Xanadu and Bluefors Partner to Redefine Cryogenic Infrastructure for Utility-Scale Quantum Computing

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TORONTO, Sept. 29, 2026 (GLOBE NEWSWIRE) -- Xanadu Quantum Technologies Limited ("Xanadu"; NASDAQ/TSX: XNDU), a leading photonic quantum computing company, and Bluefors, the industry-leader in cryogenic solutions, announced today a strategic partnership to develop a novel, high-performance cryogenic prototype for utility-scale quantum computing (USQC). This work aims to realize a shared vision of scalable modular cryogenic infrastructure for USQC.

This partnership represents a key milestone for Xanadu and Bluefors' joint development efforts. The USD $ multi-million collaboration will leverage Bluefors' cutting-edge cryogenic solutions and aims to establish a foundational blueprint not only for Xanadu's planned USQC data centre, but for all future USQC data centres.

"Until recently, the industry assumed that USQC would require massive, industrial-scale cryoplants," said Dr. Christian Weedbrook, Founder and Chief Executive Officer of Xanadu. "Our collaboration with Bluefors has yielded a concept that integrates their most advanced technology into a compact module. This approach is expected to remove the need for traditional cryoplants, greatly improving the scalability and economics of future quantum data centres."

Looking ahead, Xanadu and Bluefors plan to utilize insights from this development to engineer a mass-manufacturable cryogenic module tailored specifically for single-photon detectors and USQC in a data centre environment.

"Bluefors and Xanadu share a vision of making utility-scale quantum computing achievable," said Kim Povlsen, Chief Executive Officer of Bluefors. "We are delivering a high-powered, modular and cryo-tested solution that combines cooling and quantum infrastructure designed to grow alongside our customers' technology roadmaps. By meeting the cooling demands that infrastructure investments need to scale, we help customers optimize time-to-value and build a strong foundation to accelerate the next generation of fault-tolerant quantum computers."

About Xanadu

Founded in 2016, Xanadu is a Canadian photonic quantum computing company with the mission to build quantum computers that are useful and available to people everywhere. Xanadu is building fault-tolerant quantum computers using light, with systems designed to compute at room temperature. Xanadu develops both hardware and software, including PennyLane, its open-source quantum computing platform. Xanadu is the first pure-play photonic quantum computing company to list on public markets (Nasdaq/TSX: XNDU) and is recognized globally for its breakthroughs in scalable quantum technologies. Visit xanadu.ai or follow on X @XanaduAI.

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About Bluefors

Bluefors envisions a world where everyone has access to the power of quantum. As the world-leading quantum infrastructure company providing the fundamental quantum computing infrastructure of cryogenic systems, wiring, and ongoing system support, we are the trusted partner for the world's most advanced companies that build and aim to harness the future of quantum. With a revenue of over EUR 210 million, over 700 employees, and more than 1,800 systems delivered and operating around the world, we are helping to accelerate the imminent arrival of quantum datacenters and the practical application of scalable quantum computing for companies across the widest range of modalities.

Forward-Looking Statements

This communication includes "forward-looking statements" within the meaning of the U.S. federal securities laws and "forward-looking information" within the meaning of applicable Canadian securities laws (collectively, "forward-looking statements"). Forward-looking statements may be identified by the use of words such as "estimate," "plan," "project," "forecast," "intend," "will," "expect," "anticipate," "believe," "seek," "target," "continue," "could," "may," "might," "possible," "potential," "predict" or similar expressions that predict or indicate future events or trends or that are not statements of historical matters. We have based these forward-looking statements on current expectations and projections about future events. These statements include: statements regarding the strategic multi-million dollar partnership with Bluefors and the ability to successfully collaborate; the ability to develop a novel, high-performance cryogenic prototype and realize a scalable modular cryogenic infrastructure for utility-scale quantum computing (USQC); the ability of the collaboration to establish a foundational blueprint for Xanadu's planned USQC data centre and future quantum data centres; the expected performance, cooling capabilities, integration, and modularity of the cryogenic solution, including its ability to accommodate high-density optical fiber and flex-cabling for Superconducting Nanowire Single-Photon Detectors (SNSPDs) near 2 Kelvin; the potential to eliminate the need for traditional industrial-scale cryoplants and improve the scalability and economics of future quantum data centres; plans to utilize development insights to engineer a mass-manufacturable cryogenic module; the expected acceleration of fault-tolerant quantum computers; and Xanadu's mission to build quantum computers that are useful and available to people everywhere.

These forward-looking statements are provided for illustrative purposes only and are not intended to serve as, and must not be relied on as, a guarantee, an assurance, a prediction or a definitive statement of fact or probability. Actual events and circumstances are difficult or impossible to predict and will differ from assumptions, many of which are beyond the control of Xanadu. These forward-looking statements are subject to known and unknown risks, uncertainties and assumptions that may cause the actual results of Xanadu, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such statements. Such risks and uncertainties include: **the risk that the strategic partnership with Bluefors may not achieve its intended technical or economic benefits; technical and engineering challenges in designing, prototyping, testing, and mass-manufacturing modular cryogenic infrastructure operating near 2 Kelvin; risks associated with reliance on Bluefors as a key infrastructure partner and potential supply chain or manufacturing delays; the risk that the prototype may not successfully accommodate required SNSPD optical fiber and flex-cabling at scale or eliminate the need for industrial-scale cryoplants; that Xanadu is pursuing an emerging technology, faces significant technical challenges and may not achieve commercialization or market acceptance; Xanadu's historical net losses and limited operating history; that there is substantial doubt about Xanadu's ability to continue as a going concern; Xanadu's expectations regarding future financial performance, capital requirements and unit economics; Xanadu's use and reporting of business and operational metrics; Xanadu's competitive landscape; Xanadu's dependence on members of its senior management and its ability to attract and retain qualified personnel; the potential need for additional future financing; Xanadu's ability to manage growth and expand its operations; potential future acquisitions or investments in companies, products, services or technologies; Xanadu's reliance on strategic partners and other third parties; Xanadu's concentration of revenue in contracts with government or state-funded entities; Xanadu's ability to maintain, protect and defend its intellectual property rights; risks associated with privacy, data protection or cybersecurity incidents and related regulations; the use, rate of adoption, and regulation of artificial intelligence and machine learning; uncertainty or changes with respect to laws and regulations; uncertainty or changes with respect to taxes, trade conditions and the macroeconomic environment; material weaknesses in Xanadu's internal control over financial reporting and its ability to maintain internal control over financial reporting and operate as a public company; the outcome of any legal proceedings or government investigations that may be commenced against Xanadu; Xanadu's ability to issue equity or equity-linked securities in the future; and other factors described in Xanadu's filings with the SEC (www.sec.gov) and the Canadian Securities Administrators (www.sedarplus.com). These forward-looking statements are based on certain assumptions, including that none of the risks identified above materialize; that there are no unforeseen changes to economic and market conditions, and that no significant events occur outside the ordinary course of business. Additional information concerning these and other factors that may impact such forward-looking statements can be found in filings and potential filings by Xanadu with the SEC and the Canadian Securities Administrators, including under the heading "Risk Factors." If any of these risks materialize or assumptions prove incorrect, actual results could differ materially from the results implied by these forward-looking statements. In addition, these statements reflect the expectations, plans and forecasts of Xanadu's management as of the date of this communication; subsequent events and developments may cause their assessments to change. While Xanadu may elect to update these forward-looking statements at some point in the future, they specifically disclaim any obligation to do so, unless required by applicable securities laws. Accordingly, undue reliance should not be placed upon these statements.

In addition, statements that "we believe" and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this communication, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.