



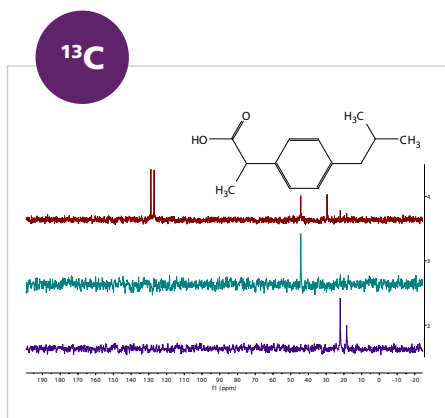
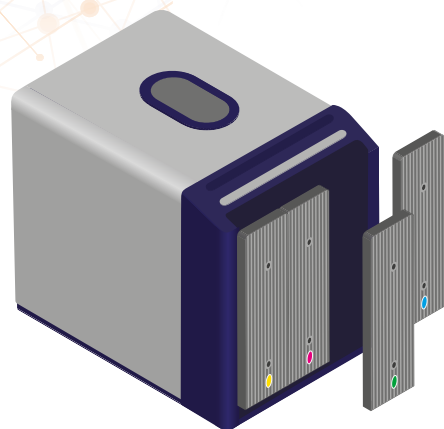
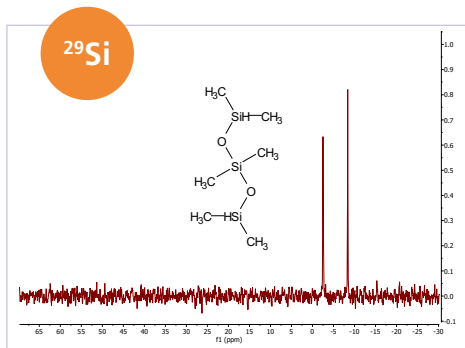
X-Pulse

Bringing broadband NMR to your benchtop

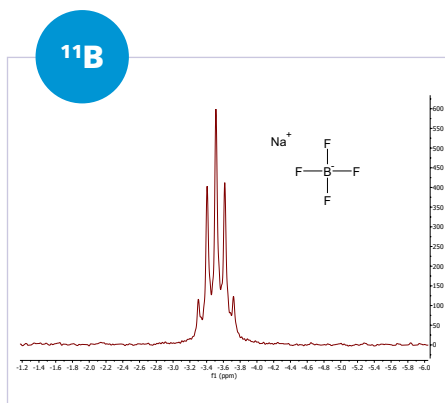
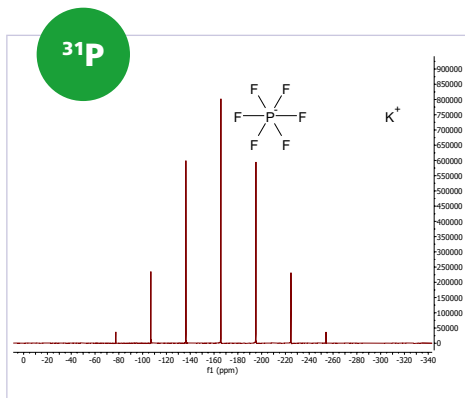


True X-Nuclei

Tuneable broadband preamplifier allows you to select nuclei from ^{29}Si to ^{31}P to match your experimental needs.



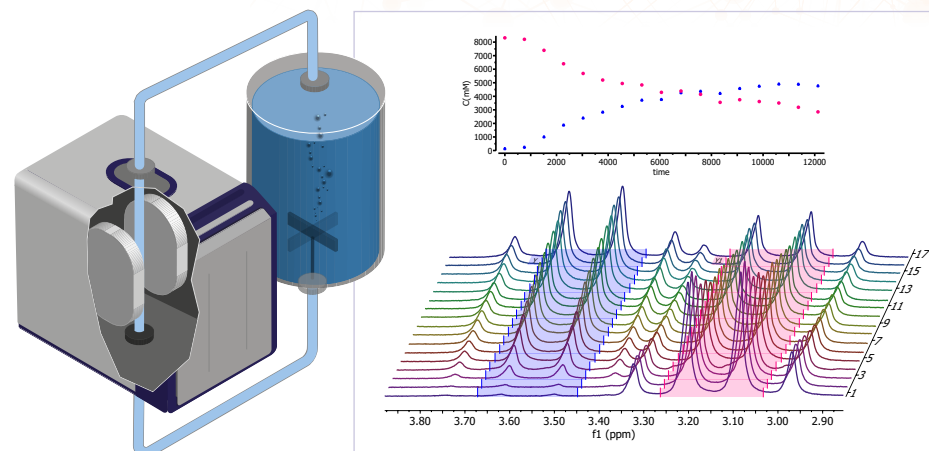
No compromises! **X-Pulse** lets you maximise your signal-to-noise ratio with optional interchangeable **X-Pods** for specific nuclei.



