

PRESS RELEASE

FOR IMMEDIATE RELEASE

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HEIDELBERG INSTRUMENTS CELEBRATES 10 YEARS OF NANOFRAZOR

Zurich, Switzerland / Heidelberg, Germany – Heidelberg Instruments Nano AG in Zurich, a subsidiary office of Heidelberg Instruments Mikrotechnik GmbH celebrated the 10-year anniversary of the commercialization of the NanoFrazor system series. The NanoFrazor is based on the Thermal Scanning Probe (t-SPL) technology and can be used for nanopatterning of quantum devices on 1D/2D materials, grayscale photonics devices, nanofluidic structures or biomimetic substrates for cell growth.

Originally the Thermal Scanning Probe technology was developed at IBM, where a group of researchers showed that the sharp tips of atomic force microscopes can be heated and used as a tool to "drill" nanoscale holes and later to write arbitrary nanostructures by using special, evaporating materials. After exploring the technology at IBM, Felix Holzner and Philip Paul incorporated SwissLitho AG as a spin-off from ETH Zurich (Heidelberg Instruments Nano AG since 2021) as CEO and CTO with the idea of selling nanolithography equipment for t-SPL. The technical term "Thermal Scanning Probe Lithography" was then replaced by the product name "NanoFrazor".

After starting operations of then SwissLitho in early 2013, the first commercial NanoFrazor machine named "Titlis", a NanoFrazor Explore, was installed in 2014 at McGill University in Canada. "Titlis" is still running and just recently received an upgrade with the integration of the laser writer module jointly developed in Heidelberg and Zurich. Today, more than 50 NanoFrazor systems have been installed at renowned facilities all over the world, with new customers lined up for future systems.

"The NanoFrazor team in Zurich works on various promising developments on the instrument as well as on the materials to continuously expand the applications range of the technology. There are still manifold open opportunities for the NanoFrazor, as it can still be considered novel, even 10 years after the start of its commercialization. Everyone at Heidelberg Instruments is excited to see how the NanoFrazor will have developed in another 10 years from now", Konrad Roessler, CEO of Heidelberg Instruments Mikrotechnik says.

The anniversary was celebrated in the newly opened office of Heidelberg Instruments Nano in Zurich together with family, friends, and numerous partners, who supported the successful journey of the NanoFrazor.

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About Heidelberg Instruments Mikrotechnik GmbH:

With over 35 years of experience and more than 1,200 installed systems, Heidelberg Instruments is one of the leading international players in the development and production of high-precision photolithography systems and nanofabrication tools. Heidelberg Instruments systems are installed in industrial and scientific facilities around the world. They are used for efficient direct writing, as well as for photomask fabrication for a wide range of industries - including semiconductors, quantum computing, photonics, 2D materials, IoT, and many related application fields.

About Heidelberg Instruments Nano AG:

Heidelberg Instruments Nano AG (HIN) is one of the most successful high-tech start-up stories in Switzerland. With the Thermal Scanning Probe Lithography, they offer a truly unique technology, which revolutionizes the fabrication of tiniest nanostructures required for many cutting-edge technologies ranging from quantum electronics to DNA sequencing. Backed by their parent company, Heidelberg Instruments Mikrotechnik GmbH in Germany, they are pushing forward with their goal of widely replacing and complementing nanofabrication machines used in R&D and industry.