



PyroGenesis Announces Acquisition of Intellectual Property Rights Related to the PUREVAP™ Nano Silicon Reactor and Nano-Silicon Development

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MONTREAL, March 26, 2024 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX: PYR) (OTCQX: PYRGF) (FRA: 8PY), a high-tech company (the "Company" or "PyroGenesis") that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions which are geared to reduce greenhouse gases (GHG) and address environmental pollutants, today announces that, further to HPQ Silicon Inc.'s ("HPQ Silicon") press release dated [November 17, 2023](#), indicating that HPQ Silicon would no longer be pursuing the commercial development of the PUREVAP™ Nano Silicon Reactor (NSiR) in order to focus on other initiatives, PyroGenesis has reacquired the intellectual property rights to the NSiR technology on a no-cost basis.

The PUREVAP™ NSiR is a proprietary process, originally designed and developed by PyroGenesis on behalf of HPQ Nano Silicon Powders Inc. ("HPQ Nano"), a wholly-owned subsidiary of HPQ Silicon, that can use different purities of silicon (Si) as feedstock to make a wide range of spherical silicon nano- and micro-powders and wires, for potential use across various applications including as a potential replacement metal in lithium-ion batteries.

Under the terms of a 2020 Development and Purchase Agreement between PyroGenesis and HPQ Nano, all rights in the PUREVAP NSiR process (including any intellectual property rights) were assigned to HPQ Nano on condition that should HPQ Nano choose not to commercialize the technology, PyroGenesis would have the option to have the ownership of this technology revert back to it at no additional cost.

"Nano silicon is still in its infancy, and so is the understanding of its usefulness. Reacquiring the intellectual property related to the PUREVAP NSiR allows us to continue to explore the full spectrum of possibilities for this metal," said Mr. P. Peter Pascali, President and CEO of PyroGenesis.

By reacquiring this technology, PyroGenesis will also be reacquiring the rights to the invention entitled "NANO-SILICON PARTICLES/WIRE PRODUCTION BY ARC FURNACE FOR RECHARGEABLE BATTERIES", which is subject to US and PCT patent applications.

The Company's development of technology to produce nano-silicon is part of the Company's [three-tiered solution ecosystem](#) that aligns with economic drivers that are key to global heavy industry. Nano-silicon production via the PUREVAP NSiR is part of the Company's Commodity Security & Optimization tier, where the recovery of viable metals, and the optimization of production to increase output, helps to maximize raw materials and improve the availability of critical minerals.

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a proud leader in the design, development, manufacture and commercialization of advanced plasma processes and sustainable solutions which reduce greenhouse gases (GHG) and are economically attractive alternatives to conventional "dirty" processes. PyroGenesis has created proprietary, patented and advanced plasma technologies that are being vetted and adopted by multiple multibillion dollar industry leaders in four massive markets: iron ore pelletization, aluminum, waste management, and additive manufacturing. With a team of experienced engineers, scientists and technicians working out of its Montreal office, and its 3,800 m² and 2,940 m² manufacturing facilities, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. The operations are ISO 9001:2015 and AS9100D certified, having been ISO certified since 1997. For more information, please visit: www.pyrogenesis.com.

Cautionary and Forward-Looking Statements

This press release contains "forward-looking information" and "forward-looking statements" (collectively, "forward-looking statements") within the meaning of applicable securities laws. In some cases, but not necessarily in all cases, forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "targets", "expects" or "does not expect", "is expected", "an opportunity exists", "is positioned", "estimates", "intends", "assumes", "anticipates" or "does not anticipate" or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might", "will" or "will be taken", "occur" or "be achieved". In addition, any statements that refer to expectations, projections or other characterizations of future events or circumstances contain forward-looking statements. Forward-looking statements are not historical facts, nor guarantees or assurances of future performance but instead represent management's current beliefs, expectations, estimates and projections regarding future events and operating performance.

Forward-looking statements are necessarily based on a number of opinions, assumptions and estimates that, while considered reasonable by the Company as of the date of this release, are subject to inherent uncertainties, risks and changes in circumstances that may differ materially from those contemplated by the forward-looking statements. Important factors that could cause actual results to differ, possibly materially, from those indicated by the forward-looking statements include, but are not limited to, the risk factors identified under "Risk Factors" in the Company's latest annual information form, and in other periodic filings that the Company has made and may make in the future with the securities commissions or similar regulatory authorities, all of which are available under the Company's profile on SEDAR+ at www.sedarplus.ca, or at www.sec.gov. These factors are not intended to represent a complete list of the factors that could affect the Company. However, such risk factors should be considered carefully. There can be no assurance that such estimates and assumptions will prove to be correct. You should not place undue reliance on forward-looking statements, which speak only as of the date of this release. The Company undertakes no obligation to publicly update or revise any forward-looking statement, except as required by applicable securities laws.

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