INCREASE YOUR CAPABILITIES
WITHOUT INCREASING COMPLEXITY

MicroLab Expert Software

Advanced flexibility and spectral visualization

Now there's a full-featured software package for your Cary 630 FTIR that delivers unprecedented spectral visualization and analytical power.
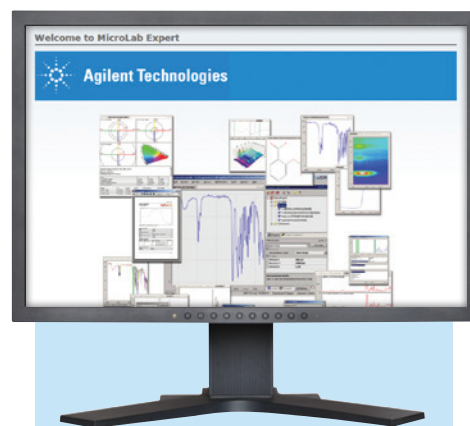
The Agilent MicroLab software suite has expanded to include **MicroLab Expert**, which combines the simplicity of MicroLab with seamless instrument control and advanced spectral analysis.

Improving your FTIR analysis is easier than you think

MicroLab Expert gives you the ability to view spectral information before—and during—collection. What's more, you can identify spectra using functional groups, perform basic kinetics analysis, and manipulate/process data using mathematical functions and algorithms.

Features of MicroLab Expert software include:

- Measurement control and data collection for MicroLab FTIR instruments
- 2D and 3D data visualization
- IR interpretation and functional group analysis
- Powerful library searching
- Optional Quant with Chemometrics module
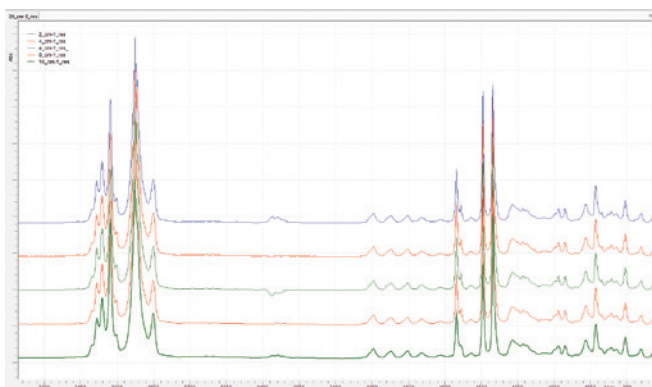- Seamless integration: Easily transfer data and methods between MicroLab PC and MicroLab Expert

Enhanced Agilent MicroLab Expert software, coupled with the Agilent 630 FTIR, are perfect for method development, organic synthesis, and other non-routine R&D operations.

Agilent Technologies

INNOVATIVE FEATURES HELP YOU VISUALIZE AND ANALYZE COMPLEX SPECTRA

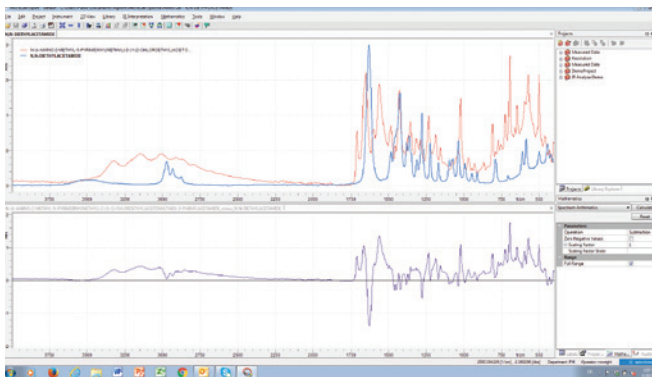## Straightforward operation, reliable answers

MicroLab Expert increases the capability of your Cary 630 FTIR spectrometer, while maintaining the ease of operation for which MicroLab software is renowned.

Stacked Display Feature: The offset helps you visualize the spectra.
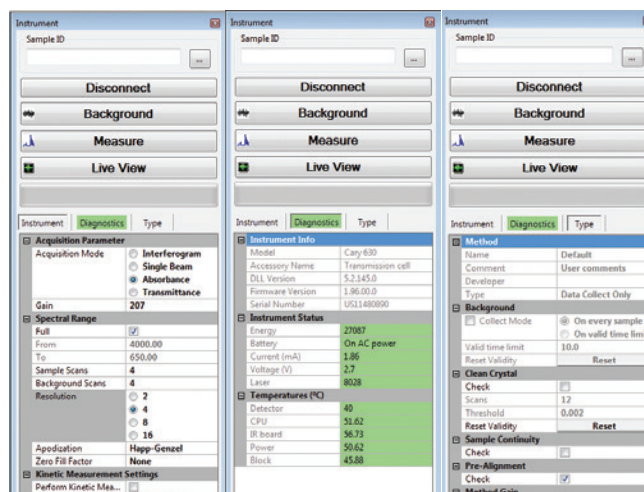
Advanced data evaluation and mathematics

All standard mathematical functions used in spectroscopy—including normalization, derivatives, baseline correction, spectral arithmetic, smoothing, and peak picking—are included in MicroLab Expert. An optional Chemometrics and Prediction module increases your capabilities further with special mathematical operations, such as noise statistics, multiplicative scatter correction, thickness correction, ATR correction, and Kramer-Kronigs correction.
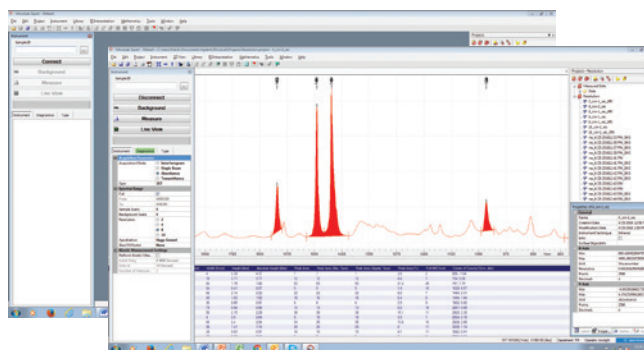

Spectral subtraction: The two spectra are shown above; the subtraction result appears below.

