HALIFAX, NOVA SCOTIA--(Marketwired - Jun 26, 2017) - <u>Ucore Rare Metals Inc.</u> (TSX VENTURE:UCU)(OTCQX:UURAF) ("Ucore" or the "Company") is pleased to update on progress made towards monetizing rare earths and other valuable constituent metals from Alberta oil sands process tailings.

In 2016, Ucore announced that it partnered with a Major Alberta Oil Sands Producer ("MOSP"), the identity of which is being held in confidence at the request of the partner. The MOSP has developed a proprietary process for the extraction of a metals-rich mixed concentrate from Alberta oil sands bitumen (the "Bitumen Metals Extraction" process, or "BMX"). BMX has been designed specifically for the beneficiation of Athabasca oil sands, with prospective licensing opportunities beyond Alberta with a customized process to treat other species of oil sands at a world level.

The oil sands concentrate ("BMX Concentrate") is now being advanced by Ucore to generate a Pregnant Leach Solution ("PLS") suitable for submission to a Molecular Recognition Technology ("MRT") metals separation circuit. The final metals production phase of the process will include the application of MRT to identify and appropriate a range of valuable specialty metals existent in the PLS. These metals include significant quantities of titanium, rare earth elements ("REE"), vanadium and others (see Ucore Press Release dated July 18, 2016). Further to the foregoing, Ucore has retained Edwin Bentzen of Bentzen & Associates of Arvada, CO ("Bentzen") to formulate a PLS beneficiation process (the "Bentzen Process") (see Ucore Press Release dated March 6, 2017).

Ucore reports that the Bentzen Process has now been successfully deployed to produce three distinct categories of PLS. The categories have been delineated by the acidic reagents utilized during the leach process: Hydrochloric PLS, Nitric PLS and Sulphuric PLS.

The three PLS bench samples have been generated at the Resource Development Inc. laboratory of Wheat Ridge, Colorado ("RDI"). The bench samples will now be subject to analytical testing at Activation Laboratories Ltd. of Ancaster, Ontario ("Act Labs"), to identify the definitive PLS suitable for introduction to the MRT separation circuit.

"The isolation of three classes of concentrate provides us with a wide palette of alternatives from which to select our final optimized PLS," said Ed Bentzen. "Our objective is to create a low-carbon content PLS from the BMX Concentrate, and the methodology that best satisfies these parameters will take precedence. Our work is currently occupied with establishing refining metrics such as leach time, temperature, and acid strength in order to optimize the dissolution process and maximize recoveries. Given the scope of the economic opportunity, we're excited to be working on such a high-quality input concentrate."

"The potential for MRT to liberate untapped value from oil sands production is significant," said Jim McKenzie, President and CEO of Ucore. "The unlocking of previously inaccessible products speaks to increased valuations for each incremental barrel of heavy crude. High-value commodities such as REE, titanium, scandium, niobium, vanadium, tantalum, and a host of other tech metals are in the offing. The MOSP has already generated a high-quality BMX Concentrate for prospective metals extraction, which in itself is a significant accomplishment. We're pleased that MRT has been selected as a high potential final-stage separation platform for this important initiative."

The next stage of testing will entail detailed analysis of the three PLS bench samples at the Act Labs facility in Ancaster. Analytical results will provide a comparison of the pre-leach input feeds against the post-leach residues to determine which PLS optimizes metal retention. Further studies overseen by RDI will include the application of X Ray Fluorescence ("XRF") X Ray Diffraction ("XRD") ICP and other standard analytical procedures, to determine the effectiveness of each medium for the dissolution of the various constituent metals. Based on the foregoing, a single PLS category will be selected from the three alternative bench samples (the "Beta PLS"). The Beta PLS will then be submitted to a factorial designed series of studies to determine the conditions of time, roast temperature and acid strength which will optimize the solution, prior to being submitted to MRT.

The final phase of test work will involve the submission of the Beta PLS to an MRT metals separation circuit at IBC Advanced Technologies' facilities in American Fork, Utah ("IBC"). MRT has previously been demonstrated to successfully separate specialty metals from all three of the candidate acid leach solutions (Hydrochloric, Nitric and Sulphuric). The previously announced SuperLig®-One pilot plant ("Pilot Plant") was conducted using a Nitric PLS to render high purity REE from the rare earth enriched Bokan PLS (see Ucore Press Release dated September 26, 2016). Beyond the generation of a Beta PLS, the Company will be examining the potential to modify the existing Pilot Plant for industrial scale testing of the Alberta Oil Sands feedstock.

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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## Contact

Ucore Rare Metals Inc. Mr. Jim McKenzie

President and Chief Executive Officer +1 (902) 482-5214 http://www.ucore.com