Zentek's ZenARMOR is potentially a major breakthrough in the US$23.8B+ Global Anti-Corrosion Coatings Market

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The anti-corrosion coatings market may not sound very glamorous, but it is a multi-billion dollar business. According to Vantage Market Research, the global anti-corrosion coatings market was valued at US$23.8 billion in 2021 and is forecast to grow to $43.2 billion by 2028. Zentek quoted from a 2012 U.S. Congressional Briefing that "corrosion-related costs amounted to US$452 billion per year in the US, including US$22 billion for the Department of Defense." This just highlights the importance of anti-corrosion coatings and the fact the market for coatings can grow much larger over time.

According to a November 2022 report: "The anti-corrosion coating material is widely used in marine industries, oil & gas, automotive, and infrastructure… Additionally, increased infrastructure investment, particularly in developing and emerging countries, has been a major driver of demand for anticorrosion coatings."

Canadian graphene technology specialist company Zentek Ltd. (NASDAQ: ZTEK | TSXV: ZEN) has just announced that they have developed a novel corrosion protection technology known as ZenARMOR™. The technology is based on graphene oxide and Zentek's CEO and Director Greg Fenton stated it is "better than the best existing anti-corrosion systems currently in the

marketplace.”

Given that Zentek trades on a market cap of just C$228 million, the opportunity to break into a US$23.8 billion market with a major breakthrough technology could be potentially game-changing for Zentek.

ZenARMOR™

ZenARMOR™ is a graphene oxide additive that can be added to existing paint and applied to surfaces to help prevent corrosion. Initial testing results on ZenARMOR™ showed no signs of corrosion even after 1,500 hours of salt spray testing. The best systems on the market start breaking down at 1,000 hours. Zentek spent 2 years developing ZenARMOR™ and it has been third-party validated. Greg Fenton commented (video here) that he sees ZenARMOR™ as a “potentially game-changing technology”.

The next steps will be further testing by potential end users over the next 6-9 months, if successful, it is to be followed with the commercialization of ZenARMOR™. If Zentek gets to the stage of selling the product, the Company believes it can ramp up supply to meet demand.

In the February 8, 2023 announcement, Zentek stated:

“The Company also reports that the ZenARMOR™ corrosion protection self-healing coating was submitted to the Innovative Solutions Canada (ISC) testing stream – Military Call for Prototypes. The Company is pleased to announce that it has been advised that ZenARMOR™ has met the mandatory and technical evaluation criteria of the Military Call for Prototypes, Military Component, and is considered conditionally qualified, pending further steps such as matching our innovation with a Government of Canada Organization (GCO) interested in testing

ZenARMOR™.”

ZenGUARD™

In further breaking news, Zentek’s Heating, Ventilation, and Air Conditioning (“HVAC”) filtration product ZenGUARD™ has performed well in Stage 2 testing. ZenGUARD™ is a graphene-based coating that can be used to upgrade existing HVAC filters. Zentek announced on February 7, 2023 that “ZenGUARD™-treated MERV 8 filters achieved 34.56% filtration efficiency of the Phi6 virus, a surrogate for COVID-19 during a single air exchange. This compares to 7.24% for uncoated MERV 8 filters, a 27.32% net improvement.”

Zentek CEO, Greg Fenton, stated: “The ZenGUARD™ technology is a simple and practical way to improve one of the biggest problems facing workspaces, planes, trains, buses, and other indoor spaces: indoor air quality……..we believe our patented ZenGUARD™ technology has the potential to not only protect people’s health by removing more pathogens from the air we breathe, but to do so in a way that reduces financial burden and environmental footprint.”

More details here in a CEO video discussing ZenGUARD™.

Zentek’s Guelph manufacturing center is one of the world’s largest graphene-based production facilities (produces the graphene oxide for coatings for ZenARMOR™ and ZenGUARD™)

Source: Zentek website

Closing remarks

Zentek continues to innovate at a rapid pace with all types of

graphene-related products. Commercialization is underway with their revolutionary ZenGUARD™ being used in face marks which remove 98.9% more bacteria and 97.8% more virus compared to standard surgical masks. Zentek is also developing numerous other graphene-based products such as icephobics (help prevent ice buildup), fuel additives (to reduce carbon emissions), and fire-retardant coatings just to name a few. Graphene is a revolutionary product and Zentek is at the cutting edge of developing and commercializing numerous uses for graphene-based products.

InvestorIntel will continue to keep investors up to date with Zentek's amazing progress in what promises to be another potentially superb year for the company.