
World's First Micro Power Multi-channel Gas Detector Chip for the Mass Market

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SmartNanotubes Technologies, a German startup that has developed the world's first micro power multi-channel gas detector chip for the mass market, has raised € 2.4 million in its Series A funding round. Lead investors are Cottonwood Technology Fund and duotec GmbH.

Game changer in the gas sensor market

[SmartNanotubes Technologies](#), based near Dresden, operates on the principle of an electronic nose similar to the array of receptors in the human nose. Current gas sensor arrays are expensive, large in size, and characterized by low sensitivity and high power consumption. The carbon nanotubes chips of SmartNanotubes, however, are highly sensitive, energy-efficient, compact, and low-cost. SmartNanotubes is a game changer in the gas sensor market as its chips can measure multiple gases while most existing technologies can only detect one gas at a time.

Product quality, safety and security

In a team of four people Dr. Viktor Bezugly and Dr. Birte Sönnichsen co-founded SmartNanotubes in the summer of 2020 after a three year know-how transfer project at LifeScience Inkubator (LSI). Bezugly started his research on carbon nanotubes at [Dresden University of Technology](#) twelve years ago. "I'm delighted to make my research available to the public by setting up this company. As of now, our target markets include product quality in materials, food and medical applications," said Viktor Bezugly. "Other areas include safety and security in transport, consumer goods and manufacturing through the early detection and identification of volatile organic compounds (VOCs) and hazardous gases. Moreover, SmartNanotubes can control air quality, for example in industrial environments such as cleanrooms."

Multiple product lines and markets

In its previous seed round, SmartNanotubes received support from LSI Pre-Seed-Fonds, Technologiegründerfonds Sachsen (TGFS), TUDAG TU Dresden Aktiengesellschaft, and a private investor. The current investment round is led by Cottonwood Technology Fund and German corporate duotec GmbH and complemented by Mittelständische Beteiligungsgesellschaft Sachsen.

“We first met SmartNanotubes two years ago at the High-Tech Venture Days in Dresden. At the same time, we received a recommendation from a large corporate about its outstanding technology,” said Alain le Loux, General Partner of Cottonwood Technology Fund.

“SmartNanotubes is the perfect example of a deeptech company with a disruptive innovation. It is truly rewarding to help them in the pre-customer and pre-revenue stage with launching their technology in the global market. In particular, because SmartNanotubes offers the possibility of technology-selling in multiple markets and product lines.”

For duotec, the investment in SmartNanotubes is a continuation of their innovation strategy.

“We are expanding our portfolio of expertise through innovative and disruptive technologies,” said Arthur Rönisch, Managing Director and CIO of duotec. “This novel sensor technology means we are ahead of the competition by more than just a nose, literally. Together with our customers, we will incorporate this know-how into products.”

“We are very excited to have both Cottonwood and duotec on board as our newest investors,” said co-founder Dr. Birte Sönnichsen. “duotec is well known as a very professional electronics production partner. And Cottonwood brings us – besides their deeptech startup experience – a global network of relevant corporates including Asia and the [United States](#)”.

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