



NEWS RELEASE

Successful Installation of ETH 1.2 GHz NMR System Enables Novel Research Capabilities in Solid-State NMR

7/22/2020

ETH Zürich Accepts Bruker 1.2 GHz NMR Spectrometer

BILLERICA, Mass.--(BUSINESS WIRE)-- **Bruker Corporation** (Nasdaq: BRKR) today announced the successful installation and customer acceptance of the **Avance™ NEO 1.2 GHz NMR system** at the Department of Chemistry and Applied Biosciences of the Eidgenössische Technische Hochschule (ETH) Zürich (www.ethz.ch) in Switzerland. Following the acceptance of the world's first 1.2 GHz NMR at the CERM (www.cerm.unifi.it) of the University of Florence earlier this year, this marks the second customer installation of a 1.2 GHz NMR in the world.

This press release features multimedia. View the full release here:

<https://www.businesswire.com/news/home/20200722005168/en/>

Bruker Avance™ NEO 1.2 GHz NMR system at the Eidgenössische Technische Hochschule (ETH) Zürich (Photo: Business Wire)

ETH will utilize their new 1.2 GHz NMR system to enable the development of new solid-state NMR techniques, and to apply these techniques to study materials and biological systems, including proteins fibrils which are linked to diseases such as Parkinson's and Alzheimer's. The 1.2 GHz spectrometer will also be used as a basis for further improving NMR methodology towards in-cell structural biology, and to investigate solid catalysts and functional materials, e. g. for energy conversion and data storage.

Professors Beat Meier, Matthias Ernst and Alexander Barnes at ETH stated: "We are very excited to have the world's first 1.2 GHz solid-state NMR spectrometer successfully installed in our lab. The system was delivered just a couple of months ago and the installation and energizing of the NMR magnet went exceptionally well. The completion of

the installation marks the culmination of a project that we started with Bruker almost a decade ago. We are very much looking forward to starting our first ultra-high field solid-state NMR experiments."

Dr. Falko Busse, Bruker BioSpin's Group President, commented: "I am very grateful for the confidence and the trust our partners at ETH have placed in Bruker, and for the outstanding support they gave to our engineers during the installation of the 1.2 GHz NMR. The second successful customer installation of a 1.2 GHz NMR is a testament to the success of our newly developed Ultra-High-Field (UHF) NMR technology. The production of additional UHF systems is well underway. In fact, the installation of the next 1.2 GHz spectrometer will commence at the **Max Planck Institute (MPI) in Göttingen**, Germany this week. We are thrilled to be able to provide the structural biology and NMR research community with such powerful tools."

Bruker's unique 1.2 GHz NMR magnets utilize a novel hybrid technology with advanced high-temperature superconductors (HTS) in the inner sections, and low-temperature metallic superconductors (LTS) in the outer sections. The Ascend™ 1.2 GHz magnets are stable, homogenous, standard-bore (54 mm) magnets that meet the requirements of high-resolution and solid-state NMR. Bruker's Avance™ NEO 1.2 GHz spectrometers offer different ultra-high field CryoProbes™ for solution-state NMR and fast-spinning MAS solid-state probes.

About Bruker Corporation (Nasdaq: BRKR)

Bruker is enabling scientists to make breakthrough discoveries and develop new applications that improve the quality of human life. Bruker's high-performance scientific instruments and high-value analytical and diagnostic solutions enable scientists to explore life and materials at molecular, cellular and microscopic levels. In close cooperation with our customers, Bruker is enabling innovation, improved productivity and customer success in life science molecular research, in applied and pharma applications, in microscopy and nanoanalysis, and in industrial applications, as well as in cell biology, preclinical imaging, clinical phenomics and proteomics research and clinical microbiology. For more information, please visit: www.bruker.com.

View source version on [businesswire.com](https://www.businesswire.com/news/home/20200722005168/en/): <https://www.businesswire.com/news/home/20200722005168/en/>

Investor Contact:

Investor Contact:

Miroslava Minkova

Director, Investor Relations & Corporate Development

T: +1 (978) 663-3660 x1479

E: Investor.Relations@bruker.com

Media Contact:

Thorsten Thiel, Ph.D.

VP of Group Marketing

Bruker BioSpin

T: +49 (721) 5161-6500

E: **thorsten.thiel@bruker.com**

Source: Bruker Corporation