

February 27, 2023



Lightbridge and Pacific Northwest National Laboratory Complete Work Under U.S. Energy Department GAIN Voucher to Advance a Critical Stage in Lightbridge Fuel Manufacturing Process

Collaborations Between Lightbridge and U.S. National Laboratories Instrumental in Developing Lightbridge Fuel

RESTON, Va., Feb. 27, 2023 (GLOBE NEWSWIRE) -- [Lightbridge Corporation](#) (Nasdaq: LTBR), an advanced nuclear fuel technology company, announced today that it has successfully completed work under the U.S. Department of Energy's (DOE) Gateway for Accelerated Innovation in Nuclear (GAIN) voucher program to support the development of Lightbridge Fuel, in collaboration with Pacific Northwest National Laboratory ([PNNL](#)).

Working in collaboration with PNNL, the project scope was to demonstrate Lightbridge's nuclear fuel casting process using depleted uranium, a key step in manufacturing Lightbridge Fuel. Several castings were performed throughout the project, and the cast ingots were analyzed. In an iterative process, the casting methodology was modified based on the characterization results as part of the process was a demonstration to achieve acceptable results with PNNL's existing equipment. The results of this work will help Lightbridge determine a final process suitable to produce fuel material coupons for our upcoming irradiation tests in the Advanced Test Reactor.

[Ali Zbib](#), PNNL nuclear industry program manager, commented, "One of our missions at PNNL is to support U.S. nuclear industry partners in advancing their technology. Working on this GAIN-funded project was an excellent opportunity to use national laboratory resources and expertise on these fuel development efforts for light water reactors."

Seth Grae, President and CEO of Lightbridge, commented, "Completing the work under our second GAIN voucher advances our ability to develop, demonstrate, and optimize the manufacturing processes for Lightbridge Fuel."

"I want to thank the teams at Lightbridge and PNNL for their collaborative efforts. Our successful collaboration with the GAIN Office at the U.S. Department of Energy and access to U.S. national laboratories' teams of experts and world-class facilities enabled Lightbridge to make meaningful progress in our fuel development program," concluded Mr. Grae.

The PNNL report is titled '[Casting and Characterization of U-50Zr](#).'

About Lightbridge Corporation

Lightbridge Corporation (NASDAQ: LTBR) is focused on developing advanced nuclear fuel

technology essential for delivering abundant, zero-emission, clean energy and providing energy security to the world. The Company is developing Lightbridge Fuel™, a proprietary next-generation nuclear fuel technology for existing light water reactors and pressurized heavy water reactors, significantly enhancing reactor safety, economics, and proliferation resistance. The Company is also developing Lightbridge Fuel for new Small Modular Reactors (SMRs) to bring the same benefits plus load-following with renewables on a zero-carbon electric grid. Lightbridge has secured a long-term strategic partnership with Idaho National Laboratory (INL), the United States' lead nuclear energy research and development laboratory, in collaboration with the U.S. Department of Energy (DOE). DOE's Gateway for Accelerated Innovation in Nuclear (GAIN) program has twice awarded Lightbridge to support the development of Lightbridge Fuel. An extensive worldwide patent portfolio backs Lightbridge's innovative fuel technology. Lightbridge is included in the Russell Microcap® Index. For more information, please visit www.ltbridge.com.

To receive Lightbridge Corporation updates via e-mail, subscribe at <https://www.ltbridge.com/investors/news-events/email-alerts>

Lightbridge is on Twitter. Sign up to follow @LightbridgeCorp at <http://twitter.com/lightbridgecorp>.

Lightbridge is on We Don't Have Time. Join the dialogue at <https://app.wedonthavetime.org/profile/Lightbridge>

For an introductory video on Lightbridge, please visit www.ltbridge.com or click [here](#) to watch the video.

Forward Looking Statements

With the exception of historical matters, the matters discussed herein are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements regarding the timing and outcome of research and development activities, other steps to commercialize Lightbridge Fuel™ and future governmental support and funding for nuclear energy. These statements are based on current expectations on the date of this news release and involve a number of risks and uncertainties that may cause actual results to differ significantly from such estimates. The risks include, but are not limited to: the Company's ability to commercialize its nuclear fuel technology; the degree of market adoption of the Company's product and service offerings; the Company's ability to fund general corporate overhead and outside research and development costs; market competition; our ability to attract and retain qualified employees; dependence on strategic partners; demand for fuel for nuclear reactors, including small modular reactors; the Company's ability to manage its business effectively in a rapidly evolving market; the availability of nuclear test reactors and the risks associated with unexpected changes in the Company's fuel development timeline; the increased costs associated with metallization of our nuclear fuel; public perception of nuclear energy generally; changes in the political environment; risks associated with the further spread of COVID-19, including the ultimate impact of COVID-19 on people, economies, and the Company's ability to access capital markets; war in Europe; changes in the laws, rules and regulations governing the Company's business; development and utilization of, and challenges to, our intellectual property; risks associated with potential shareholder activism; potential and contingent liabilities; as well as other factors described in Lightbridge's filings with the Securities and Exchange Commission. Lightbridge does not assume any obligation to update or revise any such forward-looking statements, whether as the result of new developments or otherwise,

except as required by law. Readers are cautioned not to put undue reliance on forward-looking statements.

A further description of risks and uncertainties can be found in Lightbridge's Annual Report on Form 10-K for the fiscal year ended December 31st, 2021 and in its other filings with the Securities and Exchange Commission, including in the sections thereof captioned "Risk Factors" and "Forward-Looking Statements", all of which are available at <http://www.sec.gov/> and www.ltbridge.com.

Investor Relations Contact:

Matthew Abenante, IRC
Director of Investor Relations
Tel: +1 (347) 947-2093
ir@ltbridge.com



Source: Lightbridge Corporation