

News Release - Volt Carbon Releases Battery Test Results

FOR IMMEDIATE RELEASE

Volt Carbon Technologies Announces the Development of a Low Temperature Li-metal Battery Functional to -80°C

September 16, 2024, Calgary, Alberta, Canada – Volt Carbon Technologies Inc. (“Volt Carbon” or the “Company”) (TSX-V: VCT) (OTCQB: TORVF) is pleased to announce that the Company has achieved what it believes to be a breakthrough in lithium-ion battery performance, with successful testing showing functionality at temperatures as low as -80°C.

Highlights

The team at Solid UltraBattery, in collaboration with Volt Board Member, Dr. Aiping Yu, Professor and Director of the Carbon Nanomaterials Laboratory for Renewable Energy and Multi-functional Composites at the University of Waterloo (U of W), has successfully produced a proof of concept for a proprietary high-entropy electrolyte. This electrolyte has been designed to improve low-temperature battery performance.

In tests conducted using Li-metal coin cells, the new electrolyte demonstrated superior performance compared to conventional electrolytes (see Figure 1). The results showed that, at -40°C, the proprietary electrolyte retained 62.5% of its capacity, compared to just 16.8% for the standard electrolyte. At -60°C, the proprietary electrolyte maintained 49.7% capacity, while the standard electrolyte showed no capacity retention.

Most notably, at an extreme temperature of -80°C, the proprietary electrolyte retained 30.3% capacity, a result that management considers to be a significant advancement in battery technology for cold environments.

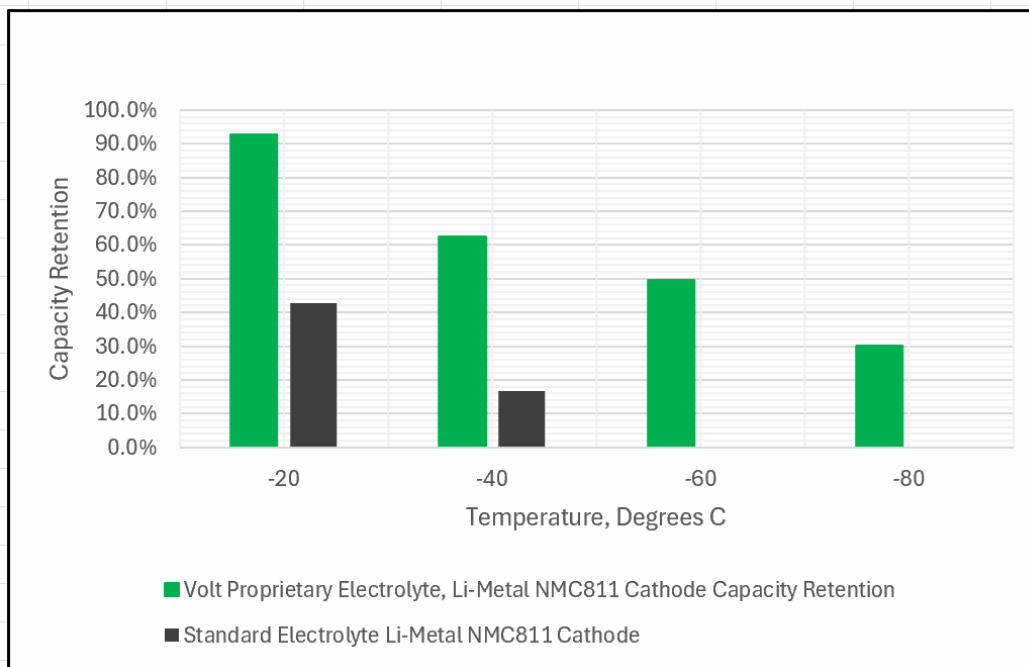


Fig. 1: Capacity Retention of Conventional Electrolyte vs Volt’s High Entropy Electrolyte

Dr. Hey Woong Park, Head of Battery Development at Solid UltraBattery, who brings over 20 years of experience in automotive battery OEMs, commented; “The ability of our proprietary electrolyte to perform at temperatures as low as -80°C highlights its potential for industries demanding reliable energy storage in extreme conditions, such as

automotive, aerospace and defense. This innovation is particularly critical for regions like Canada, where winter temperatures can severely affect battery performance. Last winter's extreme freeze, which left many electric vehicles stranded due to charging inefficiencies, illustrates the urgent need for advancements like ours. With this technology, we aim to overcome the challenges of cold-weather battery performance, ensuring reliable operation even in the most demanding climates."

Next Steps

Volt Carbon is moving forward with the development of pouch cells to validate the performance of the proprietary electrolyte at a commercial scale. This phase is crucial for demonstrating the technology's viability for large-scale applications. The company plans to commercialize this advanced electrolyte for sectors requiring superior cold-weather battery performance, including aerospace, defense, and markets in cold regions like Canada, Northern Europe, and parts of the United States.

About Volt Carbon Technologies

Volt Carbon Technologies Inc. is a publicly traded company focused on advancing carbon science, with a strong emphasis on energy storage solutions and green energy innovation. The company holds strategic mining claims across Ontario, Quebec, and British Columbia, Canada. Volt Carbon operates a state-of-the-art battery fabrication facility in Guelph, Ontario, and a dedicated Carbon Research Facility in Scarborough, Ontario. For the latest updates on the company's projects and developments, please visit our website at www.voltcarbontech.com.

On behalf of the Board of Directors

Volt Carbon Technologies Inc.

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These forward-looking statements are based on current expectations and are naturally subject to uncertainty and changes in circumstances that may cause actual results to differ materially. Although Volt believes that the expectations represented in such forward-looking statements are reasonable, there can be no assurance that these expectations will prove to be correct. Such statements include statements with respect to: (i) the Company has achieved what it believes to be a breakthrough in lithium-ion battery performance, with successful testing showing functionality at temperatures as low as -80°C; (ii) The team at Solid UltraBattery, in collaboration with Volt Board Member, Dr. Aiping Yu, Professor and Director of the Carbon Nanomaterials Laboratory for Renewable Energy and Multi-functional Composites at the University of Waterloo (U of W), has successfully produced a proof of concept for a proprietary high-entropy electrolyte; (iii) the new electrolyte demonstrated superior performance compared to conventional electrolytes. The results showing that, at -40°C, the proprietary electrolyte retained 62.5% of its capacity, compared to just 16.8% for the standard electrolyte. At -60°C, the proprietary electrolyte maintained 49.7% capacity, while the standard electrolyte showed no capacity retention; (iv) the company's intention to move forward with the development of pouch cells to validate the performance of the proprietary electrolyte at a commercial scale; and (iv) the vision that the technology is also crucial for regions experiencing severe cold, like Canada; Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future

performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors, including those discussed above, could cause actual results to differ materially from the results discussed in the forward-looking statements. Any such forward-looking statements are expressly qualified in their entirety by this cautionary statement.

All of the forward-looking statements made in this press release are qualified by these cautionary statements. Readers are cautioned not to place undue reliance on such forward-looking statements. Forward-looking information is provided as of the date of this press release, and Volt assumes no obligation to update or revise them to reflect new events or circumstances, except as may be required under applicable securities legislation.