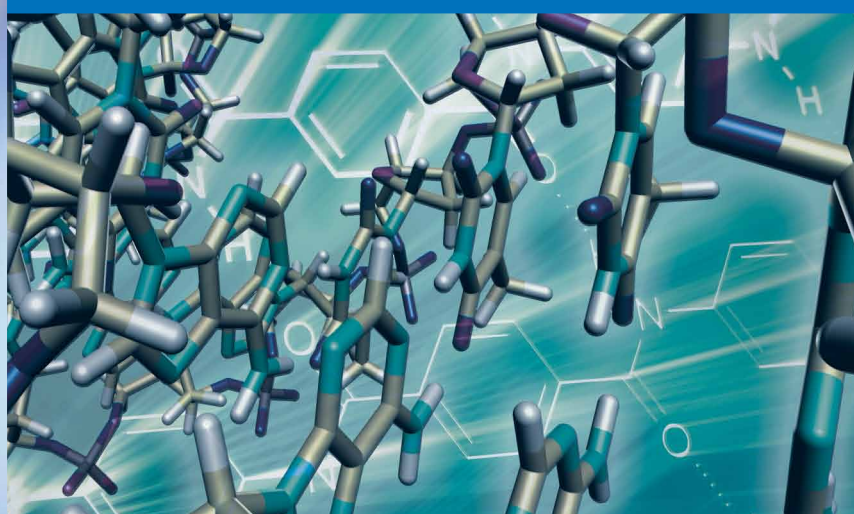




Bruker BioSpin



Fourier 300

- Bringing NMR within Everyone's Reach

think forward

NMR

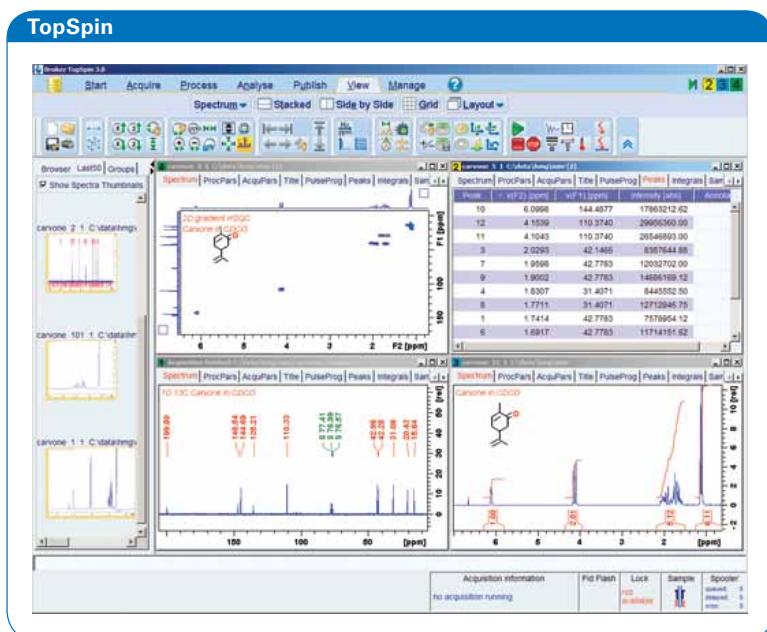
Dedicated high-resolution NMR spectrometer delivers affordable NMR for all your common applications in education and routine chemistry research.



Fourier 300 brings NMR within everyone's reach. It delivers powerful performance at extremely compact size, low weight and most importantly, minimal cost. With its new Fourier probe technology and a unique push-button, power on/off concept, ease of siting and handling is guaranteed. Designed and built by the world's NMR market leader, Fourier 300's unique qualities include the

industry standard operating software, TopSpin™. TopSpin's various tools for exploring the world of NMR make Fourier 300 the ideal solution for chemistry education and routine analysis. Researchers have access to numerous pre-defined 1D and 2D experiments and interactive, automated processing tools help to transfer spectroscopic data into a corresponding report.

- Dedicated high-resolution NMR spectrometer
- Affordable system for chemistry education and routine analysis
- Powerful performance at extremely compact size
- New robust Fourier NMR probe for easy handling
- Industry standard TopSpin software



Fourier 300 runs NMR software TopSpin, offering various tools for exploring the world of NMR.



