

# Nano One Provides Update on Joint Development Work with PuLead



April 2, 2019 (Source) – The CEO of Nano One Materials Corp. (TSXV: NNO) (OTC PINK: NNOMF) (FSE: LBMB), Mr. Dan Blondal, is pleased to provide an update on the progress of its partnership with Pulead Technology Industry,

announced January 25. The objective of this joint development effort is to identify a viable supply chain and design a low cost lithium iron phosphate (LFP) plant using Nano One's proprietary processes.

*"After two months, our teams are working well together and developments at the lab and pilot scale are moving along at a good pace. We have identified viable raw materials, are refining our processes, and are evaluating resulting materials against target specifications,"* said Mr. Blondal. *"Performance targets and economic modeling remain on track as we optimize Nano One's innovative process for the commercial production of LFP."*

LFP represents a tremendous market opportunity for Nano One:

- Market demand for LFP is anticipated to double to over 200,000 tonnes/yr in 2025<sup>1</sup>.
- Chinese Ministry of Industry and Information Technology said that 61% of passenger vehicles and 94% of busses will use LFP batteries<sup>2</sup>.
- Pulead is a global leader in LFP production and are expanding their capacity to capture a greater portion of the LFP growth opportunity.

- LFP is widely considered to be the safest, lowest cost and longest lasting of all battery cathode materials.
- LFP is a dominant cathode material in electric buses, mid-range electric automobiles and fleet vehicles.
- Nano One believes LFP will garner a substantial share of the electrical grid energy storage systems (ESS) market where cost, safety and longevity drive purchase decisions. For example, BYD, who leads the world in e-buses and e-cars, recently signed a deal with finance group Pireos Capital which could see up to 100MWh of its LFP battery storage systems deployed in Mexico<sup>3</sup>.
- LFP could become a cost competitive and environmentally superior alternative to lead-acid batteries, opening a \$40B market opportunity that includes energy storage systems (ESS), telecom, hybrid EVs, forklifts, bikes and power tools.

*“These are large opportunities,” adds Mr. Blondal, “and they address emissions targets head-on with growth in new and existing markets, as well as replacement units for large consumer and industrial fleets of vehicles and energy storage systems. LFP is well positioned to serve these markets because it is low cost, safe and durable, with low environmental impact and security of supply chain that avoids riskier materials such as cobalt. Pulead is a significant and respected LFP cathode producer and as their joint development partner, we are excited to be at the forefront of these emerging markets.”*

While LFP clearly represents Nano One’s near term market opportunity, Nano One continues to develop additives and coatings, in collaboration with various global automotive interests, to improve the longevity and stability of NMC (lithium, nickel, manganese and cobalt) and HVS (high voltage spinel) for solid state batteries and other advanced lithium ion batteries.

## **Nano One Materials Corp.**

**Dan Blondal, CEO**

### **About Pulead**

Established in 1999 by Oriental Investment Co. Ltd and Peking University, Pulead Technology Industry is one of China's leading Li-ion battery cathode producers. Together with its strategically positioned subsidiaries and JVs in cathodes and separators as well as in upstream lithium resources and downstream large format battery packs, Pulead is becoming a key player in the Li-ion battery supply chain. [www.pulead.com.cn/en/](http://www.pulead.com.cn/en/)

### **About Nano One**

Nano One Materials Corp ("Nano One" or "the Company") has developed patented technology for the low-cost production of high performance lithium ion battery cathode materials used in electric vehicles, energy storage and consumer electronics. The processing technology addresses fundamental supply chain constraints by enabling wider raw materials specifications for use in lithium ion batteries. The process can be configured for the full range of cathode materials and has the flexibility to shift with emerging and future battery market trends.

Nano One has built a pilot plant to demonstrate high volume production and to optimize its technology across a range of materials. The pilot plant is being funded with the assistance and support of the Government of Canada through Sustainable Development Technology Canada (SDTC) and the Automotive Supplier Innovation Program (ASIP) a program of Innovation, Science and Economic Development Canada (ISED). Nano One also receives financial support from the National Research Council of Canada Industrial Research Assistance Program (NRC-IRAP). Nano One's mission is to establish its patented technology as a leading platform for the global production of a new

generation of battery materials. [www.nanoone.ca](http://www.nanoone.ca)

<sup>1</sup> K. Berman, J. Dziuba, C. Hamilton, J. Jackson, R. Carlson, P. Sklar, "**The Lithium Ion Battery and the EV Market**", Toronto February 2018

K. Berman, C. Hamilton, J. Jackson, R. Carlson, "**Next Generation Cathode Technologies**", BMO Capital Markets, Toronto October 2018

C. Pillot, "**The Rechargeable Battery Market and Main Trends 2017-2025**", Avicenne Energy, AABC San Diego June 2018

T. Hoff, S. Ding, V. Leung, S. Hoon Han, C. Kim, C. Terry, "**Notes from the road: Jostling for position in the EV supply chain**", Deutsche Bank Research, Sydney October 2018

M. Sanders, "**Industrial Markets North America**", Avicenne Energy, NAAT Baat International Annual Meeting 2019, San Diego March 2019

<sup>2</sup> Lithium Today, "**Lithium Market Wire**", 20 March 2019, <http://lithium.today/lithium-market-wire-read/>

<sup>3</sup> <https://www.energy-storage.news/news/byd-in-mexico-chinese-company-signs-100mwh-deal-with-investment-fund>

*Certain information contained herein may constitute "forward-looking information" under Canadian securities legislation. Forward-looking information includes, but is not limited to, the execution of the Company's plans which are contingent on the receipt of grant monies and the commercialization of the Company's technology and patents. Generally, forward-looking information can be identified by the use of forward-looking terminology such as 'believe', 'expect', 'anticipate', 'plan', 'intend', 'continue', 'estimate', 'may', 'will', 'should', 'ongoing', or variations of such words and phrases or statements that certain actions, events or results "will" occur. Forward-looking statements are based on the opinions and estimates of management as of the date such statements are made and they are subject to known and unknown risks,*

*uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking statements or forward-looking information, including: the ability of the Company to obtain additional financing; including the receipt of grant monies from SDTC, ASIP, NRC-IRAP and the receipt of all necessary regulatory approvals. 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 to update any forward-looking statements or forward-looking information that is incorporated by reference herein, except as required by applicable securities laws.*

**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 NEWS RELEASE**