

Zentek is well positioned to commercialize several revolutionary nanotech graphene health products in 2022

written by Investor News Writer | November 12, 2021

[Zentek Ltd.](#) (TSXV: ZEN) (formerly ZEN Graphene Solutions Ltd.) is a trail blazing company in the world of nanotechnology and graphene, particularly in the healthcare sector. That is because not only does it make its own graphene but Zen has also partnered with other companies to expand the uses of graphene in areas such as (graphene coated) masks clothing, and other PPE, as well as COVID-19 rapid saliva tests, graphene colloidal antiviral/bacterial/fungal detection, and, hopefully, improved air purifiers, and air conditioning systems using graphene filtration.

Zentek summarizes this by saying that “Nanotechnology and graphene have the potential to protect against pathogens, detect and treat disease, clean our water, make building materials stronger and produce cleaner energy. With almost limitless potential to improve people’s lives, we are uniquely positioned to create significant value through our next-generation healthcare solutions and beyond.”

Zentek is currently focusing on commercializing into health care prevention, detection, and treatment



IP development and commercialization company focused on next-gen, nanotechnology-enabled healthcare solutions

Development pipeline is robust with opportunities in three primary verticals:



PREVENTION

ZENGuard™ for PPE & indoor air quality markets



DETECTION

Aptamer-based rapid detection for numerous pathogens



TREATMENT

Antimicrobial compound as a therapeutic and healthcare product

Source: [Zentek Company presentation](#)

Zentek's vision is for a healthier and safer world through nanotechnology, and its mission is to develop innovative nanotechnologies, with their partners, that improve people's lives. What a great basis to grow a company from.

Zentek's stock price has risen [281%](#) over the past year after more than quadrupling the year before. From the March 1, 2020 low of C\$0.30 the stock **has risen a whopping 20.7x**, now sitting at [C\\$6.20](#). Tesla and some junior lithium stocks are the only stocks I know that have achieved a 20x return in the past 2 years. This puts Zentek up there with the most elite performers on the stock market in recent times.

What's next for Zentek

- **A Nasdaq listing** – On October 13, 2021, Zentek (then ZEN Graphene Solutions) [announced](#) that it has submitted an application to list its common stock on The Nasdaq Capital Market® (“Nasdaq”) and that it has retained Donohoe Advisory Associates, LLC, to assist with the listing

process. That process is ongoing with no listing date yet announced.

- **ZENGuard™ international patent application to complete soon.** ZENGuard™ is a graphene-silver ‘coating’ with 99% antimicrobial activity, including against COVID-19. Zentek is commercializing ZENGuard™ with mask manufacturer, Trebor Rx, to produce masks, filters and gloves. ZENGuard™ is Health Canada approved. Zentek’s coating can also be used on all types of personal protective equipment including masks, gloves, clothes, and shields to reduce the spread of pathogens including COVID-19. Similar products can be used in air purification systems. There is also the potential (if approved) to use similar compounds as pharmaceutical products against infectious diseases.
- **Zentek’s Pathogen Detection Technology (aptamer-enabled) initially for COVID-19 to be launched by [01, 2022](#).** Zentek has the [worldwide exclusive rights](#) to commercialize a rapid, saliva-based COVID-19 antigen testing technology. The key differentiating factor here is that the test can detect much lower quantities of virus compared to other tests, thereby being able to potentially detect low viral loads at the early stages of infection when the patient may be asymptomatic. The test is exceptionally accurate (similar to current PCR tests), saliva-based, affordable, scalable and provides results in under 10 minutes. The test still requires final Health Canada and FDA approval. Zentek recently [announced](#) the development of an improved aptamer with a higher binding affinity for the COVID-19 Delta variant as well as reduced result production time of the aptamer-based sensor from 18 hours to 30 minutes with more consistent results. Zentek also [announced](#) this month that it “has been selected as one of three technologies for phase 1 of the Innovation Solutions Canada (ISC)

challenge to develop a portable detection device for SARS-CoV-2 in wastewater. ZEN has received a \$148,000 award from ISC to develop its first prototype.”

Zentek CEO, Greg Fenton, recently [stated](#): “In collaboration with our partners, including Dr. Li and his entire McMaster team, **we have made tremendous progress advancing our aptamer-based rapid detection platform toward commercialization.** A key aspect of the technology is its adaptability through the production of new aptamers to detect different pathogens leveraging the existing platform – and the process of building out this aptamer and disease-detection library is well underway with our colleagues at McMaster.”

ZENGuard™ has enormous potential to scale up from current capacity of coatings for 32 million masks per month to a potential [~800 million masks per month by Q1, 2022](#)

ZENGuard™ Technology

zentek



Typical ASTM Level 3, 3-ply Surgical Mask

ZENGuard™ Antimicrobial Coating

Seasonal Flu

Tuberculosis

SARS-CoV-2

VS

- Patent pending, non-toxic, antimicrobial coating that is **99+%** effective deactivating numerous pathogens, including SARS-CoV-2
- BFE/VFE > **99.99%**, which we believe is a first for surgical masks, and **98.9%** more bacteria and **97.8%** more virus particles compared to a typical ASTM Level 3, 3-ply uncoated mask

Note: Season flu and tuberculosis visuals for illustration purposes only and have not yet been tested

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Source: [Zentek Company presentation](#)

Closing remarks

Zentek has come a long way in the past 2 years with enormous technological progress in its graphene based nanotechnology products with a renewed health focus to prevent, detect, and, hopefully, soon treat pathogens, including COVID-19. This has been achieved via a number of collaborations, partnerships, patents, and approval by regulatory bodies.

The result of all these efforts should now start to show in 2022 as Zentek's commercial rollout of its innovative nanotech graphene products gains speed, led by its revolutionary ZENGuard™ coating and the company's rapidly advancing Pathogen Detection Technology collaboration.

Zentek trades on a market cap of C\$551 million and continues to outperform the market.

Disclosure: The author is long ZEN Graphene Solutions (TSXV: ZEN).