

Exceptional Structural Durability of NEO Battery's 100% Silicon Anodes for Next-Generation Flexible Battery Applications

12.05.2021 | [Newsfile](#)

Vancouver, May 11, 2021 - Dr. Jong Hyeok Park, Director and Chair of Scientific Advisory Board of [NEO Battery Materials Ltd.](#) (TSXV: NBM) ("NEO" or the "Company"), is pleased to announce that NEO's silicon (Si) anode succeeded to achieve exceptional flexibility and durability from a continuous bending test.

A 3.5 x 9.5 cm² sized pouch flexible battery cell with multi-electrodes stack was assembled at an industrial facility to investigate mechanical durability against bending fatigue. After undergoing 30,000 bending cycles (bending radius: 25 mm), conventional Si anodes showed serious cracks and deformation, as some fragments had been detached from the copper (Cu) foil. However, there were no perceptible degradation in the NEO's Si anodes after the same bending test, displaying the required robustness to effectively counter the volume expansion problem.

Flexible batteries are being recognized as a forefront technology in the rise of next-generation, rechargeable batteries. An integration of a flexibility characteristic allows the lithium-ion battery (LIBs) to be safe and lightweight, retain a higher rate capability, and possess a greater energy and power density compared to current rigid LIBs.

Figure 1

To view an enhanced version of Figure 1, please visit:

https://orders.newsfilecorp.com/files/4661/83709_27d31336643bf85e_001full.jpg

"Our patented elastomer nanocoating layer with an adhesive nature shows excellent stability in flexible battery applications, and NEO Battery Materials will further develop Si anodes for various kinds of next-generation Li-ion batteries including bendable, foldable, and stretchable Li-ion batteries," said Dr. Park.

About NEO Battery Materials Ltd.

[NEO Battery Materials Ltd.](#) is a Vancouver-based junior resource company focused on battery metals exploration in North America. The Company has staked new mining claims in Golden, BC, along a strike with a quartzite bed, targeting silica in the quartzites for a total of 467 hectares. The Company focuses on exploring and producing silicon, which, when added to anode materials in the production of lithium-ion batteries, provides improvements in capacity and efficiency over lithium-ion batteries using graphite in their anode materials. The Company intends to become an integrated silicon producer and anode materials supplier to the electric vehicle industry. For more information, please visit the Company's website at: <https://www.neobatterymaterials.com/>.

On behalf of the Board of Directors
Spencer Huh
President and CEO
604-697-2408
shuh@neobatterymaterials.com

Neither 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.

THIS NEWS RELEASE IS NOT FOR DISTRIBUTION TO U.S. NEWSWIRE SERVICES OR
DISSEMINATION IN THE UNITED STATES

To view the source version of this press release, please visit <https://www.newsfilecorp.com/release/83709>

Dieser Artikel stammt von [Rohstoff-Welt.de](https://www.rohstoff-welt.de)

Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/383293--Exceptional-Structural-Durability-of-NEO-Batteryund039s-100Prozent-Silicon-Anodes-for-Next-Generation-Flexible>

Für den Inhalt des Beitrages ist allein der Autor verantwortlich bzw. die aufgeführte Quelle. Bild- oder Filmrechte liegen beim Autor/Quelle bzw. bei der vom ihm benannten Quelle. Bei Übersetzungen können Fehler nicht ausgeschlossen werden. Der vertretene Standpunkt eines Autors spiegelt generell nicht die Meinung des Webseiten-Betreibers wieder. Mittels der Veröffentlichung will dieser lediglich ein pluralistisches Meinungsbild darstellen. Direkte oder indirekte Aussagen in einem Beitrag stellen keinerlei Aufforderung zum Kauf-/Verkauf von Wertpapieren dar. Wir wehren uns gegen jede Form von Hass, Diskriminierung und Verletzung der Menschenwürde. Beachten Sie bitte auch unsere [AGB/Disclaimer!](#)

Die Reproduktion, Modifikation oder Verwendung der Inhalte ganz oder teilweise ohne schriftliche Genehmigung ist untersagt!
Alle Angaben ohne Gewähr! Copyright © by Rohstoff-Welt.de -1999-2026. Es gelten unsere [AGB](#) und [Datenschutzrichtlinien](#).