

# Sixth Wave and CTRI Announce "Green Alternatives" Project for Gold Leaching & Recovery

Vancouver, British Columbia--(Newsfile Corp. - March 3, 2020) - **Sixth Wave Innovations Inc. (CSE: SIXW) (OTC: ATURF) (FSE: AHUH)** (the "Company" or "**Sixth Wave**") is pleased to announce that the jointly submitted proposal for the testing of IXOS® gold extraction technology in collaboration with the Centre Technologique des Résidus Industriels ("CTRI"), and a major top 10 gold producer (the "**Testing Partner**") has been approved. The initiative, known as "Green Alternatives for Gold Leaching and Recovery", is scheduled to commence in March of 2020 (the "Project").

The purpose of the Project is to validate alternative, environmentally-friendly, leaching technologies as well as Sixth Wave's IXOS® technology for the extraction of gold from both cyanide and alternative lixivants. Testing will be completed on low grade tailings originating from a gold producing site operated by the Test Partner. The Project will examine a variety of alternative lixivants for the leaching of gold, including thiourea, thiocyanate, thiosulfate and halogens (bromine, iodine, etc.).

After initial lixiviant test work, IXOS® gold extraction beads (the "**IXOS® Beads**") will be tested in direct comparison to activated carbon as a means of extracting gold from various leach solutions. This examination will also include benchmark testing of the IXOS® Beads as a means of extracting gold from a cyanide leach solution.

"This is an important initiative for Sixth Wave and our IXOS® high performance gold extraction products," said Dr. Jon Gluckman, President & CEO of Sixth Wave. "The IXOS® platform has garnered sales and distribution agreements for multiple international markets, via recently announced alliances with respected names such as Sumitomo and CyPlus. Increasingly, the remaining job at this point is to effectively get the word out on the capability of this technology to outperform activated carbon in head-to-head trials. We thank CTRI for facilitating this relationship with a prominent gold producer, and for the opportunity to showcase the relative merits of IXOS® in direct comparison testing and especially as part of this 'green mining' initiative."

The Project targets the industry's interest in new and innovative approaches to leach and recover gold as a replacement, in whole or in part, for conventional processes. In order to focus on lowering CAPEX and OPEX, and to comply with environmental and regulatory constraints, the Testing Partner has specified that success will be assessed based on the ability of the process to recover previously inaccessible low-grade gold, while minimizing associated costs.

## About IXOS® Technology

The foundation of Sixth Wave's products for the resource sector is IXOS® Beads, advanced extraction media developed using Molecularly Imprinted Polymers ("**MIPs**"). MIPs contain specifically engineered cavities designed to target and capture molecules of interest, based on molecular geometry and ionic charge. IXOS® media have the ability to attract target molecules to the exclusion of other undesirable elements.

For gold applications, the IXOS® platform is capable of selectively targeting gold while rejecting contaminants such as copper, mercury, and other non-target elements potentially contained in a gold-bearing cyanide leach solution. Non-selectivity is a comparative disadvantage of activated carbon, which tends to recover a variety of undesirable ancillary metals which affect gold process economics and purity. Indicative performance metrics of IXOS® and activated carbon are as follows:

Metric <sup>1</sup>	IXOS®	Activated Carbon <sup>2</sup>
Gold loading capacity (oz / ton)	550 oz	75-125 oz
Gold selectivity (%)	Up to 97%	50-60%
Elution time	3 hours	18-24 hours
Efficiency <sup>3</sup>	97%+	80-95%

1. IXOS® metrics are indicative of bench / pilot scale testing results. Metrics for activated carbon are as provided by testing partners.
2. Results vary significantly based on ore characteristics at a particular mine.
3. Efficiency refers to percentage of gold ultimately collected by a processing circuit.

Sixth Wave's IXOS® extraction nanotechnologies have extensive global intellectual property protection, with patents issued or pending in over 40 countries worldwide. The Company has developed strategic alliances with respected industry partners, including CyPlus GmbH of Hanau-Wolfgang, Germany, and Sumitomo Corporation of Americas, which are currently introducing IXOS® gold extraction products to their respective global customer bases (see [Sixth Wave Press Release dated Feb 13, 2020](#)).

IXOS® Beads have been tested by leading independent laboratories and gold mining companies in North and South America. Test results for extraction of gold from cyanide leach solutions have demonstrated the ability to capture elevated quantities of gold as compared to traditional activated carbon. MIPs nano technology can be applied to other target elements in addition to

gold, including both inorganic and organic elements which require removal from solution.

## About CTRI

CTRI is a technology transfer center aimed at stimulating innovation and technological development linked to the recovery of industrial residues and under-used resources. The Centre offers innovative technological solutions, applied R&D and advanced technical tests in support of companies pursuing practical solutions to their industrial residues. CTRI offers its customers a variety of products and services, including applied research activities, technological development, technical support, customized training, dissemination activities and technology transfer. For more information, please visit: <http://www.ctri.qc.ca/>

## About Sixth Wave

Sixth Wave is a development stage nanotechnology company focused on extraction and detection of target substances at the molecular level using its patented technologies in the highly specialized field of molecularly imprinted polymers. Sixth Wave is in the process of commercializing IXOS®, a line of extraction polymers for the gold mining industry, and together with the Company, it has developed extraction polymers for the extraction of CBD, THC and other cannabinoids from cannabis extracts under the name Affinity™.

For more information about Sixth Wave, please visit our web site at: [www.sixthwave.com](http://www.sixthwave.com)

## ON BEHALF OF THE BOARD OF DIRECTORS

"*Jon Gluckman*"

Jonathan Gluckman, Ph.D., President & CEO

*For information, please contact the Company:*

Phone: (801) 582-0559

E-mail: [info@sixthwave.com](mailto:info@sixthwave.com)

## Cautionary Notes

*This press release includes certain statements that may be deemed "forward-looking statements" including statements regarding IXOS® system scale-up, performance and commencement of full-scale production. All statements in this release, other than statements of historical facts, that address future events or developments that the Company expects, are forward looking statements. Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual events or developments may differ materially from those in forward-looking statements. Such forward-looking statements necessarily involve known and unknown risks and uncertainties, including the risks that IXOS® system performance may not be maintained at production level, that anticipated cost savings and performance levels relative to competing technologies may not be realized, that other technologies with better performance or costs may be developed by competitors, and other risks detailed in the Company's filing statement available at [www.sedar.com](http://www.sedar.com), which may cause the Company's actual performance and financial results in future periods to differ materially from any projections of future performance or results expressed or implied by such forward-looking statements.*



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