Bristow goes with technology and selects the stock to watch in 2022

written by InvestorNews | January 7, 2022

Welcome to 2022! I'm cautiously optimistic that this will be the year we get to put Covid in the rear-view mirror and get on with life without always waiting for the next shoe to drop (or a new variant to take hold). I'm happy to put 2021 in the history books and anticipate the bright future that could be. In that vein, I'd like to look ahead to what I think could be an exciting story for 2022. Now don't get me wrong, I'm not saying this is my top pick or suggesting it will go up. This is simply my perspective on a company that has a lot going on that could be rewarded by the market this year.

The path of least resistance, after this week's market action, would be to pick a uranium stock. Between how this group performed in 2021 and even more impressively, the first couple of trading days of 2022, it would certainly make for an easy article to write. I'm also a fan of junior base and precious metal mining companies, especially ones with plenty of results pending, but not today. The future is technology, so my exciting stock for 2022 is a technology company that posted a respectable 35% return in 2021 but is well positioned for 2022. It also happened to evolve out of a junior mining exploration company so it's the best of both worlds.

If you haven't figured out what company I'm talking about yet, it's Zentek Ltd. (TSXV: ZEN), formerly known as ZEN Graphene Solutions Ltd. There is so much going on at Zentek it's hard to know where to start. The Company currently describes itself as an IP development and commercialization company focused on next-

gen healthcare solutions in the areas of prevention, detection and treatment. Zentek is currently focused on commercializing ZENGuard™, a patent-pending coating shown to have 99% antimicrobial activity, including against COVID-19, and the potential to use similar compounds as products against infectious diseases. The Company also has an exclusive agreement to be the global commercializing partner for a newly developed aptamer-based rapid pathogen detection technology. But that's just the tip of the iceberg in my opinion.

The near-term catalyst is all about the antimicrobial coating ZENGuard™, which was developed as a virucidal graphene-oxide ("GO") based compound to be applied as a coating onto fabrics, which included personal protective equipment such as face masks in an effort to increase protection afforded by such products. In September 2021 the Company received Health Canada approval for the sale of ZENGuard™ coated masks and entered into a binding definitive license and supply agreement with Trebor Rx Corp. for the supply of ZENGuard™ to coat face masks and potentially other health care products. To date, Trebor has purchased, and the Company has delivered, quantities of ZENGuard™ coating sufficient for the production of 10,000,000 masks currently done via third parties. However, development is underway of the Company's industrial scale facility to produce ZENGuard™ and to coat materials. The Company anticipates assembly and installation of the industrial scale production equipment to be completed during Q1 2022, at which point production is expected to commence while commissioning, optimization and production ramp-up occurs over the following two to three months. Once this industrial process is in operation, the Company expects the production capacity of ZENGuard™ to increase significantly.

Zentek recently closed a bought deal public offering and a non-

brokered private placement for aggregate proceeds of C$33 million to assist in the build out of their facility as well as research and development, acceleration of business growth opportunities and working capital. Other growth opportunities include the development of a new carbon-based nanotechnology-enhanced icephobic coating to reduce ice accretion. The Company anticipates applications for aircraft, wind turbines, ocean vessels, and building structures to increase safety and efficiency outcomes in ice-forming weather conditions. In late November Zentek announced it had been awarded an R&D test contract through the Innovation Solutions Canada Testing Stream to test ZENGuard™ coated HVAC filters with interest from 3 different units within the National Research Council of Canada. Other innovations include the development of a stable diesel fuel additive, which increased the performance of diesel fuel by up to 10% in initial testing.

There is an awful lot going on at Zentek so I would encourage you to go check out their website to learn more because I've only scratched the surface of this stock to watch in 2022. Granted it's not a small cap with a market cap of roughly $466 million after the closing of the latest capital raise earlier this week. Nevertheless, there are plenty of near-term catalysts with having their own production facility operational in the next few months and some pretty creative and unique opportunities being developed to propel this Company into the future.

