

Sixth Wave Innovation moves its IXOS gold extraction technology forward with USD\$50M+ multi-stage contract

written by Tracy Weslosky | October 13, 2022

Until recently Sixth Wave has been a company with very promising technology but has been looking to turn that into dollars (revenue). That has now changed and could lead to a boost in the company's fortunes.

[Sixth Wave Innovations Inc.](#) (CSE: SIXW | OTCQB: SIXWF) ("Sixth Wave") is a nanotechnology company. The company's technology focuses on 'detecting, capturing, and releasing' of target substances at the molecular level using specialized 'molecularly imprinted polymers' ("MIPs"). Six Wave is in the process of commercializing its Affinity™ cannabinoid purification system, AMIPS™ virus/bacteria detection, as well as their IXOS® extraction polymers for the gold mining industry. All of these are based on Sixth Wave's MIPs technology which can detect, capture and release almost any target molecule.



Source: [Sixth Wave Innovation website](#)

On September 12, 2022, Sixth Wave [announced](#) that it and Magnus Mineral Resources (PVT) Ltd had signed a USD\$50M+ contract for the implementation of its IXOS Mining Technology at the Penhalonga Gold Mine and beyond. The announcement [stated](#) that Sixth Wave has signed "a three phase test and implementation contract... that will field SIXW's patented IXOS® molecular

imprinted polymer for extraction and purification of gold and silver... at the Penhalonga Gold Mine, Zimbabwe. Additionally, Magnus Resources plans to build and deploy three smaller processing plants to assist regional artisanal mining groups in Zimbabwe.” The company goes on to say that one of the benefits of using its extractive technology is to change “artisanal mining operations from dangerous and environmentally destructive practices involving mercury amalgamation.”

The first phase of the agreement involves laboratory extraction and recovery testing. The second involves pilot-plant process design, engineering, implementation for gold recovery from oxides; as well as delivery/commissioning of three portable VAT leach adsorption/desorption/recovery plants that are capable of processing 100tpd of ore. The third phase will involve the testing and optimization of extraction for the transitional and refractory ore present at the mine.

While it is still early days and a lot needs to be achieved, Sixth Wave now has a pathway towards achieving significant revenue and a project to demonstrate that their technology is effective at scale in real world conditions. Plenty of risks still exist in terms of fulfilling the contract as well as Zimbabwe’s country risk.

The key advantages of Sixth Wave’s IXOS technology is that it has a high gold recovery ([average 95%](#)), it recovers gold with 90% less cyanide usage than conventional cyanidation, and has reduced energy requirements which lower processing costs.

It is often the case when new technology comes along there will be some resistance to change. However once it has been demonstrated to be effective at scale then the disruption begins, meaning others begin to seriously consider and adopt the technology. We have seen this with electric vehicles and we may

be about to see this with gold mining via Sixth Wave and Magnus Resources' plan to deploy the IXOS MIPs technology in Zimbabwe.

If the project succeeds this should open the door to numerous other opportunities for Sixth Wave Innovations. Investors can be excited given this opportunity in the mining sector, not to mention all the [other areas of opportunity](#) across multiple sectors where Sixth Wave's multi-purpose MIPs can be effective.

Sixth Wave Innovations trades on a market cap of just [C\\$5.4M](#). Will this be the turning point for the company? Time will tell and some patience is required. But it certainly looks very promising.

Disclaimer: *The editor of this post may or may not be a securities holder of any of the companies mentioned in this column. None of the companies discussed in the above feature have paid for this content. The writer of this article/post/column/opinion is not an investment advisor, and is neither licensed to nor is making any buy or sell recommendations. For more information about this or any other company, please review all public documents to conduct your own due diligence. To access the InvestorIntel.com Disclaimer, [click here](#)*

Sixth Wave hits the market with MIP coatings and sensors

for the biodetection of viruses and bacteria

written by InvestorNews | October 13, 2022

[Sixth Wave Innovations Inc.](#) (CSE: SIXW | OTCQB: SIXWF) (“Sixth Wave”) is a nanotechnology company focused on the ‘detection and extraction’ of target substances at the molecular level using specialized molecularly imprinted polymers (MIPs).

Sixth Wave’s nanotechnology uses MIPs to detect and extract almost any target molecule



Source: [Sixth Wave Innovation website – About MIPs](#)

There is a huge list of potential industries that can benefit from Sixth Wave’s MIP technology; however key areas of interest for now for Sixth Wave are health (rapid COVID-19 detection), cannabis production (cannabinoid purification), security, gold and lithium extraction.

AMIP COVID-19 test with improved sensitivity

[Announced](#) on August 19, 2021, Sixth Wave has improved the sensitivity and capability of its leading-edge nanotechnology AMIP to detect the presence of the COVID-19 virus at levels below 1,000,000 virus particles/mL. Dr. Garrett Kraft, Vice President of Innovation at Sixth Wave, [stated](#): “Hitting this level of detection is a huge achievement for us. With this technical milestone, we are fulfilling the sensitivity requirements for many of our intended end-use applications for high throughput screening.”

Note: Accelerated Molecular Imprinted Polymers (AMIPs) are rapid

acting MIPs.

The clinical significance of a more sensitive test is the potential to detect COVID-19 earlier and in patients that are asymptomatic, when lower levels of the virus may be present. According to Grandview Research, the global COVID-19 diagnostics market size was estimated at [USD 84.4 billion](#).

Sixth Wave is quickly moving through a program of development and scale-up milestones toward a wide range of AMIPs virus rapid detection devices.

MIP coatings and sensors for biodetection of viruses and bacteria

Sixth Wave recently [announced](#) that they have filed for a patent for their MIP coatings and sensors for biodetection. The patent focuses on the synthesis and processing of MIPs containing detection elements for viruses and bacteria. Sixth Wave [state](#): “The patent will be solely in the name of Sixth Wave, who will have exclusive ownership of the IP, subject to a reasonably agreed-upon license fee. The work with York University is an expansion of Sixth Wave’s efforts with the AMIP product line and focuses on detecting both viral and bacterial-based pathogens in fluid samples.”

This could potentially be a huge business one day for Sixth Wave given the global need for rapid detection of viruses and bacteria.

More about Sixth Wave

Sixth Wave has collaborated for research and testing with some of the largest entities in the chemical, resources, education, security, defense and medical sectors. Sixth Wave’s systems are all patented or patent pending in 40+ countries worldwide.

Sixth Wave's key product names are IXOS® (a line of extraction polymers for the gold mining industry), Affinity™ (for the cannabis industry), and AMIPs (for sensitive and rapid COVID-19 testing). Sixth Wave recently [announced](#) an Affinity system has been shipped from the contract manufacturer and is on the way to Sixth Wave and then onto the first customer, Green Envy Extracts.

Other prospective products in development include a wide range of AMIPs Virus/Bacteria rapid detection devices, Personal Protective Equipment applications such as SIXW's Smart Mask™ (see news dated [May 15, 2020](#)), and smart clothing, airborne sensors, breathalyzers, ELISA-based technologies, cartridge/lateral flow designs, and others.

Closing remarks

Sixth Wave is at an exciting stage as the Company rolls out the commercialization of its Affinity™ cannabinoid purification system, IXOS® gold mining extraction technology, and soon plans the rollout of their AMIPs virus rapid detection devices and other products.

The idea of one day being able to potentially use a Sixth Wave MIP sensor to rapidly detect viruses and bacteria pathogens is quite amazing, and if it happens, would be a significant advancement for medical diagnosis.

Trading on a market cap of just C\$30 million, stay tuned for more developments from this fast-moving company.