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Evonik partners with AMSilk to manufacture sustainable silk proteins

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Evonik has entered into an agreement with the German biotech company AMSilk to produce industrial quantities of innovative, sustainable silk proteins. The silk can be used in a broad range of applications including high-quality fashion, smart materials in automotives, and medical devices. Materials produced with the silk proteins balance optimal performance with minimal environmental impact. Evonik is producing the silk at its contract development and manufacturing (CDMO) precision fermentation site in Slovakia.

â??Working with a partner who puts sustainability at the heart of their business is in perfect alignment with our goals at Evonik. We are delighted to partner with AMSilk to bring smart biotech silk materials to industries worldwide,â? said Thomas Riermeier, head of the Health Care business line at Evonik.

With more than three decades of experience as a reliable fermentation partner to companies working on advanced food ingredients, pharmaceuticals and other innovators, Evonikâ??s Health Care business plays a key role in the companyâ??s life sciences division, Nutrition & Care. The division is guided by a vision driven by sustainability, providing solutions that achieve the highest functionality while closing carbon loops and preserving biodiversity.

â??With Evonik, we have one of the most competent and renowned players for producing silk protein at our side. As we continue to improve our process, Evonik is not only the perfect industrial partner, but also as a strategic partner with whom we can scale up industrial production even beyond Europe,â? says Klaus Kjeldal, Chief Production Officer at AMSilk GmbH.

AMSilk is the world's first industrial supplier of smart biotech materials by applying an outstanding technology platform based on silk proteins. AMSilk turns man-made proteins into silk formulations including fiber, hydrogels and silk powder for applications in the textile industry as well as for medical devices and consumer goods. All AMSilk materials are created with an end of life in mind, being completely vegan, biodegradable, and using renewable plant-based carbon, with no microplastics.

Evonik draws on its expertise in fermentation, including strain development, process optimization and large-scale manufacturing, to help innovators industrialize their disruptive technologies in promising markets such as advanced foods or nature-identical materials. With a total fermentation capacity of over 4,000 mÂ³ spanning a network of global sites in the U.S., Europe and Asia, Evonik is well-positioned to support a wide range of projects regardless of scale and complexity.