

HALIFAX, NOVA SCOTIA--(Marketwired - Jul 26, 2017) - [Ucore Rare Metals Inc.](#) (TSX VENTURE:UCU)(OTCQX:UURAF) ("Ucore" or the "Company") is pleased to report on the advancement of its joint venture for the recovery of high value metals from Alberta oil sands process tailings.

In 2016, Ucore announced that it has partnered with a Major Alberta Oil Sands Producer ("MOSP"). The MOSP has developed a commercial process for the production of a metals-enriched concentrate from Alberta oil sands (the "Bitumen Metals Extraction" or "BMX" process). The BMX process produces a concentrate highly enriched in titanium, rare earth elements ("REE"), vanadium and a host of other valuable specialty metals from oil sands bitumen froth. Further in 2016, the MOSP selected Molecular Recognition Technology ("MRT") as the preferred development platform to accept output from the BMX process, and to separate high purity metals suitable for industrial transport and sale (see Ucore Press Release dated July 18, 2016).

In 2017, Ucore announced that it had successfully produced three classes of Pregnant Leach Solution ("PLS") from the BMX concentrate (see Ucore Press Release dated June 26, 2017). The PLS production process utilizes a customized leach procedure to render Hydrochloric PLS, Nitric PLS and Sulphuric PLS (the "Bentzen Process"). Each of the three laboratory samples generated by the Bentzen Process are now being subjected to a series of factorial designed studies to select an optimized PLS to be progressed to pilot scale testing with MRT.

Ucore now reports that the three samples have been subjected to initial testing at the Activation Labs facility in Ancaster, Ontario facility ("Act Labs"):

1. OIS - The oxidized pre-leach input material and post-leach residue material was analyzed by Organic Infrared Spectroscopy ("OIS") to measure the relative content of graphitic carbon and organic carbon. Preference was given to samples which exhibited the lowest overall carbon content after submission to the Bentzen Process. Based on the analysis, all three samples exhibited a post-leach reduction in carbon content to less than 0.5%, which is the detection limit for OIS testing.
2. ICPMS - The subject samples were also evaluated by Inductively Coupled Plasma Mass Spectrometry ("ICPMS") to measure the relative recovery of Total Rare Earth Elements ("TREE"). The Bentzen Process was shown to improve the extraction of the TREE by more than 50% across all three samples, when compared to the leaching of materials that had not had complete removal of organic carbon.

"The latest round of testing has achieved a near-quantitative removal of deleterious carbon content," said Ed Bentzen of Bentzen Associates, Wheat Ridge Colorado. "This, in combination with a significant increase in the recovery of REE is a remarkable advancement in the quality of the competing oil sands PLS samples. At this stage, all three of our samples appear to have substantially benefitted from a customized preparation and leaching process, both in terms of the removal of nuisance carbon content and the concentration of our target metals. We are transitioning to a battery of advanced tests designed to stack-rank the PLS samples in preparation for testing via Molecular Recognition Technology."

The next stage of analysis, now under way, will use additional factorial-designed studies to determine the most influential operating conditions by investigating leaching time, leaching temperature, and precedent solids during leaching. Leaching will employ nitric acid (HNO₃) which has been shown in previous studies to be compatible with the MRT process of IBC. Forthcoming tests will include submission for chemical analyses by OIS and ICPMS analysis. Testing will continue to be performed at Activation Laboratories in Ancaster, Ontario and Resource Development Inc. of Wheat Ridge, CO. ("RDI") will maintain chain of custody, consistency of procedure and quality control responsibilities. In addition to REE, forthcoming analysis will determine the relative extraction of valuable specialty metals, including titanium and vanadium, while considering nickel, cobalt, and tungsten values.

Based on the foregoing, one (or more) of the competing PLS samples (the "Beta PLS") will be selected for submission to advanced metals separation using MRT at IBC Advanced Technologies in American Fork, Utah ("IBC"). MRT has already been demonstrated to successfully separate specialty metals from an acid leach PLS. The SuperLig®-One pilot plant (the "Pilot Plant") utilized a Nitric PLS to render high purity REE from the enriched concentrate generated at the Bokan - Dotson Ridge HREE project in Southeast Alaska (see Ucore Press Release dated September 26, 2016). The Company is assessing the potential to modify the existing Pilot Plant for industrial scale testing using bulk samples of the Alberta Oil Sands / BMX feedstock. As the engineering advances, process economics will be examined. A factor for consideration in the choosing the optimum PLS is the relative availability of Sulphuric acid, a reagent being produced by existing Fort McMurray process facilities, in contrast to the Nitric and Hydrochloric acid leach alternatives that were also studied.

Edwin Bentzen, has approved the scientific and technical content of this news release and is the Qualified Person responsible for its accuracy. Mr. Bentzen has served in numerous capacities as Senior Project Manager in the metallurgical industry, including Bentzen and Associates of Arvada, CO, LynTek Inc. of Lakewood, CO, and Resource Development Inc. of Wheat Ridge, CO. He holds a BSc. and is a registered member of the Society for Mining, Metallurgy & Exploration (SME).

About IBC

IBC Advanced Technologies, Inc. is an award-winning, green chemistry selective separations company based on innovative

MRT products. IBC is headquartered in American Fork, Utah, with manufacturing facilities in Utah and Houston, Texas. IBC has supplied industrial, governmental and academic customers worldwide with environmentally friendly products, processes and services for over 29 years. IBC specializes in MRT, utilizing green chemistry to achieve highly selective separations of individual metal ions in complex matrices. Based on Nobel Prize-winning technology (1987), IBC's proprietary products and processes are used worldwide by premier metals refining and mining companies such as Tanaka Kikinzoku K.K. (Japan), Asarco Grupo Mexico (USA), Impala Platinum Ltd. (South Africa), and Sino Platinum (China). In 2014, the Japanese Government (Mitsubishi Research, Inc.) awarded to IBC a highly competitive subsidy grant, "Demonstration Project for Seawater Purification Technologies", concerning the selective separation of the radionuclides strontium and cesium from contaminated seawater at Fukushima, Japan.

IBC's expertise is illustrated by its extensive development and commercialization of separations systems for platinum group metals ("PGM's") at a world level. PGM's are analogous to REE, in that they are considered difficult to selectively separate due to their constituent chemical similarities. The Ucore-IBC alliance builds on IBC's proven capabilities to develop, scale-up and commercialize selective separations systems for a number of diverse and complex applications.

About Ucore

Ucore Rare Metals is a development-phase company focused on rare metals resources, extraction and beneficiation technologies with near term potential for production, growth and scalability. On March 3, 2015, Ucore announced the development of a joint venture with IBC for the deployment of SuperLig® Molecular Recognition Technology for REE and multi-metallic tailings processing applications in North America and associated world markets. The Company has a 100% ownership stake in the Bokan project. On March 31, 2014, Ucore announced the unanimous support of the Alaska State Legislature for the investment of up to USD \$145 Million in the Bokan project at the discretion of the Alaska Import Development and Export Agency ("AIDEA").

Cautionary Notes

This press release includes certain statements that may be deemed "forward-looking statements". All statements in this release, other than statements of historical facts, that address future exploration drilling, exploration activities, research and development timelines, and events or developments that the Company expects, are forward looking statements. Forward looking statements in this press release include that we may enter into a long-term supply partnership and offtake relationship and the possibility of an independent North American REE supply chain. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include exploitation and exploration successes or setbacks, research and develop successes or setbacks, continued availability of financing, that we may not be able to reach agreements, that the product may not be suitable for intended uses, and general economic, market or business conditions.

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