

# **Powerful qNMR analysis made easy**

USP-ID, delivered by Mestrelab Research, is a one-click, automated software solution for identifying, quantifying and labelling a broad range of chemical components in both simple solutions and complex mixtures by qNMR.

# **Benefits**

# **Easily identify chemicals and impurities**

USP-ID automatically identifies, quantifies and labels a broad range of chemical components in complex mixtures. With just 10 minutes of video training, NMR becomes more approachable to all.

### **Resolve overlapping peaks**

Improve spectral interpretability with quantum-mechanical models based on USP reference standards and smart analytics. Identify and quantify chemicals, even when no single signal is distinct.

#### **Customize your databases locally**

Leverage USP-ID automation capabilities with drop-in support for models and databases that users create and own. USP can provide support with custom model development.



# **Bridging the gap**

From high-field interpretability to benchtop accessibility

### **NMR Specifications**

Compatible magnet strength	40 MHz – 1.2 GHz
Signal to noise	>250 for quant, >100 for ID
Limits of detection* (depends on S/N)	>0.1% wt%
Limit of quantification*	>0.1% wt%
# of components in a sample	< 20 components
Molecular complexity	Recommend < 20 spin systems, < 25 spin systems max limit
Recommended instrument settings	Pulse angle 90°, Relaxation delay 60 s, (*qNMR acquisition parameter)

\* Performance can depend on the specifics of the chemistry and we recommend a feasibility test to confirm performance

# **Recommended PC Specifications**

Operating System	Windows 10
CPU	Intel i7 or better
RAM	16 GB or better
Hard Drive	SSD
Additional Requirements	Microsoft video for viewing training and latest Adobe Acrobat Reader for viewing PDFs

Automatic Peak Labeling

1 Automatic Chemical ID 4 Report Generator 2 Detect Impurities

**G** Customizable Libraries **(3)** Multi-library analysis

3 Automatic Quantitation 3 Information Workspace 3 Selectable analytical methods



# To request a quote or get more information

visit usp.org/products/qnmr-mestrelab or email uspidsupport@usp.org.

# Learn more about

Delivered By: estrelab Research



To request a quote or get more information visit usp.org/products/qnmr-mestrelab or email uspidsupport@usp.org.