



NEWS RELEASE

Bruker Introduces Routine Gradient Spectroscopy and Robust, Industry-Standard PAL® Automation on High-Performance Fourier™ 80 Benchtop FT-NMR System

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ZUERICH--(BUSINESS WIRE)-- **Bruker Corporation** (Nasdaq: BRKR) announces the European launch of the high-performance **Fourier™ 80 system**, a next-generation, 80 MHz Fourier Transform Nuclear Magnetic Resonance (FT-NMR) benchtop spectrometer, now with major new capabilities.

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

<https://www.businesswire.com/news/home/20201019005105/en/>

The new Fourier 80 brings the power of NMR to the bench. (Photo: Business Wire)

The **Fourier 80** now is routinely equipped for gradient spectroscopy and offers the option of an industry-standard CTC PAL® sample changer. The **Fourier 80** is suitable for organic or medicinal chemistry analysis, NMR teaching, synthesis verification or routine analysis in any chemistry laboratory. Equipped with a novel, ultra-stable 80 MHz permanent magnet, it requires no cryogenics, water cooling, or special lab infrastructure.

The **Fourier 80** has been designed for highest data quality and stability at 80 MHz, with excellent line-shape, resolution and sensitivity in 80 MHz homonuclear ¹H or heteronuclear ¹H/¹³C FT-NMR experiments. The latest version now offers even greater sensitivity and 20% improved resolution performance. It can be operated by the easy-to-use **GoScan™** software for NMR beginners, or by Bruker's **TopSpin™** NMR software with the extensive **TopSpin** library of 1D and 2D homonuclear and proton-carbon heteronuclear experiments and pulse programs.

The latest version of the **Fourier 80** now includes a pulsed field gradient which has been used in high-field NMR

spectroscopy for decades to quickly and conveniently obtain essentially artifact-free spectra. Gradients allow users to enhance solvent or water suppression, perform DOSY experiments, and acquire two-dimensional NMR spectra within minimal experiment time.

Another new feature is the option of an industry-standard, robust and high-throughput **PAL** sample changer. **Fourier 80** users with the PAL sample changer can run up to 132 samples, including 12 reference samples, thereby dramatically increasing throughput and efficiency. **GoScan** now also operates the sample changer to run samples overnight or over a weekend.

The **Fourier 80** offers workflows and protocols for academic, pharma and industrial chemistry research, as well as for forensics and organic synthesis control. It can be incorporated into science education to introduce students to the power of FT-NMR. An optional teaching package with recommended experiments and spectra interpretation guide is also available.

Dr. Falko Busse, President of the Bruker BioSpin Group, commented: "Bruker is proud to offer the **Fourier 80** with new, industry-leading capabilities like routine gradient spectroscopy, and a robust, well-accepted PAL sample changer. High-performance 80 MHz FT-NMR can now be used efficiently in any chemistry lab, just like benchtop mass spectrometers or FT-IR systems which have proliferated in chemistry labs for decades. The **Fourier 80** is providing education packages to give instructors tools to introduce young scientists to the power of FT-NMR. With the **Fourier 80**, we further 'democratize' the many applications of NMR."

Join the launch of the **Fourier 80** starting on October 19th at www.bruker.com/Fourier80. Watch exclusive content describing the new capabilities and hear from experts. Visitors will be able to ask questions and interact with members of the Bruker NMR team.

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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.

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