Zenyatta – Lakehead University Scientists have Successfully Produced Functionalised Graphene Oxide

Zenyatta Ventures {TSXV: ZEN} is pleased to announce that a team of scientists under the direction of Dr. Aicheng Chen at Lakehead University ('Lakehead') in Thunder Bay, Ontario, Canada, has made significant advancements related to sensing application development with the first graphene oxide (GO) invention produced from the Company's high-purity Albany graphite.

Zenyatta announces that Lakehead University Scientists have Successfully Produced Functionalised Graphene Oxide from Albany Graphite for Environmental Sensing Applications

Thunder Bay, ON – 1 March 2017 – **Zenyatta Ventures {TSXV: ZEN}** is pleased to announce that a team of scientists under the direction of Dr. Aicheng Chen at Lakehead University in Thunder Bay, Ontario, Canada, has made significant advancements related to sensing application development with the first graphene oxide (GO) invention produced from the Company's high-purity Albany graphite.

Dr. Chen and his team have developed a novel one-pot synthesis of fluorine functionalised graphene oxide (F-GO) which can be used in many energy, environmental and electrochemical sensing applications. The produced F-GO has been tested for the simultaneous detection of various toxic metal ions (e.g. mercury, lead, cadmium and copper) and a substantial improvement in the electrochemical sensing performance was achieved in comparison with GO. A patent has been filed by Dr. Chen for this invention and a paper describing the process in more detail was recently published in the latest volume of Electrochemistry Communications.

A one-pot synthesis may significantly shorten the number of steps required to produce F-GO. As the world deals with increased pollution and threats to human health due to the increase of various toxic metal ions entering the environment from the expanding industrial and agricultural sectors, there is a need to develop high-performance sensors that can detect and monitor these pollutants. Electrochemical methods are considered to be sensitive, highly reliable and convenient.

Dr. Chen commented, *"We found Zenyatta's high-purity Albany graphite to be an ideal material for the production of graphene oxide and subsequent application development. Interestingly, it appears that the distinct particle size and morphology of Albany graphite are important factors in the ease of production of high-quality graphene and GO. These properties are likely the result of the deposit's unique geological genesis first identified by Lakehead's geology professor Dr. Andrew Conly in 2012."*

In 2015, Dr. Aicheng Chen, Professor of Chemistry and Canada Research Chair in Materials and Environmental Chemistry at

Lakehead, was awarded a Natural Science and Engineering Research Council of Canada ('NSERC') Collaborative Research and Development ('CRD') grant. The two primary focuses of this NSERC CRD project are the characterization of Zenyatta's graphite and the development of new materials for practical applications derived from it.

Since the award of the grant, Dr. Chen and his research group have made significant advances in the development of new materials from Albany high-purity graphite. Dr. Chen's team has also supplied small samples of GO to selected third parties for testing as a component of advanced anode material for the lithium ion batteries and as a reinforcement additive for high strength composites, in applications where light weight and high strength are critical for success.

In addition to its incorporation into advanced batteries, graphite and its derivatives (like graphene and GO) have been employed in the development of various sensors and electronic devices. Recent investigations of graphene derived from graphite have demonstrated significantly improved electrochemical performance in these systems due to its unique electronic properties, enhanced surface area, novel mechanical and thermal properties, and chemical stabilities, when compared to the parent graphite. These qualities are vital for emerging high-tech or cleantech applications.

Dr. Bharat Chahar, VP of Market Development for Zenyatta, stated, *"The Company is excited with the significant progress that Dr. Chen and his research team have made at Lakehead in their application development which has resulted in their first product-related patent application. The Company is convinced of the importance of graphene and GO materials and*

is confident that the amount invested globally on R&D by corporations, governments and academics will result in eventual large-scale commercialization. Zenyatta continues to play a very active role in R&D related to graphene research by providing consistent high-purity Albany graphite test samples to collaborative research facilities globally."

Zenyatta is developing its unique Albany graphite deposit in Ontario, Canada. The Company's highly crystalline graphite deposit is situated 30 km north of the Trans-Canada Highway, power line and natural gas pipeline near the communities of Constance Lake First Nation and Hearst. A rail line is located 70 km away with an all-weather road approximately 10 km from the deposit.

Dr. Bharat Chahar, P.E., VP Market Development for Zenyatta, is a Qualified Person for the purposes of National Instrument 43-101 and has reviewed, prepared and supervised the preparation of the technical information in this news release.

To find out more on Zenyatta Ventures, please visit **www.zenyatta.ca**

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certain assumptions and risk factors that could cause actual results to differ materially from the expectations of Zenyatta included in this news release. This news release includes certain “forward-looking statements”, which often, but not always, can be identified by the use of words such as “believes”, “anticipates”, “expects”, “estimates”, “may”, “could”, “would”, “will”, or “plan”. These statements are based on information currently available to Zenyatta and Zenyatta provides no assurance that actual results will meet management’s expectations. This testing does not represent a statistically large sample size. Furthermore, these positive results do not mean that Zenyatta can extract and process Albany graphite for high-purity graphite applications on an economic basis. Without a formal independent feasibility study, there is no assurance that the operation will be economic. Forward-looking statements include estimates and statements with respect to Zenyatta’s future plans, objectives or goals, to the effect that Zenyatta or management expects a stated condition or result to occur, including the expected timing for release of a pre-feasibility or feasibility studies, the expected uses for graphite in the future, and the future uses of the graphite from Zenyatta’s Albany deposit. Since forward-looking statements are based on assumptions and address future events and conditions, by their very nature they involve inherent risks and uncertainties. Actual results relating to, among other things, results of metallurgical processing, ongoing exploration, project development, reclamation and capital costs of Zenyatta’s mineral properties, and Zenyatta’s financial condition and prospects, could differ materially from those currently anticipated in such statements for many reasons such as, but are not limited to: failure to convert estimated mineral resources to reserves; the preliminary nature of metallurgical test results; the inability to identify target markets and satisfy the product criteria for such markets; the inability to complete a prefeasibility study; the inability to enter into offtake agreements with qualified purchasers; delays in

obtaining or failures to obtain required governmental, environmental or other project approvals; political risks; uncertainties relating to the availability and costs of financing needed in the future; changes in equity markets, inflation, changes in exchange rates; fluctuations in commodity prices; delays in the development of projects; capital and operating costs varying significantly from estimates and the other risks involved in the mineral exploration and development industry; and those risks set out in Zenyatta's public documents filed on SEDAR. This list is not exhaustive of the factors that may affect any of Zenyatta's forward-looking statements. These and other factors should be considered carefully and readers should not place undue reliance on Zenyatta's forward-looking statements. Although Zenyatta believes that the assumptions and factors used in preparing the forward-looking information in this news release are reasonable, undue reliance should not be placed on such information, which only applies as of the date of this news release, and no assurance can be given that such events will occur in the disclosed time frames or at all. Zenyatta disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, other than as required by law.

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