

For Immediate Release: September 28, 2020

Radio Frequency Lobster Shell Drying Makes Value Added Products Possible

Aethera Technologies Ltd., of Halifax has developed a containerized lobster shell drying system for the Verschuren Centre Inc., of Sydney that will make it possible for added value products to be generated from lobster shells.

Traditionally, lobster shells are considered waste product. Every day, tons of lobster shells go directly to landfill. 'The Verschuren Centre has been looking for ways to add sustainable value creation in the seafood processing industry by finding applications for waste product' according to Beth Mason, CEO. 'When properly dried, lobster shells can be used to extract bio-polymers, proteins and mineral compounds that can be used in water treatment, agriculture, food products, nutraceuticals, pharmaceutical products and biomedicine'.

Aethera has applied their expertise in radio frequency (RF) power to develop drying systems that make it possible to efficiently and effectively dry bulk materials. In the case of lobster shells, the drying system dries the shells in bulk, at low heat, to avoid burning, so that the compounds can be extracted. According to Tim Hardy, RF engineer and Aethera's Chief Technology Officer, 'this system will have the capability to dry several tons of lobster shell per day to the desired moisture content needed for follow-on processes'. The system will run on Aethera's APG7-50 solid state RF generator.

This is a new application of radio frequency power which has traditionally been used for thawing/tempering and baking in the food industry as well as in applications in the wood products, paper and textiles industries. According to Tim Hardy, 'radio frequency heating and drying is particularly effective in industrial applications in which bulk materials need to be dried uniformly at controlled temperatures while meeting production speed requirements'.

Aethera Technologies <u>www.aethera.com</u> is a Halifax based company that uses RF power innovation to help clients achieve high power for process heating and drying applications while improving energy efficiency

The Verschuren Centre for Sustainability in Energy and the Environment at Cape Breton University www.verschurencentre.ca was established in 2011 to bring sustainable industry development to Nova Scotia and accelerate clean technology scale up and adoption.

Contact Information: Tim Hardy, Chief Technology Officer Aethera Technologies Ltd. 902-593-0721 thardy@aethera.com

Beth Mason, Chief Executive Officer The Verschuren Centre Inc. 604-302-1394 Beth Mason@cbu.ca