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is to develop advanced separation technologies that can be used to produce cleaner solid, liquid, and gaseous fuels from domestic energy resources in an efficient and environmentally acceptable manner.

Collaboration between NETL and CAST has resulted in two novel technologies for separating moisture from coal slurry that benefit both the environment and economics of mining operations around the world. The first technology is a hyperbaric centrifugal filtration process, first marketed by Decanter Machine Inc. (DMI) of Johnson City, Tennessee, in 2009 under the trade name Centrabaric Centrifuge. This process works like the spin cycle on a washing machine with the addition of compressed air. Combining spinning and compressed air has a synergistic effect and cuts the moisture in half compared to conventional centrifugal methods. The second technology is a patent-pending method that can be used to separate ash and water from ultrafine coal. This new technology has been licensed by Virginia Tech Intellectual Properties, Inc., (VTIP) to Minerals Refining Company, LLC, of Richmond, Virginia, for commercialization.

Dr. Yoon's most recent affiliation with the DOE is, of course, as a member of the NETL-RUA. Since its inception in 2010, Yoon has served as both a principle investigator (PI) on research and as a Consortium Area Lead (CAL). In his role as CAL, Dr. Yoon represents Virginia Tech, serving as a liaison to industry partner URS and the NETL Focus Area Leads (FALs). His responsibilities include helping to coordinate the program and providing invaluable information relative to NETL-RUA research projects. In his work as PI, Yoon has remained committed to advancing separation technologies.

This year, Dr. Yoon led a NETL-RUA team that responded to the DOE funding opportunity announcement (FOA), Energy Innovation Hub – Critical Materials. This opportunity is worth approximately \$120 million over a five-year period and addresses issues associated with ensuring a stable supply of materials (rare earth elements and others) critical to energy applications. The team submitted their letter of intent in June of this year and was subsequently invited to submit a full proposal. To date, the proposal has made it through the first round of cuts, and the team was selected for a face-to-face meeting in Washington, DC, that will consist of an oral presentation and a question and answer (Q&A) session. Dr. Yoon will present the team's application to the Hub FOA Federal Merit Review Panel (FMRP) and six to eight independent peer reviewers. If successful, this would be an important win for the NETL-RUA as well as a continuation of an already great partnership between Dr. Yoon and the DOE.

Roe-Hoan Yoon is a University Distinguished Professor at Virginia Tech. He earned his B.S. degree from Seoul National University (1967) and his M.S. (1971) and Ph.D. (1977) degrees from McGill University. He worked as a Research Scientist at the Canada Centre for Minerals and Energy Technology (CANMET) from 1976 to 1978 and joined the faculty of Virginia Tech in January, 1979. He currently serves as Director of CAST.

WVU Awarded Top Prize for Groundbreaking Commercialization Project

WVU's [Linking Innovation, Industry and Commercialization](#) (LIINC) project was recently selected as the first-place winner in a national competition sponsored by the University Economic Development Association (UEDA). WVU received the 2012 Award of Excellence Competition in the Innovation and Entrepreneurship category, edging out the Pennsylvania State System of Higher Education and the University at Albany of the State University of New York. Managed by Lindsay Emery, LIINC is a groundbreaking program that urges student and faculty researchers to interact and innovate with private companies to turn ideas into job-creating products.

Emery presented in the competition on behalf of LIINC at the UEDA Annual Summit held in Chattanooga, Tennessee, the week of October 21, 2012. In her presentation, Emery explained how LIINC provides a platform for creation of relationships to encourage a mission-oriented entrepreneurial culture for WVU students and faculty, as well as the private sector.

Sponsored and attended by URS, the summit was a good opportunity to work with a broad cross-section of universities to understand various approaches to higher education-inspired community economic development. These approaches yielded insights on ways that URS can work with NETL-RUA partners to expand NETL's role in regional economic development by leveraging and coordinating research, community resources, talent development, and technology commercialization. WVU President Dr. Jim Clements participated on the University President's Panel that discussed trends, issues, and tactics that are driving university-led economic development; and gave a keynote address on Innovation and the Land-Grant Tradition.