

# Scandium Canada and University of Windsor to Explore Aluminum-Scandium Alloy Wires for EV Traction Motors

written by Raj Shah | July 29, 2026

July 29, 2026 ([Source](#)) – **Scandium Canada Ltd. (TSXV: SCD)** (the “**Company**”) is pleased to announce it has entered into a Memorandum of Understanding (the “MOU”) with the University of Windsor’s Center for Hybrid Automotive Research and Green Energy (“[CHARGE](#)”) to explore the potential use of aluminum-scandium (Al-Sc) alloy wire for windings for electric vehicle (EV) traction motors, a significant application at the heart of the global EV transition for lighter vehicles with extended operating ranges. The technological concepts and methods explored through this MOU are expected to be proposed for additional research grant funding. Viable marketable outcomes advanced through this MOU will be commercialized via Scantium+, the Company’s newly acquired subsidiary for specialized alloys and technologies, announced on June 29, 2026.

## Highlights

- The non-exclusive MOU brings together Scandium Canada’s Al-Sc alloy technology and CHARGE Lab’s electric powertrain expertise to develop a research project that assesses the functionality, durability, practicality, and cost-effectiveness of Al-Sc alloy wires in traction motor applications;
- CHARGE Lab is an internationally recognized R&D, component, and system design and test centre, competitive

with other leading North American automotive labs in the design, development, and testing of electric powertrain components;

- The collaboration targets a high-growth application for Scallium+;
- The MOU also contemplates evaluating other applications of Al-Sc alloys as they may emerge during testing;
- The work is intended to support Scandium Canada's downstream alloy commercialization track, which progresses independently of the Crater Lake project development timeline.

### **A strategic entry into the electric mobility supply chain**

Under the MOU, the two parties intend to develop a research project to assess the performance of Al-Sc alloy wires as traction motor windings. Scandium Canada's contributions include developing and producing Al-Sc alloy wire for evaluation along with detailed wire specifications, while CHARGE Lab will lead electrical simulation, motor segment and system testing, and wire coating process development. Both parties will participate in benchmarking against established copper wire materials and in the physical, mechanical, and specialized testing of the wires, including dielectric strength and heat resistance.

The proposed research would assess Al-Sc alloy wires against the demands of electric traction motors, a market segment where conductor weight, heat resistance, and mechanical performance directly affect motor efficiency and vehicle range. During the term of the MOU, the parties will formalize research proposals and collaboration agreements for any commercial applications identified and vetted through the work.

### **Quotes**

"Preliminary results tell a consistent story. Copper is the reference conductor in electric motors, but it is heavy;

aluminum delivers comparable conductance at roughly half the weight. Minor additions of scandium to aluminum alloys significantly increase their strength, and the alloy remains malleable enough to draw into wire and form into windings. The work with the CHARGE lab at the University of Windsor will validate aluminum-scandium performance where it counts, under the real electrical, thermal, and mechanical demands of next-generation traction motors.”

**Mark S. Kozdras, Ph.D., Strategic Advisor to Scandium Canada.**

“This collaboration puts our R&D infrastructure on aluminum-scandium alloys directly in front of one of North America’s leading electric powertrain teams. It is a concrete step toward technical and commercial validation of our aluminum-scandium wire concept for powertrains, and it advances on the strength of the science, independent of the Crater Lake mine timeline.”

**Félix Lapointe, Chief Executive Officer of Scalum+.**

“CHARGE’s testing capabilities allow us to evaluate our Al-Sc wires under real electric motor conditions. Validating functionality, durability, and cost-effectiveness in this setting is exactly the kind of rigorous, application-driven work needed to move our alloys toward qualification.”

**Dr. Luc Duchesne, Chief Science Officer of Scalum+.**

“UWindsor Team will take promising materials and technologies and test them against the real demands of electric powertrains. We are pleased to collaborate with Scandium Canada and Scalum+ to evaluate aluminum-scandium alloy wires in traction motor windings, work that speaks directly to the efficiency and range challenges the industry is working to solve.”