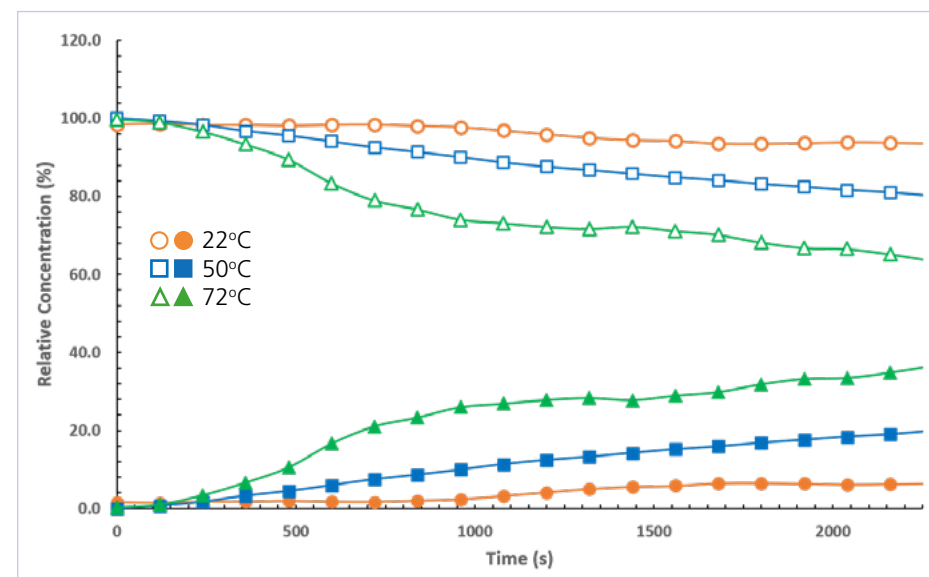
Learn more at:
nmr.oxinst.com/x-pulse

Reaction Monitoring

Monitor your reactions as they happen.



Monitor your reactions at a range of temperatures.



X-Pulse

Advanced pulse sequences

Pulsed field gradients and shaped RF pulses as standard for: coherence selection, selective excitation, water and solvent suppression

Clearer spectra

New shimming technology allows spectral resolution of <math><0.35\text{Hz}/10\text{Hz}</math> as standard

Easy to use and maintain

Removable and easy-to-access probe for cleaning. Use with standard 5mm NMR tubes or easy-to-use flow cell

Choose your nuclei

Measure the nuclei you need for your experiments with the world's first broadband benchtop NMR spectrometer

No need to compromise

Interchangeable **X-Pods** allow you to optimise signal-to-noise ratio for specific nuclei

Easy operation

Quick experiments turn complex pulse sequences into a single click allowing anyone to access the power of NMR

Flexible software

SpinFlow advanced mode allows you to define your own experiments, your way



Benchtop convenience

No requirement for special facilities or liquid cryogenics allowing you to use the **X-Pulse** wherever is most convenient

