
EnergyX Announces Partnership with ProfMOF, Leading Nanotechnology Innovation Lab

2020-08-18

Energy Exploration Technologies Inc. (EnergyX) and ProfMOF announced the beginning of a dynamic new partnership. Both companies are looking to promote the use of Metal-Organic Frameworks (MOFs), a relatively new class of nanotechnology materials suitable in the development of projects involving renewable energy and large scale lithium-ion production and battery storage.

[ProfMOF](#) is the world leader in the research and development of MOF applications, and specializes in finding opportunities to merge MOFs and industry leaders. Teague Egan, whose [EnergyX](#) uses Metal Organic Frameworks in their revolutionary Lithium-Ion Transport and Separation technology ([LiTAS](#)), in a bid to reduce the environmental impact of lithium mining, believes they are the key to making lithium more cost effective and abundant.

MOFs are incredible structures that can separate, transport and isolate specific elements on the ionic level. The material itself is incredibly porous and its chemical properties make it ideal to embed in membranes for very cost-effective separation processes. This ground-breaking technology has been touted by experts as the future of many hard to solve problems with the potential to dramatically improve the efficiency and environmental impacts of a range of industries. The science of these MOFs is remarkable—a dense and malleable material made up of metal nodes such as zirconium or titanium, connected by organic carboxylic ligands, with unbelievable internal surface area and tunable pore sizes, all in a crystalline structure that can target and extract lithium or other salt species from brine.

Based in the U.S., EnergyX is a technology company focused on scientific innovations in the field of lithium extraction and solid state battery energy storage systems. EnergyX has a mission to become a worldwide leader in the global transition to sustainable energy. The company has identified lithium as a key component to fulfill that goal, and seeks to improve both the extraction and production process along with its production partners.

Founded within the [University of Oslo](#), ProfMOF is one of the leading MOF research and innovation labs in the world. They boast nearly two decades of research and development in the field, and their founder, Dr. Karl Petter Lillerud, invented the most important and most cited MOF in the world, UiO-66. The company's executive team are the foremost experts in the field of Metal Organic Frameworks, and believe that MOFs are the answer to creating a more efficient and environmentally friendly industrial sector.

"Metal Organic Frameworks are a miracle material that will play a tremendous role in the energy transition," commented EnergyX CEO Teague Egan. "MOFs have properties that we have never seen before, and EnergyX is partnering with the MOF world leaders to harness these powers. By creating more lithium and energy storage, thus reducing the intermittency of renewable power, we can have a great impact."

ProfMOF CEO Einar Eilertsen stated, "As a leader in the chemical industry, ProfMOF has always sought to create lasting partnerships with companies we believe can use MOF technology to be difference-makers. Metal Organic Frameworks could truly help revolutionize how industries operate, and we are glad to know that EnergyX shares our vision. This partnership will bridge academia with technology, innovation, and energy in a way that highlights the versatility of MOF technology and its potential as a world-changer. "

The partnership between EnergyX and ProfMOF highlights the opportunities behind metal-organic frameworks and how they are providing a pathway for sustainable development through scientific innovation. MOFs are reducing major drawbacks within a host of industries including but not limited to lithium-ion battery manufacturing, energy storage, and overall efficiency - making the material one of the most important steps in a transition towards a cleaner planet.

Read the [original article](#) on Energy Exploration Technologies.