UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the month of September 2022

Commission File Number: 001-39989

PYROGENESIS CANADA INC.

(Translation of registrant's name into English)

1744, William St. Suite 200 Montreal, QC, H3J1R4 Canada

(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

FORM 20-F [] FORM 40-F [X]
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Note: Regulation S-T Rule 101(b)(1) only permits the submission in paper of a Form 6-K if submitted solely to provide an attached annual report to security holders.
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):
Note: Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

On September 15, 2022, the Registrant issued a press release, a copy of which is attached hereto as Exhibit 99.1 and is incorporated herein by reference.

EXHIBIT INDEX

Exhibit Number Description

99.1 Press Release dated September 15, 2022

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PYROGENESIS CANADA INC.
(Registrant)

Date: September 15, 2022

/s/ P. Peter Pascali P. Peter Pascali Chief Executive Officer

PyroGenesis Ranks 9th on the TSX30 List Recognizing Canada's Top 30 Performing Stocks

MONTREAL, Sept. 15, 2022 (GLOBE NEWSWIRE) -- PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX: PYR) (NASDAQ: PYR) (FRA: 8PY), a high-tech company (hereinafter referred to as the "Company" or "PyroGenesis"), that designs, develops, manufactures and commercializes advanced plasma processes and sustainable solutions which are geared to reduce greenhouse gases (GHG), is pleased to announce today that it has been recognized by the Toronto Stock Exchange as a top-performing company on the Toronto Stock Exchange's 2022 TSX30 list (TSX30 highlights the 30 top-performing TSX stocks) based on dividend-adjusted share price appreciation. Over the period considered, the value of PyroGenesis shares appreciated 353%. PyroGenesis is honored to have been recognized in the top 10 ranking as the ninth fastest growing company on the 2022 TSX30 list.

"I would like to take this opportunity to emphasize how delighted we are to have been recognized by the TSX30 program, more specifically as one of the top 10, and to be among such a distinguished group of companies," said Mr. P. Peter Pascali, CEO and Chair of PyroGenesis. "I could not be prouder of the PyroGenesis team for continuing to deliver extraordinary results despite the pandemic and accompanying disruptions, and of our investors and shareholders for supporting and sharing our vision."

Founded in 2019, the TSX30 is an annual program that recognizes companies that have sustained excellence over the long term by driving growth in their industries, investors, and Canadian economy. PyroGenesis is proud to be among the 30 companies on this year's list that have demonstrated their ability to thrive in challenging times by adapting to uncertainty and remaining committed to building for the future.

"My experience running a high-growth public company has been over the top exhilarating. It has been an octane-charged neverending series of decision-making, and strategy sessions that make you regret having only one life to live", added Mr. Pascali. "I have had the unique opportunity to see our plans, despite the many challenges, give birth to a living and breathing entity. The greatest joy and pleasure remain to be lived as the Company grows from its current state to a full-fledged stand-alone entity. As a company, we are proud of what we have built and excited about what is to come. Our inclusion in TSX30 is a testament to the dedication and energy we bring to the industry, our customers, and our investors, all while we pursue our ultimate goal of becoming a leading global provider of GHG emission reduction solutions."

For more information on the TSX30, please visit: www.tsx.com/tsx30

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc., a high-tech company, is a 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.

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.sec.gov. 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 Toronto Stock Exchange, its Regulation Services Provider (as that term is defined in the policies of the Toronto Stock Exchange) nor the NASDAO Stock Market, LLC accepts responsibility for the adequacy or accuracy of this press release.

For further information please contact:

Rodayna Kafal, Vice President, IR/Comms. and Strategic BD

Phone: (514) 937-0002, E-mail: ir@pyrogenesis.com

RELATED LINK: http://www.pyrogenesis.com/