

Press release

# Using nanostructured X-ray optics to achieve outstanding precision in the high-tech sector: The young Swiss deep-tech company XRnanotech wins the Swiss BIC of CERN Technologies Funding Program 2020 of Park Innovaare.

At the «BIC of CERN» pitching event of Park Innovaare, the young Swiss deeptech company "XRnanotech", a scientific spin-off of the Paul Scherrer Institute PSI in Villigen, convinced the expert jury with its exceptionally efficient and high-resolution X-ray optics applications and thus won the third edition of the successful entrepreneurship program Swiss Business Incubation Centre (BIC) of CERN Technologies of PARK INNOVAARE.

The deeptech company XRnanotech, headed by the Göttingen physicist Dr. Florian Döring, was founded in 2020 and won ahead of the other two finalists SE2S (aerospace technologies) and SWISSPOD (mobility). XRnanotech receives 50,000 Swiss francs as the winner, settles at Park Innovaare and is supported over the next two years as a "CERN BIC Incubatee" by the University of Applied Sciences Northwestern Switzerland (business coaching), CERN Geneva (easier access to CERN-IP) and the Paul Scherrer Institute (easier access to PSI-IP).

# PARK INNOVAARE / Villigen, November 2020

At the end of october, the three finalists XRnanotech (X-ray optics), SE2S (space technologies) and SWISSPOD (mobility/hyperloop) presented their business ideas to a 5-member jury of technology transfer experts from CERN, the Paul Scherrer Institute PSI and the Park Innovaare at an online pitching event of Switzerland Innovation Park Innovaare. All projects included CERN Acceleration Technologies - the prerequisite for participation in the competition. The extraordinary X-ray optics of the winning company XRnanotech allow to focus beams with ever increasing energy on the smallest possible samples. This is crucial for drug research, medical imaging, microchip inspection or the examination of advanced materials.

In order to use such optical setups, a state-of-the-art technology for beam positioning, monitoring and control is required, which was developed at CERN with the Beam Gas Ionization Profile Monitor.

#### XRnanotech: Deeper insight into matter than ever before

The winner and CEO of XRNanotech, Dr. Florian Döring, is very pleased to have won the BIC of CERN Challenge: "A sponsorship by the Swiss BIC of CERN is a great honor and an outstanding opportunity for us. We are supported by the two most important scientific institutions in Switzerland: The Paul Scherrer Institute and CERN. This allows us to bring unique and innovative technology to the international market. Our efficient and high-resolution X-ray optics allow researchers all over the world to gain deeper insights into matter than ever before.»



## Large number of national and international applications

The CEO of Park Innovaare and member of the jury, Dr. Benno Rechsteiner, adds: "This year again we received a large number of Swiss and foreign applications. We look forward to supporting ambitious start-ups in their technological and business challenges and to welcoming them to the BIC of CERN Technologies at Park Innovaare". The project manager on the CERN side, Ashwin Ravikumar, explains the choice of the winner as follows: "XRnanotech and Dr. Florian Döring address the key challenge of transferring and implementing in-depth technological research into the market - Florian Döring is an entrepreneurial researcher who is not only able to transfer the depth of technical expertise, but can also easily discuss go-to-market strategies. That is why we predict XRnanotech to be very successful".

The Entrepreneurship Program Swiss Business Incubation Centre of CERN Technologies was launched in 2018 by PARK INNOVAARE together with CERN in Geneva to give young companies the chance to benefit from CERN's technological know-how and to integrate its accelerator technologies into their products. Supporting partners in this initiative are the University of Applied Sciences Northwestern Switzerland FHNW and the Paul Scherrer Institute PSI.

# XRnanotech Portrait

XRnanotech is a high-tech spin-off of the Paul Scherrer Institute. We offer innovative nanostructured X-ray optics with outstanding precision for high-tech applications. Our optics enable us to focus beams with ever increasing energy on the smallest possible samples. This is crucial for drug research, medical imaging, microchip inspection or the examination of advanced materials. To be able to use such optical setups, a state-of-the-art technology for beam positioning, monitoring and control is required.

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