtration.

The new membrane shows excellent technical characteristics. It optimizes the ratio between flux and throughput. It has been tested by De.mem for a MWCO of approx. 80,000, and approx. 250 l/mh water "flux" (throughput). The MWCO (Molecular Weight Cut Off) is a measure for the pore size of the membrane, which indicates the quality of the filtration the membrane can deliver. Many other commercially available UF membranes have a pore size around 80,000-120,000 MWCO.

Further membrane technologies in De.mem's portfolio that have been commercially deployed include the low pressure hollow fibre nanofiltration (NF) membrane and another hollow fibre ultrafiltration (UF) membrane, which is derived from the NF membrane technology. Both are licenced from De.mem's R&D partner, NTU, ranked as a global leader in membrane research. De.mem also licensed a Forward Osmosis (FO) membrane technology originally developed at NTU for de-watering applications in industrial waste water treatment and holds a strategic 32% stake in Aromatec Pte Ltd, a Singapore-based company which aims to promote this FO technology to the food & beverage sector.

De.mem will continue to partner with NTU on new R&D projects and this strong, long-term partnership complements the Company's growing in-house capabilities.

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About De.mem Limited

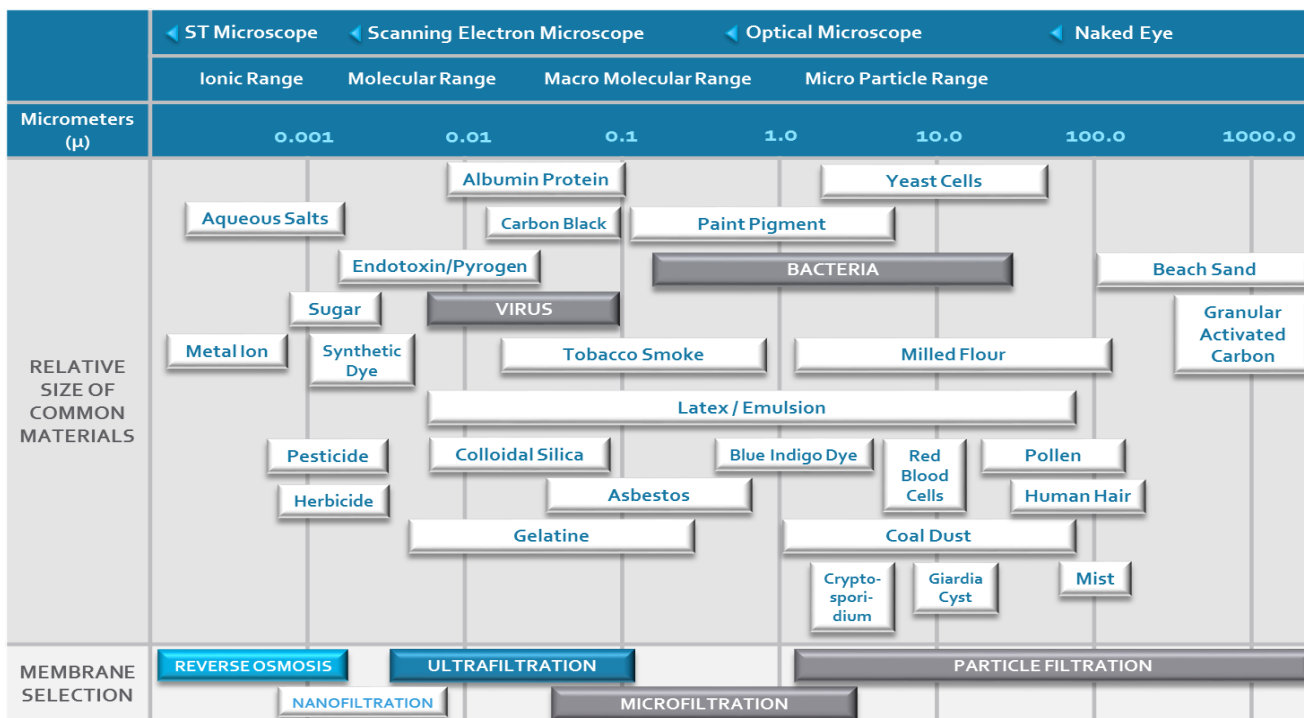
De.mem Limited (ASX:DEM) is a Singaporean-Australian decentralised water and waste-water treatment business that designs, builds, owns and operates water and waste water treatment systems for its clients. De.mem operates in the industrial segment providing systems and solutions to customers from the mining, electronics, chemicals, oil & gas and the food & beverage industries and in the municipal and residential segments. De.mem has licensed proprietary technologies from its partner in research & development Singapore's Nanyang Technological University (NTU), including an exclusive worldwide license for a revolutionary low-pressure hollow fibre nanofiltration membrane. Through its wholly owned water and waste water treatment original equipment manufacturing (OEM) subsidiary Akwa-Worx Pty Ltd, De.mem has a strong presence in Australia. Akwa-Worx has a market reputation for building high quality Australian designed and manufactured products and has long-term customers in the Australian mining industry. To learn more please visit: www.demembranes.com

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices or potential growth of De.mem Limited, are, or may be, forward looking statements. Such statements relate to future events and expectations and, as such, involve known and unknown risks and



uncertainties. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors.



Appendix 1. Membrane Separation Processes and Size of Particles to be Removed