

# ZEN Graphene Solutions Announces First Results from Graphene Oxide Silver Nanoparticle Ink Formulations

written by Igor Makarov | June 12, 2020



June 11, 2020 ([Source](#)) – **ZEN Graphene Solutions Ltd.** (TSXV: ZEN) (“ZEN” or the “**Company**”) is pleased to announce it has received a report on the first batch of samples that were submitted to Western University’s ImPaKT Facility Biosafety Level 3 lab (UWO)

for virucidal efficacy testing. The batch-testing program’s focus is to confirm and measure virucidal potency of the graphene oxide-based silver nanoparticle composite inks that were produced at ZEN’s Guelph lab.

The company prepared five different formulations with varying oxygen contents and silver nanoparticle loadings for testing at a concentration of 4g/L. All five variations with concentrations diluted to as low as 0.16g/L reduced viral replication. These formulations slowed growth of the COVID-19 Coronavirus in a media designed to replicate human cells. The June 10 Western University ImPaKT Facility report included the following results: “all compounds that were undiluted, 1:5, and 1:25 dilutions had reduced viral replication (of the SARS-CoV-2 (COVID-19) coronavirus) compared to the no-drug control, potentially reflecting a 25-50% reduction in virus replication.”

Given the indications in yesterday’s UWO report, ZEN’s R&D team has started preparing new formulations designed for virucidal

testing directly on fabric applications such as masks. These formulations will be delivered in the coming days and management has asked the UWO team to expedite testing given the immediate global need for enhanced personal protective equipment with verified virucidal capability.

Francis Dubé, ZEN CEO, commented, “ZEN is pleased with the initial results which confirm that the silver nanoparticle-doped graphene oxide can play a role in the fight against the COVID-19 Pandemic. ZEN is moving quickly to prove, optimize, develop and deliver products that could play a role in the pandemic. The opportunity to combat COVID-19 with clinically proven graphene science motivates the entire ZEN team. These new formulations are an exciting step for us in bringing graphene materials to personal protective equipment.”

Western University and the ImPaKT Facility team have reviewed and approved the news release.

Mr. Peter Wood, P.Eng, P.Geo., President of ZEN Graphene Solutions Ltd., is the “Qualified Person” for the purposes of National Instrument 43-101 and has reviewed, prepared and supervised the preparation of the technical information contained in this news release.

### **About ZEN Graphene Solutions Ltd.**

ZEN is an emerging graphene technology solutions company with a focus on the development of graphene-based nanomaterial products and applications. The unique Albany 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.

To find out more about ZEN Graphene Solutions Ltd., please visit our website at [www.ZENGraphene.com](http://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](http://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.