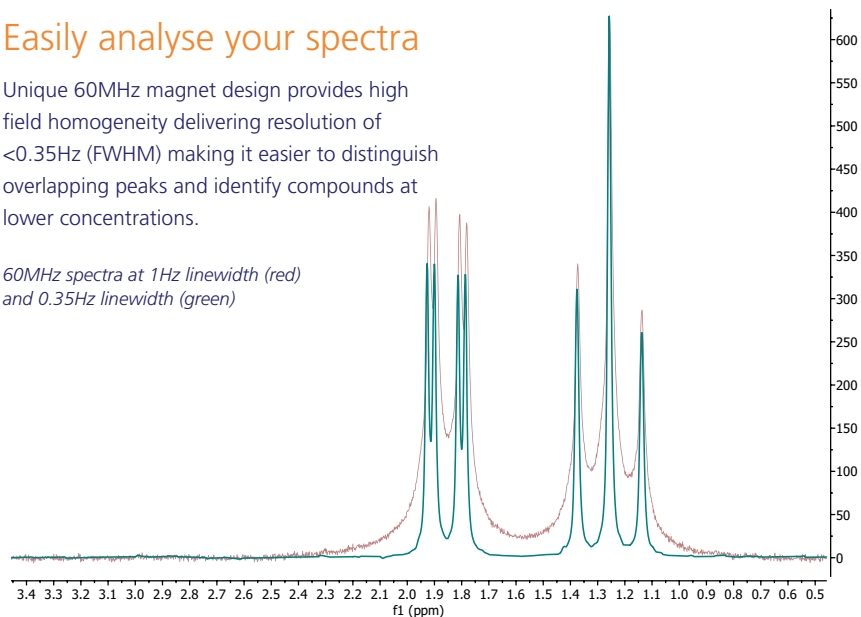
Ultimate stability

Flow liquid samples at variable temperature (20°C – 60°C) without spectral artefacts. Run high duty cycle pulse sequences without destabilising the magnet

Easily analyse your spectra

Unique 60MHz magnet design provides high field homogeneity delivering resolution of <math><0.35\text{Hz}</math> (FWHM) making it easier to distinguish overlapping peaks and identify compounds at lower concentrations.

60MHz spectra at 1Hz linewidth (red) and 0.35Hz linewidth (green)

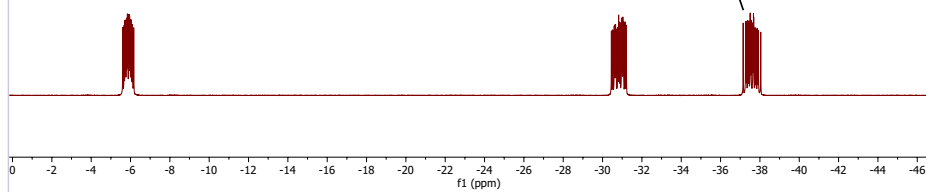
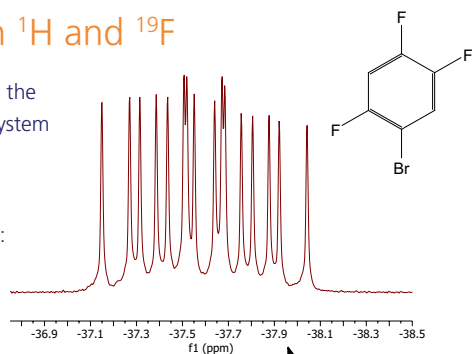


Quickly switch between ^1H and ^{19}F

Quantify your ^{19}F spectra with ease using the highest signal-to-noise 60MHz fluorine system available with no requirement to filter background signals.

Expand your capability for the analysis of:

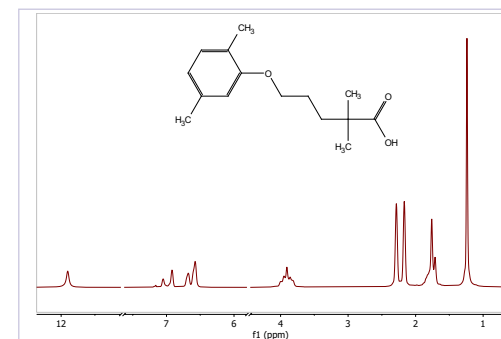
- Li^+ Battery electrolytes
- Fluorinated pharmaceuticals
- Fluorinated polymers
- Water contaminants



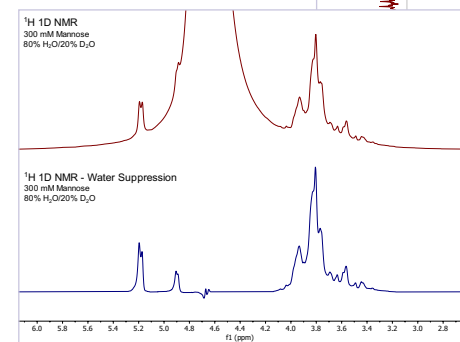
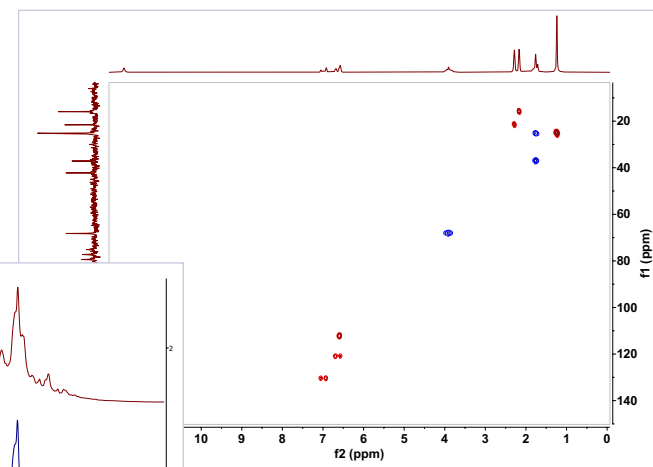
From spectra to structural elucidation

X-Pulse has the tools you need to understand your molecules and determine their structure.