ZEN Graphene is changing the world one nanomaterial at a time

written by InvestorNews | January 7, 2022

Scientists have not unanimously settled on a precise definition of nanomaterials, but agree that they are partially characterized by their tiny size, measured in nanometers. A nanometer is one millionth of a millimeter – approximately 100,000 times smaller than the diameter of a human hair. For a while, nanomaterials were going to save the world by making everything faster, stronger and maybe even higher. But Olympic motto aside, there was a lot of hype about nanomaterials and a decade(s) later not much to show for all that optimism. Or maybe there is if you look in the right places.

Nano-sized particles exist in nature and can be created from a variety of products, such as carbon or minerals like silver, but nanomaterials by definition must have at least one dimension that is less than approximately 100 nanometers. One such company that is making progress in the world of nanomaterials is ZEN Graphene Solutions Ltd. (TSXV: ZEN), despite starting life as a mining company. In fact, the Company still maintains its unique Albany Graphite Project, which provides the company with a potential long-term competitive advantage in the graphene market. The unique genesis of the Albany deposit, resulting in very fine-grained graphite crystallites, yields an ideal graphite precursor material for conversion to high-value graphene, graphene oxide and graphene quantum dots that can be used in a wide variety of applications.

However, don’t kid yourself into thinking this is a mining story. It is very much a technology story that has evolved out

of the special characteristics of the graphite available at the Albany deposit. ZEN has a broad reach as far as solutions being derived from nanomaterials. Front and center is the ZENGuard™ antimicrobial coating which can be utilized on PPE, filtration media (HVAC filters) and other materials such as paper, cardboard etc. as a preventative 'catch-and-kill' mechanism. The Company has developed a non-toxic, antimicrobial coating that is 99+% effective against numerous pathogens, including COVID-19, with initial testing showing a further 98% effectiveness after 108 days. ZENGuard™ on masks, gloves and other PPE to protect front-line workers, the public and reduce the spread of pathogens (including and beyond COVID-19) has an estimated global market of US$52 billion. While the potential market for ZENGuard™ on air filters to kill airborne pathogens in homes, schools, hospitals and commercial and industrial spaces is estimated at US$66 billion. Not a bad starting point.

As a spin-out from the focus on everything COVID-19, ZEN recently announced exclusive worldwide rights to commercialize rapid, saliva-based COVID-19 antigen testing technology in partnership with McMaster University. This technology is exceptionally accurate (similar to current PCR tests), saliva-based, affordable, scalable and provides results in under 10 minutes. It appears we aren't going to rid ourselves of this pesky virus anytime soon. So perhaps the best solution to getting on with some semblance of normal is accurate, rapid testing.

Being an optimist and looking beyond COVID-19 and hopefully no other mutation or pathogens running amok in public, we find that ZEN has developed a stable diesel fuel additive, which increased the performance of diesel fuel by up to 10% in initial testing. Greg Fenton, ZEN CEO commented: "With global market estimates for diesel fuel alone near $1 trillion, the size of the challenge to reduce emissions from this level of demand is

massive, but so is the opportunity for novel solutions to help us be more efficient in our usage." Regardless of whether you want zero emissions tomorrow, as long as everyone continues to order stuff off Amazon and you want fresh fruit in your grocery store, diesel demand is going to be with us for a while. So rather than be an environmental zealot, why not embrace solutions that help reduce emissions in the interim until we can finally achieve our ultimate goal. Which is a good segue into research ZEN is doing into lower-cost, reduced weight, higher performance and capacity energy storage applications by developing graphene-wrapped silicon anodes for Li-ion batteries.

Then there's the classic stereotype of nanomaterials making everything better. ZEN has its fingers in corrosion protective coating for reduced corrosion and enhanced longevity for steel. Polymers that enhance strength, longevity, and conductivity that can be used as versatile replacements for metallic electromagnetic shields. There's also enhanced strength and electrical conductivity aluminum for the automotive industry and enhanced strength and longevity cement based composites for the construction industry. I'm probably missing something but you get the picture.

On a final note, on June 16th ZEN and Trebor Rx Corp. provided an update on the Health Canada review process for the ZENGuard™-enhanced, ASTM level 3 surgical mask. Clearly, the sooner they can get approvals and get mask production underway, the sooner they can start to realize the revenue from the Trebor agreement signed in November 2020 or a minimum of 100 million masks/filters. As a prospective investor, this is the news I'm eagerly awaiting.