ASX Announcement
26 February 2026

5E Advanced Materials Launches Ferroboron Trial Program to Support U.S. Mine-to-Magnet Supply Chain

Ceramics and High-Temperature Processing Expert Dr. William M. Carty, Ph.D., Engaged to Lead Ferroboron Trial

Targets Supplying Magnet-Grade Ferroboron to Potential Customers for Initial Qualification in First Half of 2026

HESPERIA, Calif. / ACCESS Newswire / February 26, 2026 / 5E Advanced Materials, Inc. ("5E" or the "Company") (Nasdaq:FEAM) (ASX:5EA), a company focused on becoming a vertically integrated global leader and supplier of refined borates and advanced boron derivative materials, today announced it has commenced trials to evaluate production of magnet-grade ferroboron. As part of this initiative, the Company has engaged Dr. William M. Carty, Ph.D., to lead the ferroboron trials and support its efforts to qualify the material with potential customers.

Ferroboron is a ferrous iron-boron alloy used to introduce boron into specialty steel, and it can also serve as a boron source in the production of neodymium-iron-boron (NdFeB) permanent magnet alloys. The United States does not currently produce ferroboron domestically, creating a critical import dependency within specialty steel and permanent magnet supply chains.

5E has identified two redox-based (reduction-oxidation) process routes to trial ferroboron production in a laboratory environment. The program leverages 5E's planned domestic boric acid production as a secure upstream feedstock, reinforcing the Company's downstream derivative strategy. The Company intends to provide initial samples meeting specifications to prospective end users across specialty steel and NdFeB permanent magnet supply chains for evaluation and initial qualification in the first half of 2026. Program deliverables are expected to include product chemistry, impurity profiling, and particle size distribution, as well as preliminary mass and energy balances designed to inform early-stage process design and initial economic assessment.

Key Takeaways:

- Dr. Carty brings deep expertise in ceramic powder processing and forming, high-temperature processes, powder characterization, and statistical analysis.
- His experience includes high-temperature compatibility of oxides, carbides, nitrides, and borides, and developing robust high-temperature solutions for high-performance materials.
- Two redox-based technology pathways have been selected for laboratory evaluation; the Company is targeting delivery of initial samples to prospective end users across specialty steel and permanent magnet supply chains.
- Expected deliverables include material and energy balances to support early-stage processing and economic evaluation, leveraging 5E's planned domestic boric acid production.

"This program represents the strategic next step toward establishing a secure, domestic supply chain of ferroboron," said Paul Weibel, Chief Executive Officer. "We are pleased to engage Dr. William M. Carty in leading this initiative, bringing his expertise to support the development and evaluation of initial material for potential customers. By generating critical technical data and advancing early

customer qualifications, we are positioning 5E to accelerate scale-up and capture strategic opportunities in the U.S. specialty steel and permanent magnet supply chains."

NdFeB permanent magnets are essential components in high-efficiency electric motors, wind turbines, industrial automation, and defense systems. Global demand for NdFeB magnets is expected to grow significantly over the next decade, driven by electrification, renewable energy expansion, and advanced defense systems. Global magnet supply chains remain highly concentrated, and recent export controls and geopolitical friction have reinforced investors and customers to focus on resilient, domestic magnet supply chains. This initiative reflects 5E's strategy to expand beyond first derivative borates into higher-value performance materials, which may enhance long-term revenue mix, strategic relevance, and customer integration.

Professional Notes: Dr. William M. Carty, Ph.D.

Dr. Carty is serving as the Company's engaged expert in connection with the Company's ferroboron trial program. Dr. Carty is Professor Emeritus of Ceramic Engineering at Alfred University, where he taught from 1993 to 2020. He relocated to New Hampshire in 2022 and currently serves as Chief Technology Officer for Materials Research Furnaces in Allenstown, New Hampshire. He also consults across the ceramic industry, with specialization in powder processing and forming (traditional and advanced ceramics and composites), pyrolysis and sintering processes, microstructure evolution, high-temperature chemical reactions, mechanical behavior of ceramics and composites, powder characterization, and statistical analysis. His research interests include high-temperature compatibility of oxides, carbides, nitrides, and borides, and the development of robust high-temperature solutions for high-performance materials.

About 5E Advanced Materials, Inc.

5E Advanced Materials, Inc. (Nasdaq: FEAM) (ASX:5EA) is focused on becoming a vertically integrated global leader and supplier of refined borates and advanced boron materials, complemented by calcium-based co-products, and potentially other by-products such as lithium carbonate. The Company's mission is to become a supplier of these critical materials to industries addressing global decarbonization, energy independence, food, national security, and the defense sector. The Company believes factors such as government regulation and incentives focused on domestic manufacturing and supply chains and capital investments across industries will drive demand for end-use applications like solar and wind energy infrastructure, neodymium-ferro-boron magnets, defense applications, lithium-ion batteries, and other critical material applications. The business is based on the Company's large domestic boron resource, which is located in Southern California and designated as Critical Infrastructure by the U.S. Department of Homeland Security, and boron was included on the U.S. Government's 2025 List of Critical Minerals.

Forward Looking Statements

Statements in this press release may contain "forward-looking statements" that are subject to substantial risks and uncertainties. Forward-looking statements contained in this press release may be identified by the use of words such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, and include, but are not

limited to, statements regarding the Company's ferroboron trial program; the timing and results of the ferroboron trials; the ability to produce ferroboron at acceptable cost, scale and quality; development plans; production capabilities; commercialization strategy; ability to negotiate or obtain offtake agreements; customer qualification processes for any of its proposed products, and success thereof; market demand for boron, lithium and ferroboron; the potential applications of its products across energy, defense, agriculture and industrial markets; and ability to access and secure any government-based financing. Any forward-looking statements are based on 5E's current expectations, forecasts, and assumptions and are subject to a number of risks and uncertainties that could cause actual outcomes and results to differ materially and adversely from those set forth in or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, statements regarding the Company's ferroboron trial program; the timing and results of the ferroboron trials; the ability to produce ferroboron at acceptable cost, scale and quality; development plans; production capabilities; commercialization strategy; ability to negotiate or obtain offtake agreements; customer qualification processes for any of its proposed products, and success thereof; market demand for boron, lithium and ferroboron; the potential applications of its products across energy, defense, and industrial markets; and ability to access and secure any government-based financing. For a discussion of other risks and uncertainties, and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, see the section entitled "Risk Factors" in 5E's most recent Annual Report on Form 10-K and its other reports filed with the SEC. Forward-looking statements contained in this announcement are based on information available to 5E as of the date hereof and are made only as of the date of this release. 5E undertakes no obligation to update such information except as required under applicable law. These forward-looking statements should not be relied upon as representing 5E's views as of any date subsequent to the date of this press release. In light of the foregoing, investors are urged not to rely on any forward-looking statement in reaching any conclusion or making any investment decision about any securities of 5E.

For further information contact:

Investor Relations
Brett Maas
Hayden IR, LLC
FEAM@haydenir.com
Ph: +1 (480) 861-2425

Media Relations
Paola Ashton
PRA Communications
team@pracommunications.com
Ph: +1 (604) 681-1407