

HPQ Completes Latest Fumed Silica Pilot Test, Moves Closer to Achieving Highest Material Grades

MONTREAL, Canada, October 23, 2025 — <u>HPQ Silicon Inc.</u> ("HPQ" or the "Company") (TSX-V: <u>HPQ</u>, OTCQB: <u>HPQFF</u>, FRA: <u>008</u>), a technology company driving innovation in advanced materials and critical process development, announces the successful completion of Test Series #7 of the proprietary Fumed Silica Reactor (FSR) pilot plant developed by its wholly owned subsidiary, HPQ Silica Polvere Inc. (HSPI) [1].

The pilot plant, designed and built by engineering partner PyroGenesis Inc. (TSX: PYR, OTCQX: PYRGF, FRA: 8PY1), marks another step in HPQ's drive to commercialize a direct-quartz-to-fumed-silica manufacturing process that eliminates the need for costly intermediate steps and sharply reduces the total energy and carbon footprint of production. The process uses a plasma-based reactor to convert quartz directly into fumed silica, a high-value product used in a wide range of applications, including batteries, electronics, cosmetics, and sealants.

"Each test series brings us closer to proving that low-energy-low-carbon, direct-from-quartz fumed silica can be produced reliably and competitively," said Bernard Tourillon, President and CEO of HPQ Silicon Inc. and HPQ Silica Polvere Inc. "This work continues to validate years of R&D investment and demonstrates the industrial scalability of HPQ's proprietary process."



Image of test #7 material (Source PyroGenesis)



Before initiating Test Series #7, PyroGenesis engineered implemented two sets of key improvements.

The <u>first</u> focused on expanding the material's surface area, a critical measure of fumed silica performance, which has already advanced from 28 m²/g surface area in Test #4 to 44 m²/g in Test #5 and 136 m²/g in Test #6.

The target surface area for test cycle #7, based on the engineering modifications, is to surpass 150 $\text{m}^2/\text{g}^{[2]}$. Surface areas in the 150 – 200 m^2/g range are consistent with market specifications for premium fumed silica

The <u>second</u> set of enhancements prepared the FSR system for multi-day continuous operation, targeting the production of 200 kilograms of material suitable for distribution to multiple potential customers under non-disclosure agreements for independent evaluation.

A set of samples have been shipped to an accredited third-party laboratory for certification, with results expected within ten business days.

"Once these results are received, we will be able to define the goals and engineering upgrades for Test Cycle #8, which we anticipate will take us closer to the end goal of the highest fumed silica surface area grades of 300 m²/g," added Tourillon. "We're moving from proof-of-concept toward measurable market traction—aligning with HPQ's broader objective of creating low-energy carbon, high-value materials that compete globally while supporting North American supply-chain resilience."

REFERENCE SOURCES

- [1] A wholly owned subsidiary of HPQ Silicon Inc., when technology supplier PyroGenesis announced its intention to exercise its option to acquire a 50% stake in HSPI in May 2024.
- [2] These estimates are based on management's interpretation of past test results. The Company cautions that these findings are preliminary and may not be indicative of the final outcome.

 They remain valid only until the receipt of the independent third-party laboratory analysis.

About HPQ Silicon

<u>HPQ Silicon Inc.</u> is a Quebec-based TSX Venture Exchange industrial issuer (<u>TSX-V: HPQ</u>) focused on innovation in advanced materials and critical process development. In partnership with its research and development partner Novacium — of which HPQ is a shareholder — the Company is advancing next-generation silicon-based anode materials (Gen3) for batteries, commercializing its ENDURA+ lithium-ion cells, and developing breakthrough clean-hydrogen and waste-to-energy technologies, for which HPQ holds exclusive North American rights.

HPQ is also pursuing proprietary technologies to become a low-cost, zero-CO₂ producer of fumed silica and high-purity silicon, with technical support from PyroGenesis Inc. Together, these initiatives position HPQ to capture growth opportunities in the energy storage, clean hydrogen, and advanced materials markets essential to achieving global net-zero goals.

For more information, please visit HPQ Silicon web site.

About PyroGenesis Inc.

PyroGenesis leverages 30 years of plasma technology leadership to deliver advanced engineering solutions to energy, propulsion, destruction, process heating, emissions, and materials development



challenges across heavy industry and defense. Its customers include global leaders in aluminum, aerospace, steel, iron ore, utilities, environmental services, military, and government. From its Montreal headquarters and local manufacturing facilities, PyroGenesis' engineers, scientists, and technicians drive innovation and commercialization of energy transition and ultra-high temperature technology. PyroGenesis' operations are ISO 9001:2015 and AS9100D certified, with ISO certification maintained since 1997. PyroGenesis' shares trade on the TSX (PYR), OTCQX (PYRGF), and Frankfurt (8PY1) stock exchanges.

Cautionary Note Regarding Forward-Looking Information

This press release contains forward-looking statements regarding HPQ Silicon's Fumed Silica Reactor project. Such statements reflect management's expectations on future performance, pilot plant testing, commercialization, financing, and strategic milestones. They involve assumptions about technology, market conditions, financing, permits, supply chains, and economic factors. However, risks—including delays, financing challenges, regulatory changes, competition, commodity prices, geopolitical factors, and market demand—may cause actual results to differ materially.

Readers are cautioned that forward-looking information is uncertain and not guarantees of future performance. Additional risk factors are detailed in HPQ's Annual Information Form on SEDAR+.

A more detailed cautionary note regarding forward-looking information related to HPQ Fumed Silica is available for download [here].

Further information regarding the Company is available in the SEDAR+ database (www.sedarplus.ca), and on the Company's website at: http://www.hpgsilicon.com/

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

This News Release is available on the company's <u>CEO Verified Discussion Forum</u>, a moderated social media platform that enables civilized discussion and Q&A between Management and Shareholders.

Source: HPQ Silicon Inc.

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