



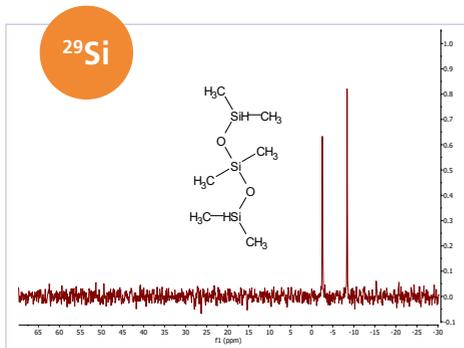
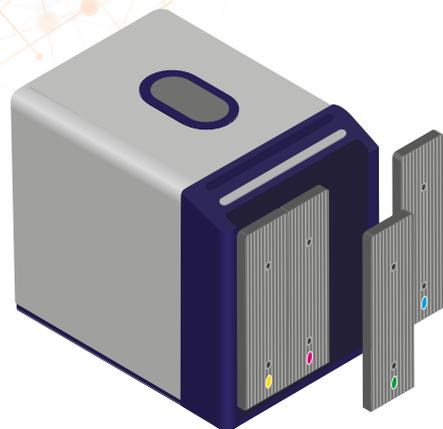
X-Pulse

Bringing broadband NMR to your benchtop

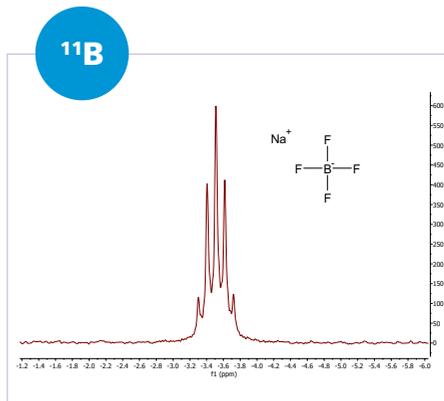
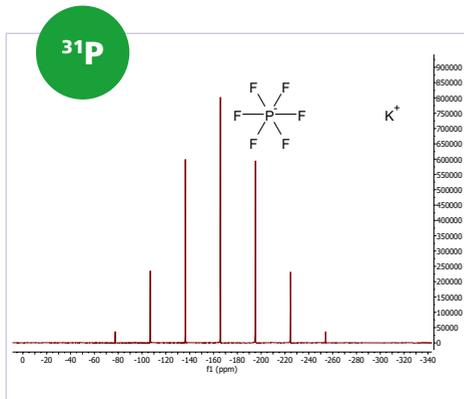
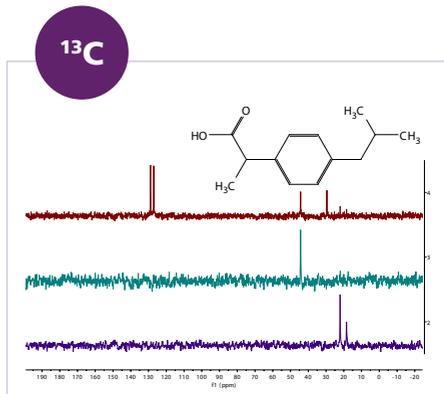


True X-Nuclei

Tunable broadband preamplifier allows you to select nuclei from ^{29}Si to ^{31}P , whatever your experiment needs.