**Dr. Narayan Kar, Founder and Director of CHARGE, Tier 1 Canada Research Chair in Electrified Vehicles, University of Windsor.**

“Collaborations like the one between Scandium Canada and the

world-class CHARGE Lab at the University of Windsor are foundational in how industry works with universities to deliver the highest quality trainees and develop groundbreaking innovation that accelerates scientific discovery and creates value for industry and the broader sector. We're thrilled to see this MOU move forward."

**Dr. Shanthi Johnson, Vice-President, Research and Innovation, University of Windsor.**

### **About the CHARGE Lab – University of Windsor**

The Center for Hybrid Automotive Research and Green Energy ([CHARGE](#)) of the University of Windsor is an internationally recognized R&D, component, system design and test centre that fosters cross-disciplinary research collaboration among materials, mechanical, electrical, and software engineers in the design, development, and testing of electric powertrain components.

### **About the University of Windsor**

The University of Windsor is located at the heart of North American automobility manufacturing. With 18,000+ students representing faculties from engineering and science to nursing and law, the University of Windsor works directly with industry and community partners to support innovation development and real-world solution building.

### **About Scantium+**

Scantium+, formerly Ferreol Technologies, is Scandium Canada's wholly owned commercialization subsidiary for aluminum-scandium (Al-Sc) alloys. It unites the alloys developed by the Company's Scandium+ division with the Scantium® line of alloys and surface treatment created by the Ferreol Technologies team. Scantium® alloys deliver strength up to 45% higher than typical 7075 aerospace aluminum, positioning them as candidates to replace high-strength aluminum alloys, and even titanium, in the most

demanding applications. Scalium+ brings these specialized materials to market today, across multiple sectors.

#### **About Scandium Canada Ltd.**

Scandium Canada (TSXV: SCD) is a critical minerals mining and advanced materials company developing North America's only primary source of scandium at its Crater Lake project in Nunavik, Québec. Through Scalium+, its wholly owned commercialization subsidiary, the Company brings proprietary, patent-pending aluminum-scandium (Al-Sc) alloys and the Scalium® line of alloys and technologies to market today, while advancing the Crater Lake mining project for the future. This dual-engine strategy positions Scandium Canada to anchor a secure North American scandium supply chain and to shape the future of lighter, stronger and longer-lasting materials for advanced manufacturing end users, while committing itself to building a more responsible economy through innovation and agility.

#### **Forward-looking statements**

*This news release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, without limitation, statements regarding the objectives, scope, and anticipated outcomes of the collaboration with CHARGE; the potential applications, performance, and commercialization of the Company's aluminum-scandium alloys and alloy wires; the status of the Company's patent applications; the development of the Crater Lake project; and all statements in the paragraph "About Scandium Canada Ltd." above, which essentially describes the Company's prospects.*

*Forward-looking statements are necessarily based upon a number of estimates and assumptions that, while considered reasonable by the Company as of the time of such statements, are inherently subject to significant business, economic and competitive*

uncertainties, and contingencies. These estimates and assumptions may prove to be incorrect. Many of these uncertainties and contingencies can directly or indirectly affect, and could cause, actual results to differ materially from those expressed or implied in any forward-looking statements and future events, could differ materially from those anticipated in such statements. A description of assumptions used to develop such forward-looking information and a description of risk factors that may cause actual results to differ materially from forward-looking information can be found in the Company's disclosure documents on the SEDAR+ website at [www.sedarplus.ca](http://www.sedarplus.ca).

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that estimates, forecasts, projections and other forward-looking statements will not be achieved or that assumptions do not reflect future experience. Forward-looking statements are provided for the purpose of providing information about management's endeavors to develop the Crater Lake project, and, more generally, its expectations and plans relating to the future. Readers are cautioned not to place undue reliance on these forward-looking statements as a number of important risk factors and future events could cause the actual outcomes to differ materially from the beliefs, plans, objectives, expectations, anticipations, estimates, assumptions and intentions expressed in such forward-looking statements. All of the forward-looking statements made in this press release are qualified by these cautionary statements and those made in our other filings with the securities regulators of Canada. The Company disclaims any intention or obligation to update or revise any forward-looking statement or to explain any material difference between subsequent actual events and such forward-looking statements, except to the extent required by applicable

law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

For more information or interview requests, please contact:

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