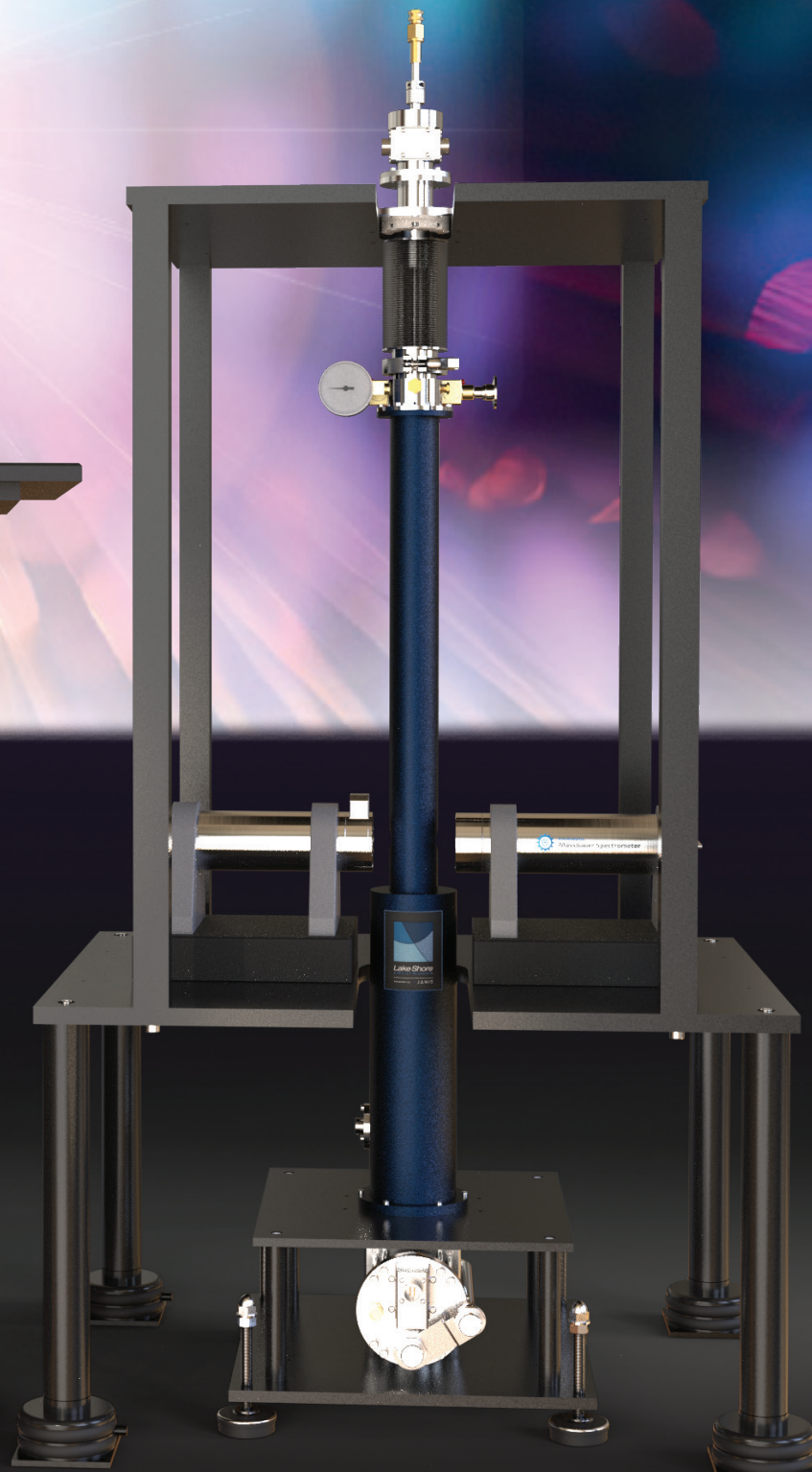


CryoComplete
Mössbauer

Simple, Comprehensive Mössbauer Analysis

Everything you need to perform
precise Mössbauer spectroscopy
measurements, from source
calibration to data analysis

—integrated for your research



CryoComplete Mössbauer

A Fully Integrated Cryogenic Mössbauer Spectroscopy System

CryoComplete Mössbauer is the only commercial solution offering a cryostat purpose-designed for Mössbauer experiments, complete with temperature control and integrated measurement coordination — all from a single vendor.

Engineered for Precision and Confidence

With Lake Shore's CCS-800 cryostat, Model 335 temperature controller, and Iron Analytics' high-performance spectrometer, this system supports low-temperature Mössbauer spectroscopy with unmatched stability and control.

