

## IONOMR PRESS RELEASE

## ION-EXCHANGE MEMBRANES - A PLATFORM FOR CLEAN TECHNOLOGY.

Vancouver, BC – Shattering multiple industry standards in the cleantech revolution, the aptly named Ionomr Innovations – brings a dramatic new approach to membrane materials that address fundamental limitations and environmental concerns at the core of batteries, fuel cells and hydrogen generation technologies.

“Other groups are designing advanced molecules to attach to common polymers, but we have taken the reverse approach and focused on converting common industrial materials into cutting-edge membranes. This enables high performance, environmentally benign and recyclable materials, with a clear line to competitive pricing at scale” – Ben Britton, CEO

Recent results at EMEA 2017 by David Aili et al from the Danish Technical University ([Conference Proceedings 2017](#)) compared the results of PEM vs AEMs in electrolysis applications using Ionomr’s Aemion membranes, where AEM matched PEM performance in completely platinum free operation at 65% greater efficiency. A recorded hydrogen crossover of less than 0.4% indicate substantial cost savings, lifetime and efficiency improvements; Results that have never been seen before in this field.

The potential implications of Ionomr technology are significant: up to 50% reduction in costs for energy storage for grid-scale systems (electrolyzers, redox flow batteries). A membrane that enables hydrogen fuel cell technology to be economically competitive with internal combustion engines. Because the membrane structure consists of hydrocarbons, electrolysis becomes a competitive method to produce hydrogen. And not to be forgotten; the vast reserves of salt water unlocked through high-efficiency desalination.

Born in 2008 and refined at the highly regarded Holdcroft Lab at Simon Fraser University, Ionomr brings a different approach with their next generation ion-exchange membrane, Aemion™. Explore the opportunities with the company making waves in the Vancouver start-up community, Ionomr Innovations.

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