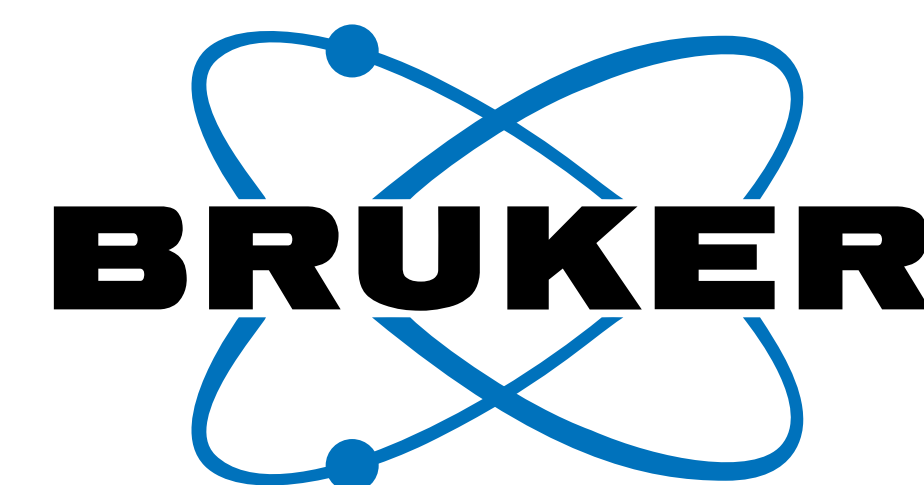


# Metabolomics Solutions Systems, Automation and More



## NMR - Discern More

Compound specificity, quantification and high reproducibility are unique benefits gained when using NMR in metabolomics research. Of course, NMR can provide much more, including classification, detection of outlying components, and insight into system changes. Bruker offers a full complement of solutions and tools to support your metabolomics needs and enhance your research.

## Software

Software integration with the NMR spectrometer supports the metabolomics workflow to provide highest quality data and ease the demands of following SOPs. AssureNMR™ Summit offers the full complement of tools for your customized approach using targeted and non-targeted metabolomics screening.



## AssureNMR™ Summit

- Fully integrated with the NMR spectrometer for optimal spectra, consistent data processing, ease of following SOPs, and retaining metadata with spectra.
- Build your own Spectral Databases or use ours.
- Identification and quantification of components.
- Chemometrics including PCA, SIMCA Outlier Detection, Quantile Plot, multi-class classification, model validation and quality measures.
- PLS regression for multivariate quantitative analysis with variable importance in projection (VIP), PLS error estimation and PLS outlier.

## AssureNMR™ for Integrating Your Workflow



Fig. 1: AssureNMR Summit provides a solution for integrating your metabolomics workflow and obtaining results.

## Spectral Databases (SBASE)

BBIORFECODE empowers the AssureNMR™ and AMIX™ user to rapidly identify metabolites of interest with 1D and 2D reference spectra from 700 compounds typically found in biofluids. Assure-Residual Solvent SBASE includes volatile organic compounds.

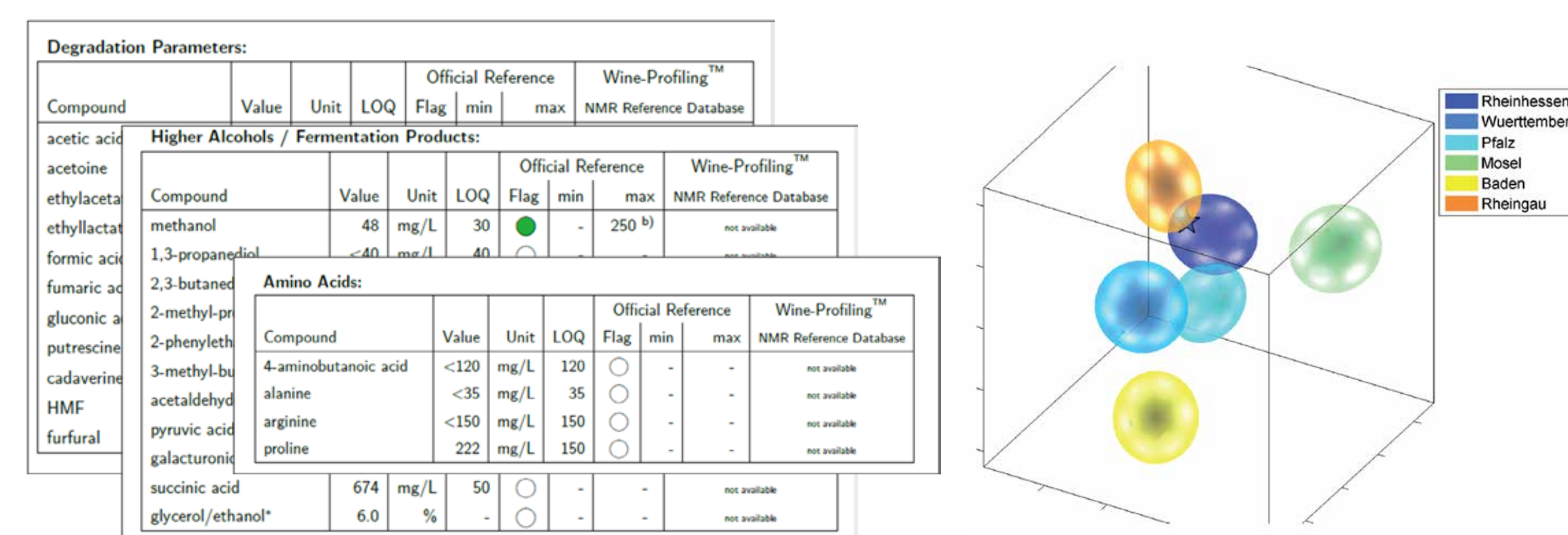
## Automation

Metabolomics studies are best supported with temperature controlled sample changers. Suggested options include:

- SampleJET™: 510 sample capacity, barcode compatible
- SampleCase Cooled™: 24 sample capacity

## Integrated Systems

Specially designed to address specific metabolomics needs, our Screener systems combines the NMR with protocols and extensive models to answer detailed and specific questions about your samples. Our MetabolicProfiler combines NMR and LC-MS with robotic preparation. Our LC-SPE-NMR-MS system facilitates the isolation and structure determination of new metabolites.



## AVANCE IVDr Clinical Screening and In-Vitro Diagnostics



## Summary

- NMR provides unique benefits to metabolomics research. Discover more, discern more.
- Bruker offers a full complement of tools to meet your metabolomics research needs including software, hardware and spectral databases.
- AssureNMR provides a customizable software solution that integrates with your spectrometer to automate your metabolomics workflow and provide optimal results.
- Screener systems offer automated fixed platform solutions that provide detailed information of urine, lipids, wine, honey and other materials.