- Simple 1D spectra
- 2D experiments
- Inverse experiments
- Shaped pulses
- Pulsed field gradients
- Powerful MNovo software

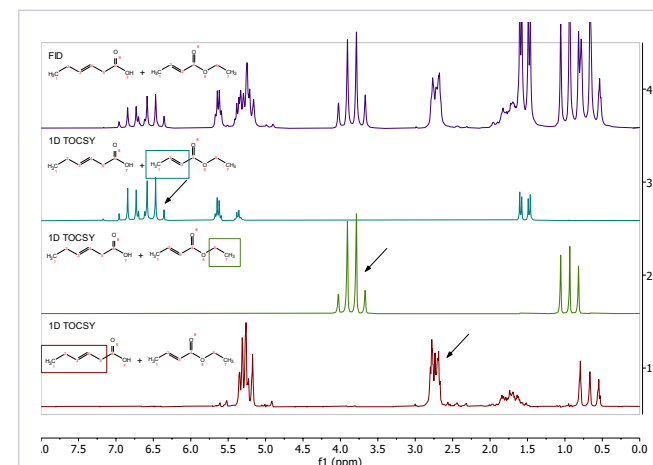


Shaped RF pulses unlock advanced pulse sequences and allow you to improve your solvent suppression.



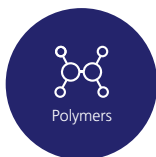
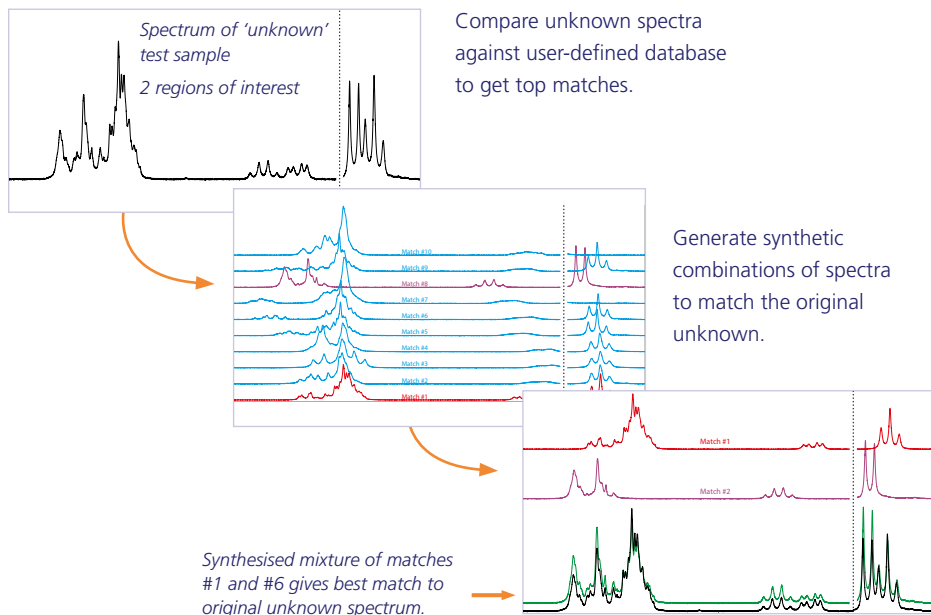
Shaped pulses combined with the improved linewidth of the **X-Pulse** makes removing solvent peaks more effective than ever.

Advanced pulse sequences like the selective 1D TOCSY can be used in place of some 2D experiments, simplifying spectral analysis and allowing you to obtain your results more quickly.



Unleash the power of QA/QC in your benchtop NMR

Ensure the consistency of your products and processes while spotting any contaminants. Quickly identify compounds, even in mixtures, or low concentration adulterants using chemometric fingerprinting from your own custom-built database.



This brochure provides only a glimpse into the technology of **X-Pulse** and its applications. Find out more at:
nmr.oxinst.com/x-pulse

Service[®]

We're here to help you!

OiService aims to keep your instrument working as hard as you do. Our global network of service hubs provides a full range of technical support.

- Extended warranties
- Consumables and accessories
- Maintenance contracts
- Remote support
- Repairs

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