

InSpek raises a pre-seed round with Venture Capital fund Quantonation

Paris, October 19th, 2021 – InSpek announced the closing of a pre-seed round with Quantonation to support the development of the first generation of its chemical analysis system. InSpek was founded in 2021 to improve the performances of chemical analysis techniques while reducing their production cost. Based on a technology developed at MIT, InSpek paves the way towards a new set of tools that will accelerate research and development for the pharmaceutical, biotechnological, and chemical industries.

From a partial understanding to a full control of processes to reduce errors

Despite raw materials high costs and the importance of delivery times for products dedicated to critical applications, errors in chemical and biological fabrication processes remain common and represent billions of dollars of loss every year. These errors result from a lack of control and a limited understanding of the processes at play, as current analytical solutions do not allow for a precise characterization of reactions because of trade-offs between speed, sensibility, ease of use, and cost. By relying on microchip sensors with enhanced sensitivity, InSpek will deliver a solution allowing for an improved understanding of processes thanks to no-compromise measurements offering high-quality data, real-time data collection, ease of use, and the compatibility with single-use technologies to reduce contamination risks. This solution will thus enable limited errors during the implementation of biological and chemical processes, and thereby a reduction of the time and costs associated with the overall fabrication process flow.

On-chip systems represent the future of sensing and data collection

InSpek aims to become a world leader in analytical solutions for chemistry and biology. The company leverages recent advances in integrated optics and optical microchip fabrication to develop sensors that benefit from three key advantages compared to current solutions: better detection performances, lower cost, and smaller size. Its relationship with chip manufacturers will allow the company to use the latest fabrication technologies to maximize the benefits of integrated systems. Simultaneously, it is establishing partnerships with end-users to develop solutions that best fit the industry's current and future needs. InSpek is thus poised to both act as a central player of the transition towards the "Industry 4.0" and all the while benefit from this dynamic.

Behind the company, a French-American academic collaboration

InSpek is the result of 2 internationally renowned laboratories' common research in the United States and in France, specialized in integrated photonics for telecommunications and sensing. After several years of development, thanks notably to funding from the National Science Foundation and the Deshpande Center for Technological Innovation at MIT, the interest from industry for the technology led the founders to develop a custom solution.

Juejun Hu, Professor at MIT and Scientific advisor of InSpek, said: « Integrated photonics – the optical analog of electronic integrated circuits – have long been hailed as a revolutionary technology that is going to transform optics. Sensing is one of the most prominent applications of integrated photonics, since optical sensing can be incredibly sensitive and specific given the rich wealth of spectral information they provide. I am therefore thrilled to see InSpek exploring this extremely promising area

and I am confident that InSpek's proprietary integrated photonic sensing technologies will lead to smaller, lower cost, and better photonic sensors that broadly impact many applications from bioproduction to healthcare. »

According to **Jérôme Michon**, InSpek CEO: « The goal for the system we're developing is to drastically reduce mistakes when implementing chemical and biological processes. Our sensors' versatility makes them useful all along the fabrication pipeline, ranging from characterization during the process development phase to monitoring and control during production. By combining optics, materials science, and data processing, our product enables users to leverage the benefits of integrated optics, which are in close adequation with the principles of Industry 4.0. We want to become a trusted solution for chemists and biologists in the numerous industries relying on reactions. »

Venture Capital fund Quantonation has worked closely with the team to bring the founders' project to maturity. **Jean-Gabriel Boinot**, part of the company's board, said: « The perspectives offered by InSpek's technologies will tackle issues that are considerably limiting research and development cycles. We are very proud to be a part of this project from the start and work on a development strategy that is commensurate with the disruptive potential of this technology. »

With offices within the premises of Ecole Polytechnique, InSpek has also joined the Agoranov incubator.

About InSpek

InSpek was founded in 2021 with the vision of democratizing access to chemical analysis by using integrated photonics. Its sensors make the most of micro and nanofabrication technologies to maximize the light-matter interactions and improve chemical detection. The founders are based in France and the United States, and the company is established in the Drahi X-Novation Center, the entrepreneurship center of Ecole Polytechnique in Palaiseau, France. For more information, or to apply for jobs in an ambitious team, visit www.inspek-solutions.com

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About Quantonation

Quantonation is the first early-stage VC fund dedicated to quantum technologies and deep physics. Fields such as materials design, high-performance computation, cybersecurity, or ultra-precise sensing are now driven by innovation based on these disruptive technologies. Quantonation aims at supporting their transition into commercially available products for the industry. Quantonation is headquartered in Paris, France with investments all over the world. For more information and news www.quentonation.com

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