

# Sixth Wave Hits Key Achievement for a New & Innovative Rapid Detection System for COVID-19

written by InvestorNews | February 10, 2021

Yesterday, [Sixth Wave Innovations Inc.](#) (CSE: SIXW | OTCQB: ATURF | FSE: AHUH ) announced a key achievement in the development of its advanced technology for the rapid detection of the virus that causes COVID-19.

Using nanotechnology, Sixth Wave focuses on the extraction and detection of target substances at the molecular level using specialized molecularly imprinted polymers (MIPs).

The company creates a molecular imprint in the polymer for the target substance and then can detect its presence based on the specific size, shape, and/or chemistry of the target.

## **Announcement of Initial Imprinting**

Sixth Wave made a breakthrough announcement yesterday that the research team successfully completed the first molecular imprint of the SARS-CoV-2, the virus that causes COVID-19, using the company's patent-pending process and technology called Accelerated Molecular Imprinted Polymers (AMIPs™).

Over the next few weeks, this imprint will now go through a series of tests at the University of Alberta to determine the accuracy of the virus detection. The imprint process will be modified until a precise process is determined that results in a polymer with an "exceptional accuracy" in identifying the virus.

Once the polymer has reached its efficacy targets, it can then form the basis of various virus detection products including airborne detection tools, hand-held devices, and wearables.

One simple application is adding the polymer to a mask. The mask can then filter out any SARS-CoV-2 virus that tries to pass through the mask and can also change color if the user's exhale contains the virus. A fast, effective and easy way of detecting the COVID-19 virus.

Dr. Jonathan Gluckman, President and CEO of Sixth Wave, commented,

*"With the completion of the initial imprint, we've demonstrated the process of making this polymer. More importantly, we now have an AMIPs prototype customized for SARS-CoV-2, which we can run through a battery of tests, optimizing its design with each successive imprint version. At the end of this process, we aim to have a Definitive Imprint with an extremely high affinity, or attraction, to the Virus, with clinically relevant detection levels and reliability."*

### **Advantages of Sixth Wave's Technology**

Currently, COVID-19 testing is expensive and often requires laboratory work, expensive equipment, well-trained technicians, and can take days to get accurate results. In addition, the tests use biological materials that are affected by climate conditions.

Sixth Wave's testing solution has many advantages over a lab-based test – it is simpler, faster, and does not require any skilled person to administer. If the polymer is implemented in a breathalyzer, simply breathe into the device and it will tell you if your breath contains the SARS-CoV-2 virus.

In addition, the polymer can be easily replicated at a low cost, it doesn't need to be stored at low temperatures, and the same process can be used to detect other viruses or diseases.

## **Technology Already Used in Gold and Cannabis Processing**

Sixth Wave's technology has already been used in the gold mining industry. In gold extraction, Sixth Wave's product is called IXOS® and is a line of polymers formulated for the extraction of gold from cyanide leach solutions.

In September 2020, Sixth Wave announced that it signed a non-binding Letter of Intent for the trialing of Sixth Wave's IXOS® purification polymer at Rio2's (TSXV: RIO | OTC: RIOFF | FSE: 1SB) Fenix Gold Project in Chile.

In the cannabis extraction industry, Sixth Wave's Affinity™ system can lower the cost by streamlining the process of capturing and extracting cannabinoids (THC and CBD) while still yielding high purity distillates and isolates.

In April 2020, Sixth Wave signed a deal with Green Envy for the purchase of at least three Affinity™ extraction units. Green Envy is a cannabinoid extraction company specializing in the production of high-quality concentrates, distillates, and edibles. Green Envy will integrate the Affinity™ units into its existing process platform for the production of full-spectrum distillates.

Sixth Wave expects to recognize revenue from this sale starting in the first fiscal quarter in 2021.

## **Final Thoughts**

Sixth Wave can apply its MIP solutions across a broad range of industries. The company is currently commercializing solutions

in the cannabis and gold mining industries, and is testing an innovative solution for the detection of the virus that causes COVID-19.

Unfortunately, this current health crisis is not the first global pandemic and probably won't be the last but Sixth Wave's technology could provide a faster and cheaper way for virus detection this year.

Sixth Wave currently trades at \$0.35 with a Market Cap of \$ 30.7 million.

