

Nano Science, Technology and Industry Scoreboard

## ZEN Graphene Solutions Develops Graphene-based Ink with 99% Virucidal Activity Against COVID-19

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ZEN Graphene Solutions Ltd. is pleased to report that after 5 months of optimization, it has developed a novel graphene-based virucidal ink with 99% effectiveness against COVID-19.

ZEN Graphene Solutions Ltd. has received results from the latest round of testing of its proprietary, virucidal graphene-based ink formulation at Western University's ImPaKT facility Biosafety Level 3 laboratory. Two graphene-based ink samples at different concentrations were applied to N95 mask filtration media and then exposed to the SARS-CoV-2 virus that causes COVID-19 and tested for antiviral properties in accordance with ISO 18184:2019.

Very significant virucidal activity was recorded and reported, achieving 99% inactivation of the virus for both samples in 3 separate tests each and verified through a second round of testing. Of significance, the antiviral effect of the second round of testing was on material that was prepared 35 days earlier demonstrating the ongoing virucidal activity of ZEN's proprietary ink. For those interested in seeing the report, please contact the company directly.

The research and development of this antiviral ink formulation was conducted entirely by ZEN's research team at its Guelph, Ontario facility using a graphene product that was produced from its Albany PureTM Graphite.

ZEN is now developing plans to bring this novel virucidal ink to commercial production including working with regulatory authorities and government agencies to fast track this product to Canadian and global markets to help the fight against the Coronavirus pandemic. ZEN is expanding the testing of this graphene-based ink formulation to include pathogenic bacteria and fungi and will report on these tests as soon as the results are available.

CEO Dr. Francis Dube commented, "These recent results have dramatically exceeded our

expectations with our ink achieving 99% virucidal activity against the SARS-CoV-2 virus 35 days after production of the samples. I am very proud of our Research and Development team for their exceptional work in developing this novel formulation. We are excited about the role our ink can play in the fight against this global pandemic and are moving quickly to mobilize our resources to bring this product to market."

Read the <u>original article</u> on ZEN Graphene Solutions.