

Genenta-backed Sòphia High Tech Brings Aerospace Precision Inside a Nuclear Fusion Reactor with ROMAN, a Robotic Arm

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Sòphia High Tech designs and manufactures ROMAN units for the remote inspection and maintenance of the RFX-mod2 fusion experiment, combining its precision manufacturing capabilities with the robotics expertise of University of Naples Federico II and Herobots, extending the group's precision-engineering capabilities into the nuclear domain

MILAN and NAPLES, Italy, July 23, 2026 (GLOBE NEWSWIRE) -- **Sòphia High Tech S.r.l.** (Sòphia HT), an Italian aerospace and defense company manufacturing critical parts for Europe's space and defense programs, backed by Genenta Science S.p.A. (Nasdaq: GNTA) — evolving into Saentra Forge¹, a strategic industrial consolidator focused on aerospace, defense, biotech and Italian national-security-related technologies — today announced the unveiling of **oROMAN**, a robotic arm engineered to perform inspection and maintenance operations inside a **nuclear fusion machine**. Sòphia HT and its partners Department of Industrial Engineering (DII) and Herobots designed, developed, produced, assembled, tested and integrated the manipulator ROMAN units for two facilities: the DII of the **University Federico II** and to **Consorzio RFX**².

ROMAN demonstrates Sòphia HT's ability to engineer systems for environments where humans cannot operate and failure is not an option. **Designed for RFX-mod2, a nuclear fusion research machine** in which plasma can reach approximately 20 million °C, ROMAN remotely inspects and maintains the machine's innermost wall. Its custom-built tool can identify, remove and reinstall individual graphite tiles, as well as perform visual inspection and cleaning operations.

ROMAN is the result of a close collaboration between Sòphia HT, Herobots – a technology partner specialized in robotics and automation for safety-critical applications – the DII and Consorzio RFX. Within the project, Sòphia HT led the development, manufacturing, assembly, testing, and integration of the ROMAN manipulators, working closely with all partners throughout the definition, validation, and refinement of the solution. The partners worked closely throughout the definition, validation, and refinement of the solution.

The project extends Sòphia HT's proven precision-engineering capabilities—**from critical components for rockets, satellites and defense systems—into nuclear technology and energy infrastructure** while leveraging the robotics expertise for hazardous and challenging environments of the DII and Herobots team. This provides Sòphia HT with a new strong reference capability for future applications in another highly regulated, mission-critical market and supports Genenta's strategy of building an industrial platform across sectors central to national technological sovereignty.

"Delivering with our partners ROMAN took Sòphia HT into the nuclear domain for the first time, and our team met that challenge with the same rigor we apply to space-flight hardware. Developing a manipulator that can operate safely and repeatably inside RFX-mod2 required custom mechanics, a purpose-built end-effector and extensive qualification. It is a proud milestone for our engineers and PhDs, and, together with Genenta, it opens a new avenue of growth for the company," said Domenico Borrelli, CTO of Sòphia HT.

"ROMAN is exactly the kind of capability that makes Sòphia HT irreplaceable. The same mastery of precision mechanics that lets this company 3D-print flight-ready space hardware now allows it to manufacture the mechanical systems of advanced robotic platforms operating where no human can go — inside a nuclear fusion machine. It is a powerful demonstration of how deep-tech know-how developed for space and defense translates directly into the technologies that will underpin energy independence. This is the model we are building: keeping critical industrial know-how in Italy, and letting it compound across the sectors that define national economic security," said Pierluigi Paracchi, CEO of Genenta.

¹ The name change from Genenta Science S.p.A. to Saentra Forge S.p.A. is subject to shareholder approval.

² <https://www.igi.cnr.it/en/about-us/>

About Genenta Science

Genenta Science (Nasdaq: GNTA) is evolving into a next-generation strategic consolidator focused on privately held specialized companies operating in Italian national security-regulated sectors, with activities spanning cybersecurity, defense, aerospace, and biotechnology/biosecurity. Genenta holds a 19% equity interest in Sòphia High Tech and has an option to increase its ownership to 51% at a pre-agreed valuation.

About Sòphia High Tech

Sòphia High Tech S.r.l. is an Italian aerospace and defense engineering and manufacturing company, headquartered in Somma Vesuviana (Naples). At its core, Sòphia HT builds the critical mechanical components of space and defense systems — the precision parts that hold rockets together, protect satellites in orbit, and allow aircraft to perform under extreme stress. The company covers the entire product lifecycle, from initial concept design and computer simulation, through prototyping and

manufacturing, all the way to final testing, assembly, and qualification for flight. What sets Sòphia HT apart is its mastery of advanced manufacturing techniques — including state-of-the-art metal 3D printing (Selective Laser Melting), CNC precision machining and multitasking, and the ability to work with some of the most demanding exotic materials in the industry, including titanium, Inconel, tungsten, and specialized copper alloys. Certified to the EN9100 aerospace quality standard and to ECSS-Q-ST-70-80C, the ESA specification for additive manufacturing, Sòphia HT is one of the very few companies in Europe qualified to 3D-print flight-ready space hardware to ESA and NASA standards. With over 530 advanced projects completed, Sòphia HT serves leading European aerospace and defense organizations, including ESA, AVIO, Thales Alenia Space, Leonardo, MBDA, GSSI, and D-Orbit.

Forward-Looking Statements. Statements in this press release contain “forward-looking statements,” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, that are subject to substantial risks and uncertainties. Forward-looking statements contained in this press release may be identified by the use of words such as “anticipate,” “believe,” “contemplate,” “could,” “estimate,” “expect,” “intend,” “seek,” “may,” “might,” “plan,” “potential,” “predict,” “project,” “suggest,” “target,” “aim,” “should,” “will,” “would,” or the negative of these words or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements are based on Genenta’s current expectations and are subject to inherent uncertainties, risks, and assumptions that are difficult to predict, including risks related to the transition to Saentra Forge, the expansion to a sovereign-aligned industrial consolidator. Further, certain forward-looking statements are based on assumptions as to future events that may not prove to be accurate. These and other risks and uncertainties are described more fully in the section titled “Risk Factors” in Genenta’s Annual Report on Form 20-F for the year ended December 31, 2025, and Genenta’s material disclosures on Form 6-K dated October 10, 2025, January 26, 2026, as well as other Form 6-K disclosures filed with the Securities and Exchange Commission. Forward-looking statements contained in this document are made as of the date of this announcement, and Genenta undertakes no duty to update such information except as required under applicable law.

Genenta Science Media
Tiziana Pollio, Mobile: +39 348 23 15 143
email: tiziana.pollio@genenta.com

