



Enhanced Process Control

- Reduce risk with high fidelity reaction monitoring

Need to improve process control? Tired of repetitive and time-consuming calibrations? Flow NMR is now at your fingertips with our new benchtop solution for online monitoring of chemical and bio processes by NMR, in real-time, under real process conditions.

Bruker's Fourier RxnLab provides answers to key chemical questions, such as conversion, in-situ reaction yield and reaction kinetics. Developed on the Fourier 80 NMR benchtop platform, the Fourier RxnLab enables chemical processes to be monitored on the spot, making kinetic information readily accessible directly on the bench or in the fume hood. Process chemists get fast, reliable answers to make strategic decisions, which ultimately lead to reduced risk and cost savings.

Your Benefits

- On-the-fly quantitative build-up curves without the need for tedious calibration steps
- Structural information for reagents, (bi)products and intermediates
- Reduced risk with direct knowledge transfer from high-field NMR (understanding) to low-field benchtop (control)
- Increased selectivity, resolution and sensitivity compared to vibrational spectroscopy
- Used also to calibrate other techniques
- Straightforward installation and operation with minimal learning curve
- Affordable and with minimal cost of ownership
- Bringing NMR to the (bio)reactor

Key Features

- On-line monitoring with temperature-controlled sample and transfer lines (25°C - 60°C)
- Flow-through flow unit, based on the industry tested well established InsightMR™ design
- Straightforward data acquisition with on-the-fly visualisation of build-up curves. Default experiments provided for both deuterated and non-deuterated solvents
- Results are delivered as kinetic, and waterfall plots, ready to report and/or export
- Access to spectra deconvolution, predictions, chemometric and database tools
- Compatible with the use of the Fourier 80 PAL sample changer (max. sample capacity of 120)

The Fourier RxnLab provides immediate access to real-time kinetic information, enabling scientists to make informed decisions about whether any changes need to be made to the chemistry, acquisition conditions, or data analysis routines, ensuring the best possible results, for faster go-to-market with increased confidence.

Is reaction monitoring at 25°C sufficient? – Get the [Fourier RxnLite!](#)