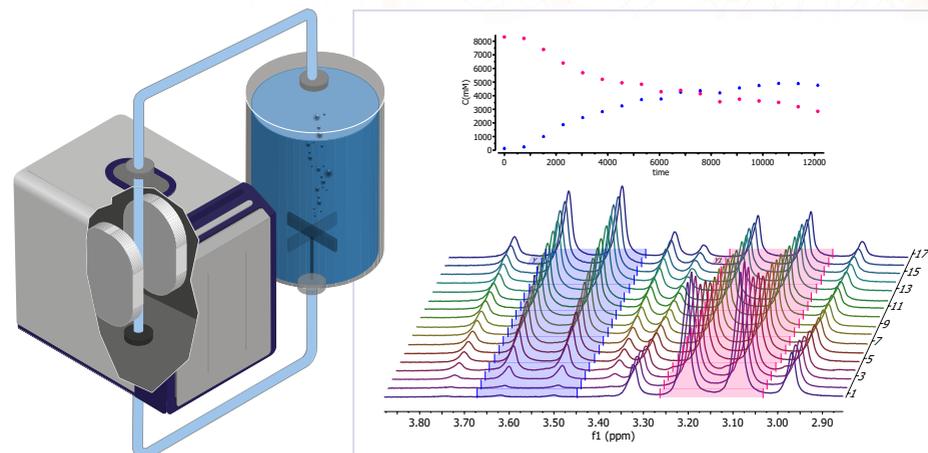
No compromises! **X-Pulse** lets you maximise your signal-to-noise ratio with optional interchangeable **X-Pods** for specific nuclei.



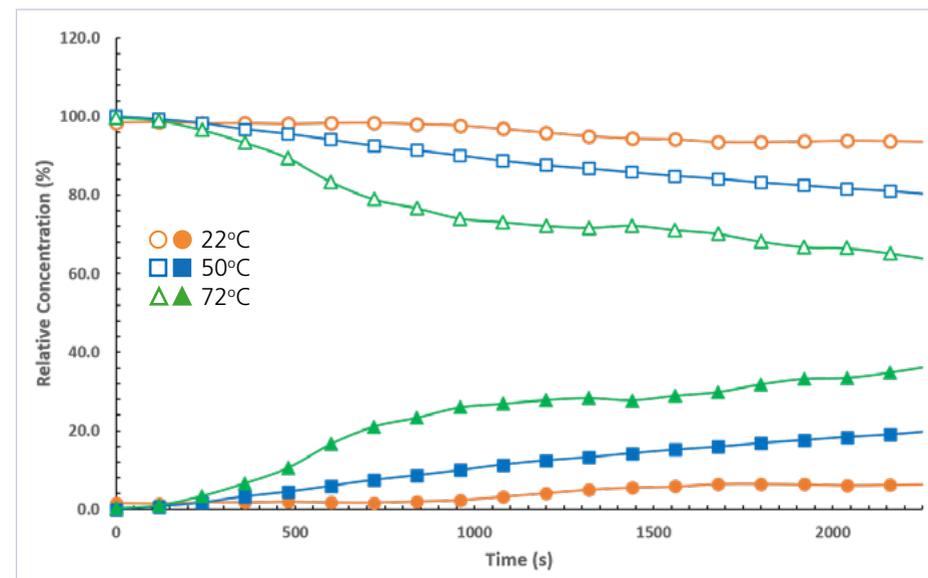
Learn more at:
nmr.oxinst.com/x-pulse

Reaction Monitoring

Monitor your reactions as they happen.



Observe your reaction at temperatures from 20°C to 70°C and with the variable temperature probe.



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 experiment 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

Ultimate stability

Flow liquid samples at variable temperature (20°C – 70°C) without spectral artefacts. Run high duty cycle pulse sequences without destabilising the magnet