Education

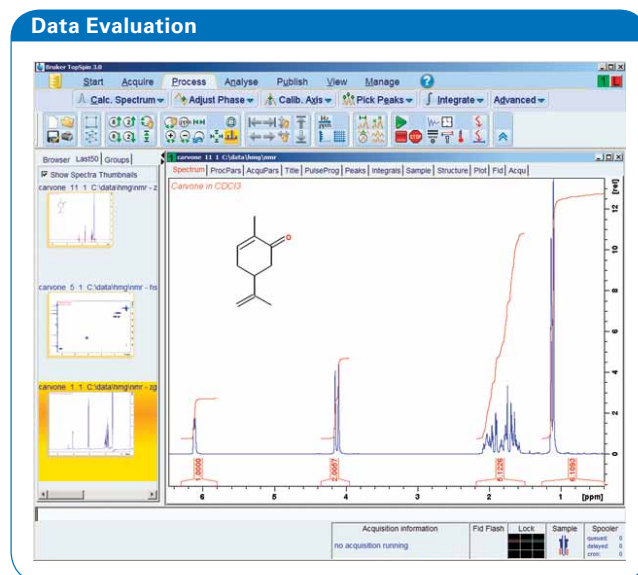
Ideal for the undergraduate NMR laboratory, the Fourier 300 will allow you to incorporate new experiments into your curriculum. From simple 1D proton spectra to advanced proton-carbon correlation experiments, all are available with just a few mouse clicks. The Fourier 300 provides the essential tools for analytical instrumentation courses in organic chemistry labs. Whatever the goal – elucidate the structure of an organic molecule, or learn NMR as a method – the flexibility of Topspin software and its comprehensive tutorials put both within easy reach of your students.

Fourier 300's full automation capabilities free the user from tedious calibration or optimization, enabling them to remain focused on their research goals. Users will immediately be comfortable with the familiar PC Windows® environment, and will find Topspin's user interface similar to many popular programs.

Thinking of implementing the Fourier 300 in your curriculum? Contact us for help.

Optional Software Packages

- Spectra 1D prediction (^{13}C & ^1H)
- Automatic structure consistency analysis
- Structure elucidation of organic molecules
- Analysis of mixtures
- Quantification



TopSpin provides a wide range of automatic NMR processing tools for small molecule analysis.

Routine Chemistry

The Fourier 300 will uniquely enrich your organic lab, enabling you to perform affordable NMR spectroscopy in-house whenever you need to. Check raw materials and verify reactions straight away, no more waiting for results from a central analytical lab. Easy to site, the Fourier requires minimal infrastructure, safety and space considerations. The intuitive user interface makes it easy to get started immediately.

Optional software packages can expand your research goals. Structure elucidation and shift prediction can easily be added, as can quick and easy sample quantification.



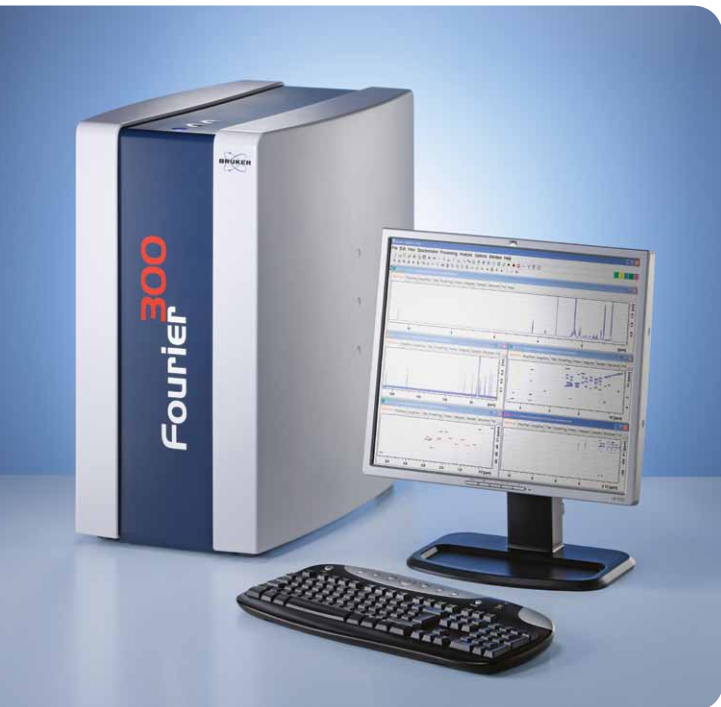
● About NMR

Fourier transform (FT) NMR spectroscopy is indispensable to chemistry, biochemistry, molecular biology and is one of the most comprehensive analytical methods for chemists. It provides unique insights into the properties of samples, from organic molecule structure elucidation and 3D structure determination of biological molecules, to materials science and the detection of metabolic disorders. FT-NMR enriches undergraduate chemistry programmes, and is required for American Chemical Society accreditation.

Now Bruker BioSpin brings FT-NMR to you in a complete, accessible yet affordable package.

Technical Information

- Digital RF 300 MHz NMR spectrometer
- Actively shielded superconducting magnet
- New robust Fourier $^1\text{H}/^{13}\text{C}$ probe requires no adjustments such as tuning and matching
- Exceptionally small footprint, bench-top electronic cabinet
- Deuterium digital lock
- Variable sample temperature control
- Z-gradient for gradient spectroscopy and automated gradient shimming
- Low power consumption < 300 W
- Very quiet operation
- Convenient LED status indication and diagnostics
- FPGA technology for pulse sequence generation, signal routing, low-noise preamplifiers, oversampling detection and digital filtering



● Bruker BioSpin

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