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# Sixth Wave Innovations leads virus detection through breath testing

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## Using nanotechnology to quickly identify pathogens

Imagine if taking a coronavirus test was as simple as an alcohol breathalyzer, or a pregnancy test, and the results just as fast. One company has developed a test that uses **molecular imprinted polymers** with the possibility of detecting almost any pathogen, and is now using their technology to develop a way to detect for COVID-19 as easily as using a saliva test or a swab test.

[Sixth Wave Innovations](#) (CSE: SIXW | OTCQB: ATURF | FSE: AHUH) is a development stage nanotechnology company with patented

technologies that focus on the extraction and detection of target substances at the molecular level using highly specialized 'molecular imprinted polymers' (MIPs). The target substances can be anything, such as pathogens (viruses & bacteria), gold, or anything made of molecules (that's every substance).

Sixth Wave has technology to make a 'polymer imprint' for molecules including viruses. Sixth Wave is working to develop a molecular imprint for the coronavirus so they can capture the virus in their polymer and then apply various techniques to detect the virus such as colormetrics or electronics.

The company is working toward incorporating the technology into a mask **so you could wear a mask that both protects and detects for COVID-19**. Another concept is to have the MIP inside a coated barcode strip which you would then scan with your smartphone to see if you have been infected or not. (See: [Sixth Wave working on a virus breath test.](#))

President, CEO and Founder Dr. Jonathan Gluckman [explained that a](#) "virus has a size and shape and we create an imprint in our polymer for that exact virus. Then we will detect that directly based on our chemistry." He continued that Sixth Wave is "working to integrate this into masks and breathalyzers and then we can just utilize the breath, as we all know that's the main transmission method. If you think about putting a mask on, not only will that mask provide protection, it can also, right there, be the test for COVID-19."

Highlighting the advantages of Sixth Wave's COVID-19 test over other tests, Dr. Gluckman also said that **the test will be cheaper, faster, less invasive, and easy to use**.

Dr. Gluckman [says](#) that Sixth Wave's COVID-19 detection technology is currently under development, but the Company has

successfully launched and commercialized other products with similar properties. The coronavirus tests are planned to be ready for an [early 2021](#) rollout. The company has received a grant from the Canadian government to work with York University and the CTRI to use its virus detection technology to detect COVID-19 virus in wastewater supplies and in air handling systems.

**Sixth Wave Innovations can detect and extract anything at the molecular level – Target markets include COVID-19 testing, gold extraction, and cannabis purification**



[Source](#)

**Sixth Wave Innovations technology can be used for other applications**

**Gold extraction**

IXOS® is a line of extraction polymers for the gold mining industry 100% developed and owned by Sixth Wave and patented/patent pending in 40+ countries worldwide. CEO Gluckman says the technology can save gold mining companies about US\$100/oz on their processing costs based on pilot scale test results for multiple mines.

**Sixth Wave Innovations IXOS® can save gold miners up to US\$100/oz in gold processing costs**



Source: [Corporate presentation](#)

**Cannabis Purification**

Sixth Wave is in the process of commercializing its Affinity™ cannabinoid purification system. The Affinity™ Technology for the medical and recreational cannabis industry is 100% developed and owned by Sixth Wave with a patent pending. Affinity™ products [are now rolling out](#) and starting to generate revenue for Sixth Wave, including an initial 300 Affinity units.

## **Other applications**

Sixth Wave's Molecular Imprinted Polymers (MIPs) have also been applied in industries including security (SAFE-T explosives detective wipes), mining (gold & silver extraction, also removal of mercury), and other pathogen detection. The potential list of applications is enormous.

## **Sixth Wave Innovations planned revenue streams**



Source: [Corporate presentation](#)

## **Closing remarks**

History has repeatedly shown how mankind makes incredible innovative technology during incredible times. Here we are facing one of this century's greatest pandemics and scientists globally are racing to develop better diagnostic tests, treatments and vaccines.

In the case of Sixth Wave Innovations it is fast-tracking the development of an innovative technology to detect and extract polymer molecules. They are now focused on adapting their technology to make a polymer imprint of the coronavirus that can, if successful, make COVID-19 detection as simple and fast as a breath test, whether on a test strip or even on a dual-purpose face mask. Imagine wearing a face mask that can also

detect COVID-19. Sixth Wave's COVID-19 detection technology targeted for early 2021, and if successful it will be a massive win-win for the public and also for Sixth Wave Innovations.

Meanwhile, Sixth Wave will be advancing their near term revenues from Affinity™, and later hopefully from IXOS®. The current market cap of Sixth Wave Innovations is only C\$21m thereby presenting a tremendous early stage speculative opportunity for investors.