Benchtop convenience

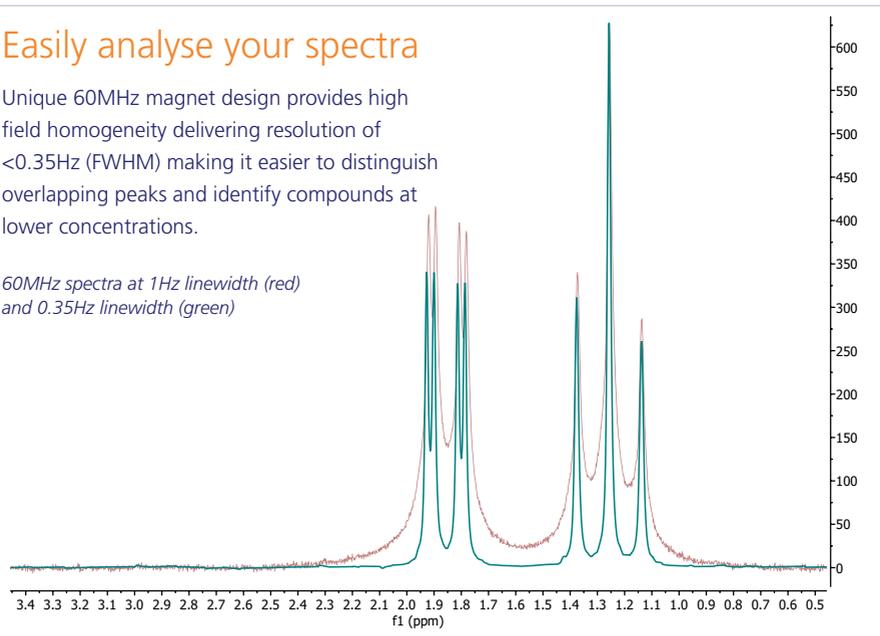
No requirement for special facilities or liquid cryogenics allowing you to use the instrument wherever is most convenient



Easily analyse your spectra

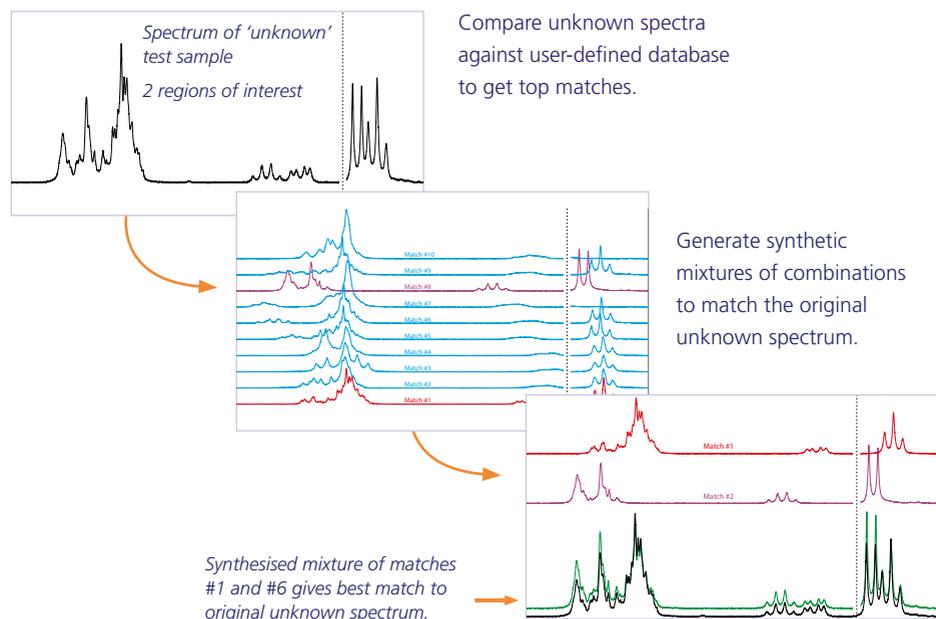
Unique 60MHz magnet design provides high field homogeneity delivering resolution of <math><0.35\text{Hz}</math> (FWHM) making it easier to distinguish overlapping peaks and identify compounds at lower concentrations.

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



Unleash the power of QA/QC in your benchtop NMR

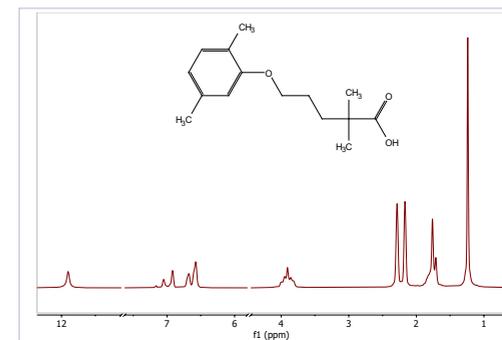
Quickly identify compounds, even in mixtures, or low concentration adulterants using chemometric fingerprinting from your own custom-built database. This allows you to ensure the consistency of your products and processes while spotting any contaminants.



