

NEW YORK, NY / ACCESSWIRE / May 31, 2016 / Graphene Energy Storage Devices Corp. (GESD), 40% owned by Lomiko Technologies, a 100% owned subsidiary of [Lomiko Metals Inc.](#) ("Lomiko") (TSXV: LMR) (OTC: LMRMF) (FSE: DH8B), is pleased to announce the successful completion of a development project undertaken jointly with the Research Foundation of Stony Brook University (SBU). The SBU team lead by Dr. Samuilov explored a novel method for assembly of high-voltage Supercapacitor units. The SBU team assembled and tested a 10 V Supercapacitor energy storage unit, thus proving feasibility of the high-voltage design. This development opens avenue for new low-cost energy storage products. Currently, GESD is working on scale-up of the technology and an in-field evaluation of the energy storage unit.

"Lomiko is developing a group of mineral and technology development projects that include lithium and graphite exploration, new battery and supercapacitor development and 3D printing capability," Stated A. Paul Gill, Lomiko CEO.

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Supercapacitors are promising energy storage devices. Due to their fast charge-discharge characteristics, low equivalent series resistance, long cycle life, wide operating temperatures, supercapacitors are finding application in transportation, industrial and grid energy storage. There is rapidly growing demand for capacitive energy storage systems with high power and energy densities. However, individual supercapacitor units have very low stand-off voltage, < 3 V. In order to increase the operation voltage to a practical level, > 3 V, the EDLCs are connected in series stacks. The EDLCs need to be interconnected and balanced with an electronic circuit, which results in a bulky and expensive energy storage system.

The GESD-SBU team demonstrated design and implementation of a sealed high-voltage EDLCs energy storage unit. The unit is internally balanced, there is no need for an external circuit. The electrode is very cost-effective nano-carbon composite either of a commercial carbon or of graphene platelets with carbon nanotubes. The nano-carbon electrode materials were used for deposition and assembly of a working prototype of an internally balanced high-voltage energy storage unit. The bench-top prototype unit, tested up to 10 V, exhibited good discharge characteristics and charge retention. This development enables new compact energy storage solutions for grid and vehicular applications.

As a part of the agreement, Graphene ESD Corp. provided \$50,000 in cash funding to the SUNY Research Foundation on February 17 2015. The research took place at SBU campus, Stony Brook, NY.

Graphene ESD will provide updates on further plans in the near future.

About Graphene ESD

Graphene ESD is developing energy storage based on graphene platelets. High surface area and outstanding electrical conductivity of graphene enable devices with a unique combination of fast charge/discharge and large stored energy. Our devices utilize graphene platelets manufactured from high-quality natural graphite by a low-cost scalable process. Graphene ESD is 40% owned by [Lomiko Metals Inc.](#) ("Lomiko") (TSXV: LMR) (OTC: LMRMF) (FSE: DH8B). e-mail: info@graphene-esd.com

For more information on Lomiko Technologies and Lomiko Metals, review the website at www.lomiko.com, contact A. Paul Gill at 604-729-5312 or email: info@lomiko.com.

On Behalf of the Board

"A. Paul Gill"

Chief Executive Officer *We seek safe harbor. 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.*

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