



Titanium Powder Produced with the NexGen™ Plasma Atomization System; Significant CAPEX and OPEX Reductions

April 11, 2019

MONTREAL, April 11, 2019 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (<http://pyrogenesis.com>) (TSX-V: PYR) (OTCQB: PYRNF) (FRA: 8PY), a TSX Venture 50® high-tech company, (the "Company", the "Corporation" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma atomized metal powder, plasma waste-to-energy systems and plasma torch products, announced today that, further to its press release dated March 19th, 2019, PyroGenesis has now produced titanium powder on its NexGen™ Plasma Atomization System with production rates in excess of 25 kg/h. Of note, these increased production rates are achieved with lower operating ("OPEX") and capital ("CAPEX") costs.

NEW OPPORTUNITY 1: NEXGEN™ OPENS NEW DOORS FOR TITANIUM POWDER

On March 19th, 2019 PyroGenesis unveiled its game-changing NexGen™ Plasma Atomization System, which produces metal powder at over 25 kg/h, shattering any published plasma-atomized production rates for titanium known to management, and announced having fulfilled a specialty metal powder order using the NexGen™ unit.

PyroGenesis announces today that it has successfully produced titanium powder on the NexGen™ Plasma Atomization System at over 25kg/h while maintaining all the characteristics demanded by the Additive Manufacturing (3D Printing) industry (ie. oxygen content, flowability, density, etc.). Of note, this increased production rate was achieved at lower OPEX per hour, which translates into significant cost per kilogram savings.

"A limiting factor in titanium adoption in the marketplace has been its cost," said Mr. Massimo Dattilo, Vice President of PyroGenesis Additive. "By lowering the cost of a typically expensive product, NexGen™ has opened the door to other markets and applications which, until now, found titanium to be too expensive to utilize. We expect that the NexGen™ price reduction will drive an increased adoption of PyroGenesis' powders into new markets and applications where the higher cost of plasma atomized powders was typically restrictive."

NEW OPPORTUNITY 2: NEXGEN™ CAN NOW PROCESS NEW MATERIALS

"By increasing the production rate, and thereby lowering the cost of production, the NexGen™ process can now produce materials via plasma atomization that were typically cost restrictive," continued Mr. Massimo Dattilo, Vice President of PyroGenesis Additive. "As a result of NexGen™'s game-changing advantages, there is now an opportunity for the Additive Manufacturing industry to start experimenting with other materials which can now be produced economically with the NexGen™ Plasma Atomization System. Essentially, NexGen™ will allow PyroGenesis to convert low value materials to high quality powder that, until now, have been deemed to be too expensive to produce."

SIGNIFICANT CAPEX REDUCTION AS WELL

"In addition to a significant reduction in OPEX, the NexGen™ technology also boasts significant CAPEX reductions," said Mr. P. Peter Pascali, President and CEO of PyroGenesis. "The CAPEX reductions occur on two fronts: (i) the reactor itself has been simplified compared to conventional plasma atomization resulting in lower fabrication costs and, (ii) given the increased production rate, the number of reactors and associated service equipment required has been reduced by up to a factor of four. This is a clear advantage over anyone using our legacy technology. We are now in a rush to incorporate these advantages into our current production process before it is frozen during audits by aerospace clients. The production process is typically frozen by an aerospace end-user as a condition for contracting powder long-term."

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a TSX Venture 50® high-tech company, is the world leader in the design, development, manufacture and commercialization of advanced plasma processes and products. We provide engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, advanced materials (including 3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 3,800 m² manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Our core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Our operations are ISO 9001:2015 certified, and have been since 1997. PyroGenesis is a publicly-traded Canadian Corporation on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace. For more information, please visit www.pyrogenesis.com

This press release contains certain forward-looking statements, including, without limitation, statements containing the words "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "in the process" and other similar expressions which constitute "forward-looking information" within the meaning of applicable securities laws. Forward-looking statements reflect the Corporation's current expectation and assumptions and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those anticipated. These forward-looking statements involve risks and uncertainties including, but not limited to, our expectations regarding the acceptance of our products by the market, our strategy to develop new products and enhance the capabilities of existing products, our strategy with respect to research and development, the impact of competitive products and pricing, new product development, and uncertainties related to the regulatory approval process. Such statements reflect the current views of the Corporation with respect to future events and are subject to certain risks and uncertainties and other risks detailed from time-to-time in the Corporation's ongoing filings with the securities regulatory authorities, which filings can be found at www.sedar.com, or at www.otcmarkets.com. Actual results, events, and performance may differ materially. Readers are cautioned not to place undue reliance on these forward-looking statements. The Corporation undertakes no obligation to publicly update or revise any forward-looking statements either as a result of new information, future events or otherwise, except as required by applicable securities laws. Neither the TSX Venture Exchange, its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) nor the OTCQB accepts responsibility for the adequacy or

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