What's Included:

- Lake Shore CCS-800 cryostat designed specifically for Mössbauer geometry, minimizing background signal and maximizing sample access
- Iron Analytics VT5 velocity drive and high-performance TMS5 YAP:Ce scintillation detector with PMT
- MeasureLINK™ software for complete environmental control and data synchronization
- Model 335 temperature controller with proven stability, accuracy, and smooth thermal ramping from cryogenic to ambient conditions

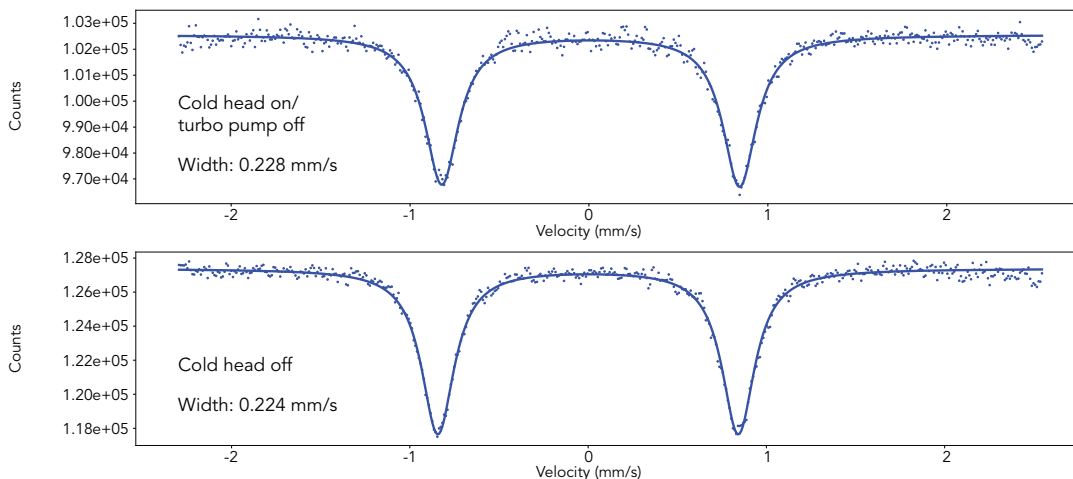
Benefits of CryoComplete Mössbauer:

- One-stop solution — avoid the headache of cobbling together components from multiple vendors
- Exceptional performance for magnetic, mineralogical, chemical or solid-state studies
- Full support from a trusted supplier of laboratory research systems

A collaboration between Lake Shore Cryotronics and Iron Analytics — unifying 90+ years of cryogenic and spectrometry expertise into a single system.



^{57}Fe calibration lines 3 and 4



Exceptionally Low Vibration-Induced Line Broadening

^{57}Fe calibration data with cryocooler on and cryocooler off, with only 1.8% line broadening. Data taken by Lake Shore applications scientist using in-house CryoComplete Mössbauer.

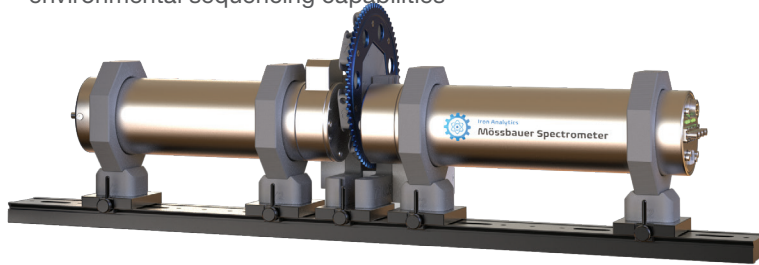
Mössbauer RT

Your Entry Point to Advanced Mössbauer Spectroscopy

Mössbauer RT is the ideal starting point for labs and institutions looking to perform high-resolution room temperature Mössbauer spectroscopy with industry-trusted technology. Built around the Iron Analytics spectrometer—this system comes preconfigured with Lake Shore's intuitive MeasureLINK™ software, enabling full control of data acquisition and analysis.

What's Included:

- Iron Analytics VT5 velocity drive developed through 30 years of design experience and academic collaboration with Palacký University in the Czech Republic
- High-performance TMS5 YAP:Ce scintillation detector with PMT, engineered for high count rates and minimal peak broadening, even in vibration-sensitive environments
- MeasureLINK™ software seamlessly coordinates spectrometer control and data compilation, with advanced environmental sequencing capabilities



