

HALIFAX, NOVA SCOTIA--(Marketwired - Jul 5, 2016) - [Ucore Rare Metals Inc.](#) (TSX VENTURE:UCU)(OTCQX:UURAF) ("Ucore" or the "Company") is pleased to update on the continuing performance of the SuperLig®-One rare earth element ("REE") separation pilot plant (the "Pilot Plant," "Plant" or "SuperLig®-One").

Pregnant leach solution ("PLS") derived from the Company's Bokan-Dotson Ridge project in Alaska has been treated by the SuperLig®-One Molecular Recognition Technology ("MRT") Plant, at the IBC Advanced Technologies, Inc. ("IBC") Utah facility, to separate the sub-groups samarium-dysprosium ("Dy Sub-Group") and holmium-lutetium ("Ho Sub-Group") (collectively "Sub-Groups") from the heavy rare earth element ("HREE") class consisting of Sm-Lu ("HREE Class").

The separation of the two Sub-Groups was achieved at 99%+ purity and 99%+ recovery. The HREE Class was previously separated from impurity metals ("Gangue Metals") (see Ucore Press Release ("PR") dated May 9, 2016); scandium ("Sc") (see Ucore PR dated May 24, 2016); and light rare earth elements ("LREE"), consisting of lanthanum-neodymium plus yttrium ("LREE Class") (see Ucore PR dated June 7, 2016).

Ucore anticipates the separation of select individual Critical HREE ("Heavy CREE") in the near term, bringing the SuperLig®-One maiden test program to conclusion.

"SuperLig®-One has again delivered outstanding results through each phase of the initial test run," said Jim McKenzie, President and CEO of Ucore. "The MRT platform has consistently outperformed traditional REE separation methodologies, including solvent extraction, ion exchange, and precipitation ("Legacy Separation Technologies"), based on critical metrics such as efficiency, recovery, and near-quantitative levels of purity. The results bode well for the application of SuperLig®, not just for the separation of REE, but for a host of other increasingly high demand metals."

"The SuperLig® portfolio now includes fully developed and customized separation molecules for almost all of the burgeoning clean energy and technology metals, specifically REE, lithium, cobalt, tungsten and PGM's" continued McKenzie. All told, the comprehensive portfolio represents a broad field of vision and a remarkable potential for rapid growth across multiple metals sectors, via a hub and spoke growth platform. That vision will apply to a potential multi-metal co-venture with IBC, as contemplated by the Company's March 3, 2015 press release. We're excited by the possibilities and encourage our shareholders to review the wealth of information we've amassed on our web site regarding the breadth and depth of MRT's capabilities."

Since announcement of the completion of SuperLig® certifications; PLS analysis; automation control verification; water testing; process flow testing of the Plant; REE separation, as a group, from Gangue Metals; Sc separation from the group of REE; and separation of the HREE Class from the LREE Class, the following results have been achieved using the SuperLig®-One Plant:

- Separation of the Dy Sub-Group from the Ho Sub-Group - Efficient separation of Dy from Ho, which are adjacent elements on the periodic table ("Next Door Neighbors"), at the 99%+ level, demonstrates the uniqueness of the MRT approach. The separation of Next Door Neighbors Dy and Ho is one of the most difficult and time consuming separations for Legacy Separation Technologies. Highly selective, green chemistry separation of the Dy and Ho Sub-Groups from each other replicates previous lab work and makes available the individual separation of Heavy CREE, as desired. The total amount of REE recovered in the Dy and Ho Sub-Groups plus that recovered earlier in the LREE Class plus Sc is, within 1%, the same as the total REE content present in the original PLS. Minimal amounts of REE have been lost to the commons in previous separation steps using the MRT procedure. The recovery of REE at 99%+ by MRT contrasts sharply with recovery rates achievable by Legacy Separation Technologies, where large amounts of the initial REE may be lost as waste in tailings alone. Conservation of REE through the separation process preserves a valuable resource, avoids environmental contamination, and markedly reduces operating and capital expenses.
- REE Purity - 99%+ purities of each of the Dy and Ho Sub-Groups are readily achievable because the Gangue Metals, Sc and LREE have all been previously removed, at 99%+ purities and recoveries, from the PLS. Dy, which is now at 99.99% purity vs. the Ho Sub-Group, the LREE Class, Sc, and Gangue Metals, will be further purified from Tb, Gd, Eu and Sm in the next unit operation of the Pilot Plant. The sequential nature and simplicity of the SuperLig®-One flowsheet minimizes the number of stages needed to obtain high purity REE products and significantly reduces the time in process, or inventory time, for these products. Rapid achievement of high purity while minimizing waste generation and preserving critical resources is a hallmark of the SuperLig®-One Plant.
- Verification of Purities and Confirmation of Scale-up Parameters - 99%+ purities and recoveries of the Dy and Ho Sub-Groups have been verified analytically at IBC using inductively coupled plasma spectroscopy ("ICP"). Purities and recovery rates obtained are consistent with those found earlier at IBC using lab-scale test work (see PR dated March 2, 2015) and by an independent analytical laboratory. The analytically measured purities and recovery rates confirm that the SuperLig®-One Plant is scaling as expected. Scaling of the Plant is enhanced by the numerical knowledge of all operating parameters at the molecular level, which were determined previously at laboratory scale. Subsequent scaling then follows directly using well known chemical engineering principles, as seen in the functioning SuperLig®-One Plant.

The remaining stage of the SuperLig®-One Pilot Plant operation will demonstrate separation and recovery of individual Heavy CREE from the Dy Sub-Group. A qualified third party will observe and confirm production of 99.99% pure Dy from the Pilot Plant. An independent third party laboratory will be utilized to confirm the Dy purity.

For further information on the SuperLig®-One Pilot Plant Mission Summary, please see the following link:  
<http://ucore.com/superlig-one>.

For background on traditional approaches to separation of REE and the historical advance offered by MRT, please refer to the recently published White Paper on Separation of Rare Earth Elements, entitled "Molecular Recognition Technology: A Green Chemistry Process for Separation of Individual Rare Earth Metals," at the following link: <http://ucore.com/academic-papers>.

Steven R. Izatt, President and CEO of IBC and a member of Ucore's Advisory Board, has approved the scientific and technical content of this news release and is the Qualified Person responsible for its accuracy. Mr. Izatt, Registered Member of the Society for Mining, Metallurgy, and Exploration ("SME"), holds a B.A. degree in Chemistry from Brigham Young University ("BYU"), as well as an M.S. degree in Chemical Engineering Practice and an M.S. degree in Technology and Policy, both from the Massachusetts Institute of Technology ("MIT").

## Background

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 right to acquire a controlling ownership interest in the exclusive rights to IBC SuperLig® technology for rare earths 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 via the Alaska Import Development and Export Agency ("AIDEA"), subject to the completion of a feasibility study acceptable to 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. 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, and general economic, market or business conditions.*

*MRT is at advanced testing stages and has yet to be proven, at a commercial scale, for the separation of rare earth elements. The Company has not yet released an economic assessment on the use of MRT for the separation of rare earth elements and does not yet have any specific contracts for the processing of rare earths using MRT.*

*Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined by the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

## Contact

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