Fast, simple data collection and file management

With MicroLab Expert, you can easily optimize, scan, and process your data. You can also organize collected data into project folders—and group methods, templates, and other relevant files together for fast retrieval. MicroLab Expert even makes it easy to share your data with other office applications, or create report printouts with customized templates.
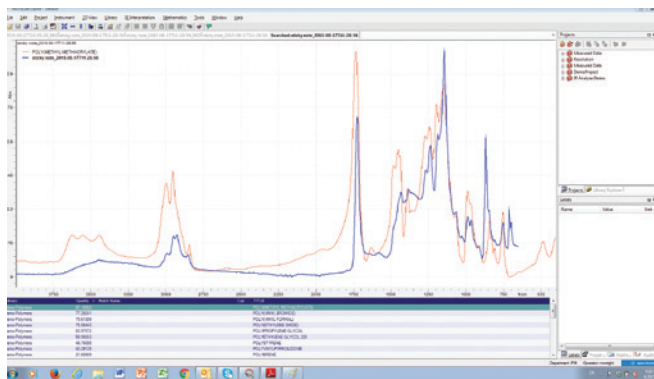

Convenient tabs organize all collection and control parameters: Instrument, diagnostics, and type.

Easy operation: Upon connection, all the data tabs become active.
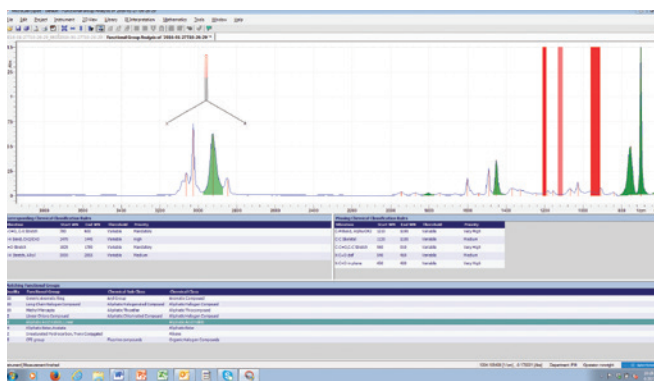
Spectral Libraries enable powerful search capabilities

From best fit to residuals… MicroLab Expert makes it easy to find the spectroscopic data you need. You can even search by spectra or text fields using commercial spectral libraries, file system data, or custom spectral libraries built by you.

Library search screen, showing sample and library spectra. A hit list appears underneath.

IR Interpretation based on functional group analysis

This intuitive approach is useful for confirming molecular structure, because the relationship between spectral bands is translated to a structural determination.

In the interpretation screen above, the query asks whether the spectrum may contain halides. The red regions indicate where the bands would be located; since no bands are present, this spectrum contains no halides.

Optional Chemometrics and Prediction module

MicroLab Expert includes PLS-1, PLS-2, SIMPLS, MLR, PCR, and PCA methodologies, so you can choose the appropriate processing tool for your analysis.

Seamless integration

Easily transfer data and methods between MicroLab PC and MicroLab Expert.

Together the enhanced Agilent MicroLab Expert software coupled with the powerful Agilent 630 FTIR are perfect for method development, organic synthesis, and other R&D laboratory operations.

Advance your FTIR analysis. Visit:
www.agilent.com/chem/microlab-expert

Ordering Information

Product	Description	Part No
MicroLab Expert Software	**Software for advanced data processing, interpretation, library searching, quantitative analysis, and data acquisition from legacy MicroLab products.**	**G4997AA**
MicroLab Expert Base Software	Includes data acquisition module, IR functional group analysis, library searching, simple kinetics, and standard mathematical functions	G4997AA #100
MicroLab Expert Base + Quant Software	MicroLab Expert Base + Quant Software (linear and chemometric functions)	G4997AA #101
MicroLab Expert Base + Quant Software + Reaction Monitoring	MicroLab Expert Base + Quant + Reaction Monitoring software	G4997AA #102
MicroLab Expert Software Upgrades	**Add capabilities to your existing MicroLab Expert Software**	**G4998AA**
Upgrade Base to add Quant Software	Upgrade MicroLab Base Software to Quantitative analysis; Includes Linear and Chemometric Analysis	G4998AA #100
Upgrade Base to Quant + Reaction Monitoring Software	Upgrade MicroLab Base Software to Reaction Monitoring and Quant	G4998AA #101
Upgrade Base + Quant to Reaction Monitoring Software	Upgrade MicroLab Base with Quant Software to Reaction Monitoring	G4998AA #102

Agilent MicroLab Expert software is compatible with:

- Cary 630 FTIR
- 4100 ExoScan FTIR
- 4200 FlexScan FTIR
- 4300 Handheld FTIR
- 4500 Series FTIR
- 5500 Series FTIR

Advance your FTIR analysis. Visit:
www.agilent.com/chem/microlab-expert

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