

ZEN Graphene Solutions and Guelph University Researchers File Patent on Graphene Oxide Production Method – A Key Ingredient in its Virucidal Ink

written by Raj Shah | September 28, 2020

September 28, 2020 ([Source](#)) – **ZEN Graphene Solutions Ltd.** (TSXV: ZEN) and (OTC: ZENYF) (“**ZEN**” or the “**Company**”) is pleased to announce that the University of Guelph (Guelph) has filed a provisional patent regarding an electrochemical exfoliation (ECE) process to produce graphene oxide (GO) from Albany Pure™ Graphite.

Highlights:

- ZEN and Guelph file patent on novel GO production method
- Exfoliation method is designed to be scalable, low cost, low energy and environmentally friendly
- GO is a key ingredient in ZEN’s proprietary virucidal ink
- ZEN’s virucidal ink still 99% effective a minimum of 35 days after application

As reported in the [November 14, 2019 news release](#), ZEN signed an 18-month exclusive initial option agreement with Guelph for intellectual property regarding the ECE process that was being developed by Prof. Aicheng Chen and his group. The current exclusive global license agreement with Guelph formalizes and extends this initial option agreement which now has no expiry

providing that all agreed payments continue to be made on an annual basis.

Also, through the recently awarded [NGen grant](#), ZEN will now work closely with Prof. Chen and his team to optimize and scale-up the ECE process to produce GO from its unique precursor Albany Pure™ Graphite. This process was designed to be scalable, low cost, low energy, and environmentally friendly to produce high-quality, few-layer graphene oxide at ZEN's Guelph facility.

ZEN can also produce GO through a proprietary chemical method which was recently filed as part of the virucidal ink_provisional ink. This novel method, which has been tested at bench scale, takes advantage of ZEN's unique Albany Pure™ Graphite and has several advantages over the improved Hummers' method as it uses significantly less chemical reagents and no phosphoric acid. ZEN will be moving rapidly towards optimization, production scale-up and commercialization of its graphene-based ink which has attracted significant interest since its 99% virucidal activity against COVID-19 was announced on [September 22nd 2020](#).

ZEN's CEO, Dr. Francis Dube commented, "This second provisional patent application in a week creates a solid commercial foundation for the company to launch its first commercial product, our virucidal ink at a crucial time when COVID-19 is starting its second wave. We believe ZEN's product can make a serious contribution in the fight against this global pandemic!"

For companies interested in adding this antiviral ink to their personal protective equipment manufacturing or other potential commercial applications, please send us an email at antiviralink@zengraphene.com

ZEN Graphene Solutions is seeking advanced applied graphene-

related research projects where ZEN could support this research by providing customized graphene materials and, in some cases, funding in exchange for some commercialization rights to be negotiated. Please submit your proposals in confidence to researchproposals@ZENGraphene.com.

Disclaimer

The company is not making any express or implied claims that its products have the ability to cure or contain the COVID-19 virus at this time.

About ZEN Graphene Solutions Ltd.

ZEN is a graphene technology solutions company with a focus on the development of graphene-based nanomaterial products and applications. The unique Albany Pure™ Graphite Project provides the company with a potential competitive advantage in the graphene market as independent labs in Japan, UK, Israel, USA and Canada have independently demonstrated that ZEN's Albany Pure™ Graphite is an ideal precursor material which easily converts (exfoliates) to graphene, using a variety of mechanical, chemical and electrochemical methods.

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To find out more about ZEN Graphene Solutions Ltd., please visit our website at www.ZENGraphene.com. A copy of this news release and all material documents in respect of the Company may be obtained on ZEN's SEDAR profile at www.sedar.ca.

Forward-Looking Statements

This news release contains forward-looking statements. Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties. Although ZEN 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. ZEN 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. 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 release.