

Nano One Successfully Completes Phase One of its Co-Development Agreement with Niobium Producer CBMM

written by Raj Shah | February 15, 2022

- Nano One successfully completed Phase One of its co-develop work with CBMM
- Durability enhanced single crystal coated NMC cathode validated with CBMM's niobium
- One-Pot process enables cost effective single nanocrystal coating
- CBMM is the world's leading supplier of niobium products and technology.

February 15, 2022 ([Source](#)) – Nano One® Materials Corp. (TSX: NANO) (OTC Pink: NNOMF) (FSE: LBMB) ("[Nano One](#)") is a clean technology company with a patented low carbon intensity process for the production of low cost, high-performance cathode materials used in lithium-ion batteries. Nano One announced today that it has successfully completed Phase One of its advanced lithium-ion battery cathode materials coating development agreement with CBMM, the world's leading supplier of niobium products and technology.

"Nano One has successfully demonstrated the use of CBMM's niobium," said Nano One CTO Dr. Stephen Campbell, "to form a protective coating on our single nanocrystal NMC cathode active material. This coating is designed to enhance durability, and our success on this first milestone strengthens the supply chain relationship between CBMM and Nano One while providing yet

another demonstration of the flexibility of Nano One's patented One-Pot process."

Phase One applied the niobium coating technology to NMC811 cathode active material and the next two phases will focus on the niobium coating of even higher nickel NMC. This will include scaling of the One-Pot coating technology to demonstrate commercial viability and validate the supply chain. Together, CBMM and Nano One are developing an integrated and differentiated supply chain for niobium coated single crystal cathode materials.

Nano One's patented One-Pot process adds a cost effective niobium coating on each individual nanocrystal to protect the cathode from deleterious side reactions than can otherwise cause rapid performance degradation. The One-Pot process enables this coating to be formed without adding process steps or costs, and the coating can significantly increase the durability of cathode materials in lithium-ion batteries. The niobium coated single crystal cathode materials are applicable to both conventional liquid electrolyte cells and advanced solid state electrolyte cells.

Nano One CEO, Mr. Dan Blondal said, *"CBMM is the world leader in Niobium, and by completing this milestone with them, we have advanced a step closer to our commercialization and supply chain development goals. Successful upstream collaborations, such as this, help us bring strategic value to downstream partners as we progress towards the adoption and commercial application of our technologies."*

CBMM's Executive Manager for Battery Products, Rogério Marques Ribas, said that, *"The results of this first milestone demonstrate the viability of making niobium enhanced high-energy battery materials using Nano One's ground-breaking process. We*

look forward to further advancing our collaborative project and its valuable outcomes.”

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About Nano One

Nano One Materials Corp (Nano One) is a clean technology company with a patented, scalable and low carbon intensity industrial process for the low-cost production of high-performance lithium-ion battery cathode materials. The technology is applicable to electric vehicle, energy storage, consumer electronic and next generation batteries in the global push for a zero-emission future. Nano One's One-Pot process, its coated nanocrystal materials and its Metal to Cathode Active Material (M2CAM) technologies address fundamental performance needs and supply chain constraints while reducing costs and carbon footprint. Nano One has received funding from various government programs and the current “Scaling of Advanced Battery Materials Project” is supported by Sustainable Development Technology Canada (SDTC) and the Innovative Clean Energy (ICE) Fund of the Province of British Columbia. For more information, please visit www.nanoone.ca.

About CBMM

CBMM is the world's leading supplier of niobium products and technology, with over 400 clients in 50 countries. Fully integrated from the mine to the final products, CBMM also provides expert technical assistance to customers around the globe. Based in Brazil, with offices and subsidiaries in China, the Netherlands, Singapore, Switzerland and the United States, the company provides cutting-edge products and technology to the infrastructure, mobility, aerospace, healthcare and energy industries. In 2019, CBMM invested in 2DM, a company dedicated to graphene and, in 2021, in startups Echion and Battery Streak.

The investments are aimed at new developments in materials for lithium-ion batteries. For more information, visit: CBMM.com.

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achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward-looking information, including but not limited to: the advancement and completion of the phase 2 and 3 work program and any anticipated results thereof, any future collaborations that may happen with the OEM's or other partners in the battery supply chain, the Company's ability to achieve its stated goals, the commercialization of the Company's technology and patents and other risk factors as identified in Nano One's MD&A and its Annual Information Form dated March 15, 2021, both for the year ended December 31, 2020, and in recent securities filings for the Companies which are available at www.sedar.com. Although management of the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements or forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements and forward-looking information. The Company does not undertake any obligation to update any forward-looking statements or forward-looking information that is incorporated by reference herein, except as required by applicable securities laws. Investors should not place undue reliance on forward-looking statements.