The Core of Precision: the Iron Analytics Spectrometer

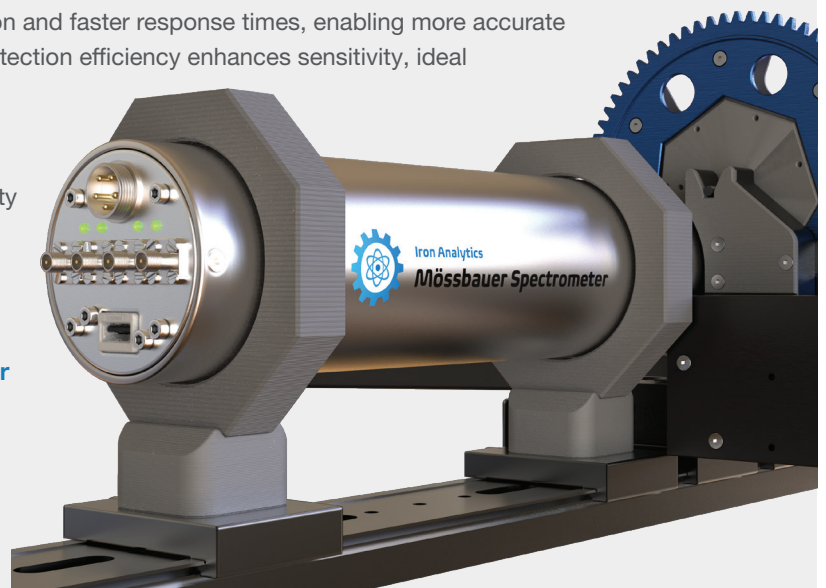
The Iron Analytics Mössbauer spectrometer is precise, fast, and reliable in hyperfine interaction studies. It features a scintillation-type detector, offering significant advantages over traditional gas-type detectors. Scintillation detectors provide superior energy resolution and faster response times, enabling more accurate spectral data and reduced acquisition times. Higher detection efficiency enhances sensitivity, ideal for low-count-rate applications.

VT5 — 5th Generation Velocity Transducer

The VT5 has a built-in PID velocity regulator and velocity generator, complete independent velocity system, and control software (Windows OS compatible) with USB control interface.

TMS5 — 5th Generation Transmission Detector

Speed up your count times with a scintillation-based detector capable of higher count rates. This complete independent detection system includes spectrum registration and control software (Windows OS compatible) with USB control interface.



CCS-800 Mössbauer Cryostat (Standalone)

Purpose-Designed Cryostat for Mössbauer Spectroscopy

For researchers with an existing Mössbauer setup, the CCS-800 Mössbauer cryostat offers a drop-in cryogenic solution engineered specifically for this spectroscopy technique.

Why Choose the Standalone CCS-800?

- Designed with optimal Mössbauer beam path geometry
- Engineered to minimize vibrational interference and maximize sample visibility
- Compatible with most Mössbauer spectrometers, including Iron Analytics

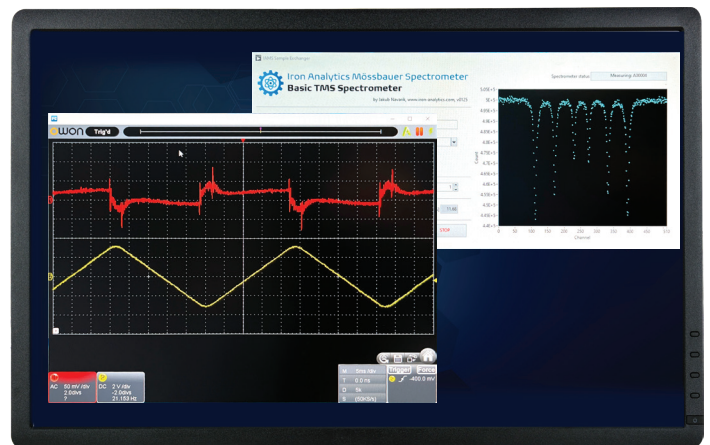
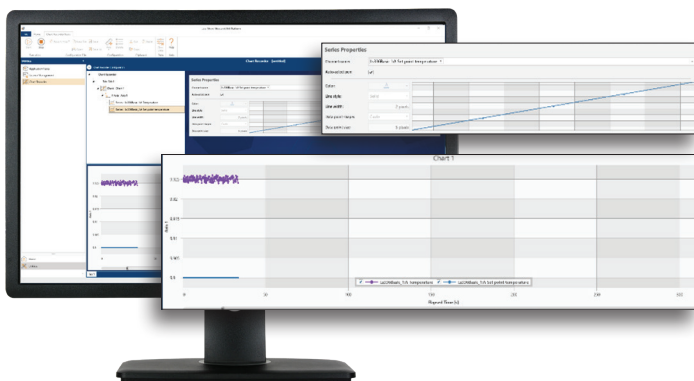
Compatible Add-Ons From Lake Shore

- Iron Analytics VT5 Mössbauer spectrometer
- High-performance TMS5 YAP:Ce scintillation detector with PMT
- Model 335 temperature controller
- MeasureLINK software for full automation and integration



Easily control and monitor your system with MeasureLINK™

Log and fit all data within various static and relaxation models, as well as parameter distributions and correlations. Using the chart recorder utility, you can keep a close eye on counts and channel velocity, ensuring live, real-time spectrum monitoring.



- Real-time data acquisition of multiple Mössbauer spectra
- Coordinate setup temperature sweeps, automated sample exchange (RT only) and data collection
- Interactive spectra visualization allows zooming, panning, and filtering to better analyze specific regions of interest
- Data analysis with third-party MossWin software