



Press release Smoltek Nanotech Holding AB (publ)

2025-11-04

This press release is an English version of the previously published Swedish version, which has interpretive precedence.

Smoltek Hydrogen and Heraeus Precious Metals launch joint development project in hydrogen technology

Smoltek Nanotech Holding AB (publ) (“Smoltek” or “the Company”) announces that its subsidiary Smoltek Hydrogen has received an order for samples of low iridium-load Porous Transport Electrodes (PTE) for PEM electrolyzers. The electrodes will be used in a joint development project with Heraeus Precious Metals, a global leader in precious metals.

“This project is the basis for a strategically important collaboration between Smoltek Hydrogen and Heraeus. Together, we are testing a product that could redefine PEM electrolyzers while future-proofing the use of iridium, one of the world’s rarest and most critical metals”, says Ellinor Ehrnberg, President of Smoltek Hydrogen.

The joint project represents an important step towards industrializing low-iridium PEM electrolyzer technology. In the project, the two companies will jointly specify prototype PTEs for Smoltek Hydrogen to produce. Heraeus will integrate the PTEs with membrane and catalyst into full PEM electrolyzer cells, which will then be tested in Heraeus’s state-of-the-art PEM cell laboratories. The project will run through the fall of 2025, with a joint evaluation of the results planned for early 2026.

Smoltek’s PTEs feature an ultra-thin iridium layer of only 0.1 mg/cm² – a level of performance not known to be proven elsewhere. Combined with Heraeus’s decades of experience in PEM cell testing and deep knowledge of industrial customer requirements, the partnership provides an ideal platform to validate this breakthrough technology under realistic conditions.

“Smoltek’s electrodes with ultra-thin iridium layers hold great promise, and we are eager to see the results. By combining our global expertise in materials and testing with Smoltek Hydrogen’s innovative technology, we aim to accelerate the transition to next-generation PEM electrolyzers,” says Philipp Walter, Executive Vice President, Business Line Hydrogen Systems at Heraeus Precious Metals.

About Heraeus Precious Metals

Germany-based Heraeus Precious Metals is part of the Heraeus Group, who has approximately 15,200 employees in 40 countries. Heraeus Precious Metals is a global leader in the precious metals business and covers the value chain from trading to precious metals products to recycling. Their business line Hydrogen Systems provides a range of products for electrolyzers and fuel cells. To learn more about the products and services they offer visit the website heraeus-precious-metals.com/en/products-solutions-by-category/hydrogen-systems.

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Smoltek Nanotech Holding is a deeptech company that provides a technology that enables the production of conductive nanostructures on various materials. The company's nanostructure manufacturing technology can be used in several industrial sectors. Customers are found in the global process industry and semiconductors. The products that the company develops are used in equipment to produce fossil-free hydrogen and in semiconductors to further miniaturize microchips. The company protects its unique carbon nanotechnology through an extensive patent portfolio consisting of more than 120 patents, of which 97 are currently granted. Smoltek's share is listed on the Spotlight Stock Market under the ticker SMOL. Smoltek is a development company and forward-looking statements regarding time to market, production volume and price levels should be interpreted as forecasts and not commitments.