

# Precision Periodic Unveils Scalable Lithium-6 & Lithium-7 Enrichment Backed by U.S. Department of Energy Grant

*New Ultra-Capacity Nano-Chromatography (UCNC) Nano Beads Deliver High Volume, Zero-Waste, Customizable Lithium Isotope Enrichment*

ORLANDO, FL, UNITED STATES,

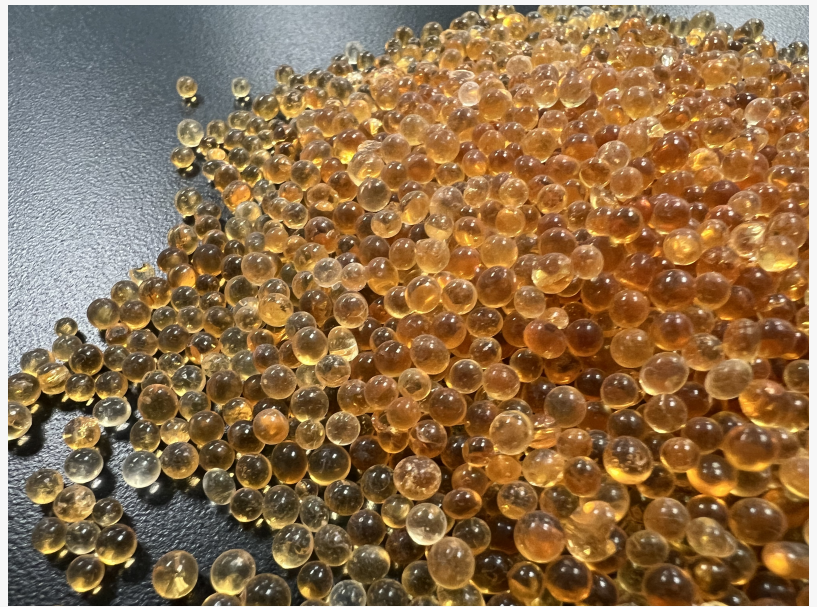
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EINPresswire.com/ -- Precision

Periodic, a leader in [nanotechnology-based selective separation media](#),

today announced a groundbreaking, scalable process developed entirely in the USA that simultaneously enriches lithium-6 and lithium-7 isotopes.

Supported by a U.S. Department of Energy grant, this innovative method represents an advanced evolution of its proprietary Nano Beads™ selective sorbent technology.



Nano Beads

Precision Periodic's [Ultra-Capacity Nano Chromatography \(UCNC\) Nano Beads](#), a high-efficiency separation technology, deliver a zero-water, zero-waste solution customizable to any enrichment level. This scalable technology cost-effectively meets the fusion industry's high-volume enrichment needs and the nuclear energy sector's growing demands.

In this application, Precision Periodic's UCNC Nano Beads, used in a simulated moving bed system utilizing displacement chromatography, enable continuous isotope production in minutes. This scalable and efficient technology allows fusion companies to order lithium-6 enrichment tailored precisely to their needs, ranging from low enrichment levels to over 90%. Lithium-6 is essential for tritium breeding in fusion reactors, while lithium-7 supports molten salt reactors and pressurized water reactors.

"This breakthrough positions us to help drive the clean energy revolution," said Brian J. Andrew, CEO of Precision Periodic. "Industry feedback affirms our technology's leading edge in the field. Our process establishes a new benchmark for lithium isotope enrichment, empowering the fusion industry with customized solutions. Designed and built from concept to execution in the



With lithium-6 critical for fusion systems and no viable supply available, our breakthrough approach delivers much-needed volumes—giving early partners a decisive edge in clean energy innovation.”

*Brian J. Andrew, CEO*

USA, our technology reflects true innovation.”

The Orlando-based team is committed to providing Nano Bead solutions for critical materials, accelerating the global transition to clean energy while advancing environmental stewardship and national energy security.

Precision Periodic is actively seeking strategic investors and partners for the global deployment of this groundbreaking technology. With the fusion industry’s looming demand for lithium-6 and no viable supply currently available, collaboration with the company

presents a rare chance to lead the clean energy transition and capitalize on emerging fusion and nuclear markets. Organizations seeking a future supply of lithium-6, as well as forward-looking investors, are invited to [contact Precision Periodic to explore partnership opportunities](#) in this high-demand sector. Timely inquiries are recommended to take advantage of this unique position in an expanding market.

About Precision Periodic: Founded in 2017, Precision Periodic develops sustainable extraction, separation, refining of metals, and isotope enrichment technologies to support fusion, nuclear energy, mining, and wastewater treatment industries. Based in Orlando, Florida, the company is committed to a cleaner energy future.

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