HALIFAX, NOVA SCOTIA--(Marketwired - Aug 15, 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 "Plant" or "SuperLig®-One Pilot Plant".)

99.99% Dysprosium ("Dy") has been produced from pregnant leach solution ("PLS") derived from the Company's Bokan-Dotson Ridge project in Alaska by the SuperLig®-One Molecular Recognition Technology ("MRT") Pilot Plant at the IBC Advanced Technologies, Inc. ("IBC") Utah facility.

The pure Dy was recovered from the samarium-dysprosium sub group ("Dy Sub-group") of the heavy rare earth element ("HREE") class consisting of samarium-lutetium (see Ucore Press Release ("PR") dated July 5, 2016.)

"This is a significant metallurgical achievement," said Jim McKenzie, President & CEO of Ucore. "The recovery of near quantitative purities of Dy at industrial scale, solely using American feedstock, and without the use of chemically-intensive SX technologies, are significant firsts for the industry. The isolation of Dy at an advanced pilot scale has also been one of mission-critical objectives of SuperLig®-One since the early blueprint phase nine short months ago, and we're excited to complete this mission in such a concentrated time frame."

"Dysprosium is ranked among the most critically important metals to America by the USDOE[1]," continued McKenzie. "This metal is deployed extensively in United States military, high technology and clean energy sectors, with 100% of the product currently originating from China. Together with commodities such as lithium and cobalt, dysprosium is also a lynchpin in the development of electric vehicles and hybrid EV's. With SuperLig® products designed to recover Li and Co already on the shelf, our Dy ligand rounds out an already compelling platform for the rapidly growing low-emissions automotive sector."

[1] http://energy.gov/sites/prod/files/DOE_CMS2011_FINAL_Full.pdf

With the production of Dy at pilot scale now complete, Ucore will engage with a qualified third party to authenticate the Dy separation process and purity levels set out in this disclosure.

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 impurity metals ("Gangue Metals"); scandium separation from the group of REE; separation of the HREE class from the LREE class; and separation of the Dy Sub-group from the HREE class; the following results have been achieved using the SuperLig®-One Pilot Plant:

- Separation and Recovery of High Purity Dysprosium - Separation of high purity Dy from the PLS is particularly noteworthy in that the purity of the Dy is 99.99% versus all other metals in the PLS, including Terbium ("Tb") and Holmium ("Ho") ("Next Door Neighbors.") This achievement distinguishes the MRT process from other, less selective, technologies, such as solvent extraction, ion exchange and precipitation ("Legacy Separation Technologies") that require extensive processing to separate Dy from its Next Door Neighbors. The MRT process makes possible the separation of Dy directly from the Dy Sub-group without the need to separate other individual REE first. 99%+ of the Dy originally present in the PLS was recovered. This exceptionally high recovery rate maximizes value and reduces wastage.

- First Pilot Scale Demonstration of Green Chemistry Separation and Recovery of Rare Earth Elements - The SuperLig®-One Pilot Plant has successfully demonstrated a number of key advantages confirming an environmentally-friendly method for separation of individual REE:
  - No organic solvents used, minimization of chemical usage, and simplicity of Plant design and operation
  - Recovery of over 99% of the REE originally present in the PLS, resulting in essentially no loss of REE to the tailings, thereby generating maximum value
  - Separation of Gangue Metals early in the flow sheet negating the need for extensive downstream separations, that are necessary with Legacy Separation Technologies, resulting in lower capital and operating expenses along with less chemical usage and waste.
  - Highly efficient SuperLig® resin selectivities, thermodynamics and kinetics that reduce the number of separation stages needed to obtain high purity REE products, resulting in:
    - Lower metal inventory (working capital) costs due to faster processing time
    - Avoidance of generation of large amounts of waste and the associated societal negative externality effects due to environmental contamination that result from Legacy Separation Technologies

- Determination of Dysprosium Purity and Confirmation of Scale-up Parameters
  - Purity of the Dy recovered in the SuperLig®-One Pilot Plant has been determined at IBC to be 99.99% using inductively coupled plasma spectroscopy ("ICP".) This purity is nearly 100 times higher than that obtained at lab-scale (see Ucore PR dated March 2, 2015). The purity of the Dy from the SuperLig®-One Pilot Plant will be verified by an independent analytical laboratory.
  - The SuperLig®-One Pilot Plant has successfully replicated previous lab-scale work. Separation of Dy was achieved rapidly and effectively in both laboratory and pilot plant cases using pre-designed highly selective MRT SuperLig® products. LREE, Ho Sub-group metals, and Dy Sub-group metals, as reported previously (See Ucore PR dated July 5, 2016), have been retained for further separations of individual REE at desired purities, as needed.
  - 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 Pilot Plant.

- Future Opportunities - Separation of 99.99% pure Dy completes the maiden test of the SuperLig®-One Pilot Plant. Successful scaling of the MRT system from the lab-scale to the pilot plant level has demonstrated the feasibility for construction of a full scale commercial system for REE separation and recovery. Feed for such a full scale system could be derived not only from REE ore deposits, but from above ground sources including coal and other ashes, mine tailings and by-product streams, oil sands, and secondary sources, such as spent magnets, spent catalysts, spent lighting devices, and other spent products (the "REE Reservoir") that do not require mining virgin ore to access the REE. Recycling of REE from the REE Reservoir is currently very small (estimated to be <1%) and MRT provides a means whereby the REE value could be unlocked. The processing of these resources using commercial MRT systems could reduce present dependence on China for the REE required in the United States and other nations for manufacture of high-technology products essential for domestic, commercial, and military applications. Production of market quantities of REE outside China is urgently needed since China is turning its priority from supplying the world market to supplying the rapidly increasing demand from its own internal industries for REE. A secure supply of REE for other nations requires a reliable, commercial source outside of China, which does not exist.

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 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. 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.

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