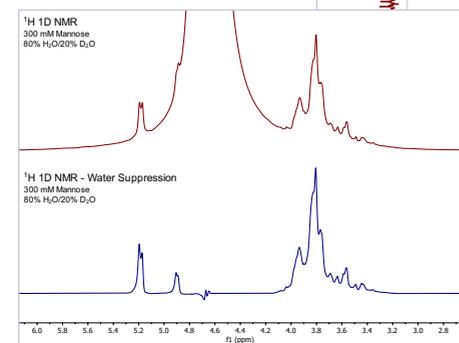
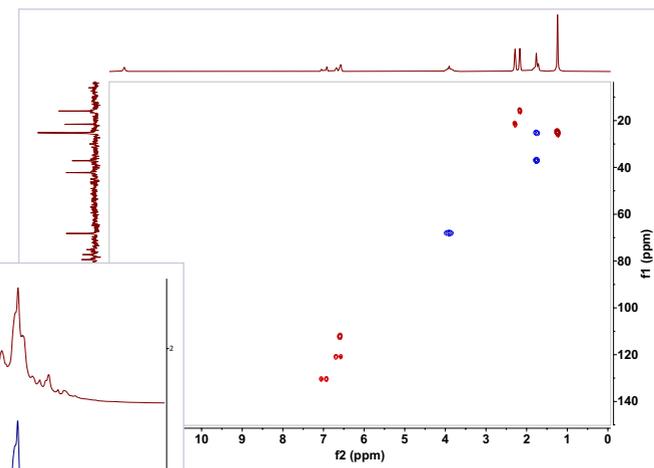
From spectra to structural elucidation

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 MNova software

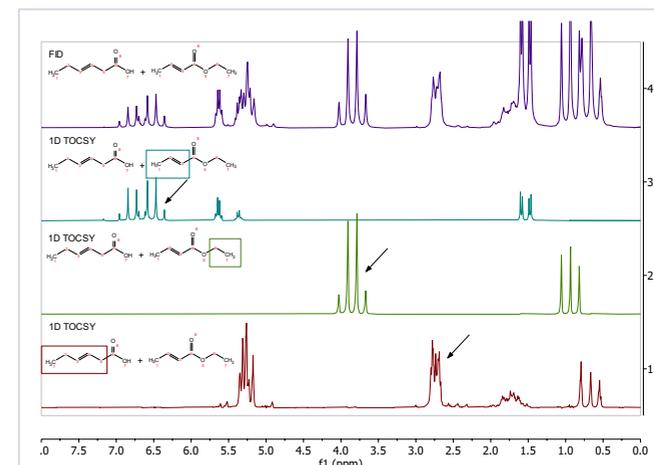


Shaped RF pulses unlock advanced pulse sequences and allow you to improve your solvent suppression.



Shaped pulses combined with the improved linewidth of the **X-Pulse** make 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.



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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:



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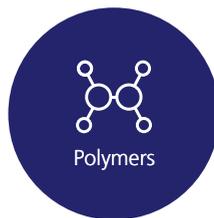


Training

Understand your analyser and its features.



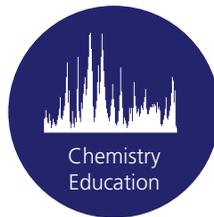
Petrochemicals



Polymers



Pharmaceuticals



Chemistry Education



Research



Industrial Chemistry

This brochure provides only a glimpse into the technology of **X-Pulse** and its applications.

Find out more at:

nmr.oxinst.com/x-pulse

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