Thermo Scientific
OMNIC Specta™ Software
Innovative identification and interpretation tools made for today’s materials analyst

Spectroscopic Identification as Never Before
You choose FT-IR and Raman spectroscopy because it’s often the easiest way to a quick answer — no sample preparation, rapid analysis, non-destructive. Now with Thermo Scientific™ OMNIC™ Specta™ we make getting answers from your spectrometer easier than ever before. Your tasks flow naturally without giving up power where you need it. This allows you to focus your efforts on getting the answers you need and taking the required actions.

Effortless Analysis – Problem In, Answer Out
When failures, contamination, or defects occur in your manufacturing process, when staying in business requires you to stay ahead of the competition, or when identifying evidence obtained from a crime scene is needed to convict a criminal — vibrational spectroscopy should be your first choice. Until now, the analyst required a high level of technical expertise to get answers and patience to use software designed for doing research. Introducing OMNIC Specta, the spectroscopic software designed to work the way you do, to get you better answers faster.

Tough Questions…
• Why was the material rejected?
• Why did the failure occur?
• What are the components of this material?
• What chemicals are in this mixture?
• Are there illegal substances in this sample?
• Can I get a definitive answer?

To get answers to these questions, just having a good quality spectrum is not enough. It requires the ability to work with and interpret spectra, the use of spectral libraries and raw data, and a justification of your results. OMNIC Specta software is a revolution in FT-IR and Raman analysis that shapes the software to your task, rather than the other way around.

Definitive Answers… Fast
OMNIC Specta is a unique combination of spectral identification tools, interpretation algorithms, and a knowledge-base of scientific documentation all in a unique and innovative software design that guides you in identifying materials and verifying assumptions. It removes the overhead of typical analytical tasks to get you on the road to answers quickly and confidently.
OMNIC Specta –
Making Spectroscopy Simple for Analytical Investigation

OMNIC Specta provides innovative identification and interpretation tools, expert knowledge bases and a user-interface made for today’s materials analyst. OMNIC Specta quickly and clearly conveys information visually as you work, thanks to years of experience in spectroscopy we put under the hood. The software indexes all of the data on your hard disk, creating a database of all your existing spectral data. And we include a large set of reference spectra to get you started properly.

Breakthrough Features

Multi-Component Search and Contaminant Search allow you to identify constituents in mixture samples without the tedious manipulations required by the traditional search and subtract processing. These unique features set OMNIC Specta apart from other spectroscopy software by providing compelling visual confirmation, giving you confidence in your results and making your job easier.

Specialized Software Packages

OMNIC Specta is available in several packages combining software and spectral libraries designed for specific applications for either FT-IR or Raman. Capitalize on the complementary nature of these two techniques with one “Spectroscopy Simplified” software platform. Select either a general chemical collection or choose a specialized package designed for your industry or sample type, such as polymer analysis or forensic science. Consult with your local Thermo Scientific representative for more details.

Compatibility

OMNIC Specta is compatible with Windows® Vista™ and XP (Service Pack 2 minimum).
Powerful Spectral Identification
• Advanced identification tools help get the answers you need
• One-step mixture identification for ultimate speed and confidence
• Find and identify contaminants without subtractions or manipulation

Flexible Result Reporting
• The control you need to confidently report your findings
• Communicate efficiently with modern PDF reports
• Directly copy into word processing programs

Confident Data Collection
• Status monitor lets you know your instrument is working
• Live displays allow active data viewing to ensure quality results
• Keep working during data collection for maximum productivity

Data collection only available for certain instruments. Consult your sales representative for availability.
OMNIC Specta –
The Perfect Answer to Real World Problems

Verification
A manufacturing problem was indicated when a routine QC test began to fail for a blended product. The Thermo Scientific™ Nicolet™ iS™10 FT-IR spectrometer running OMNIC Specta Contaminant Search quickly pinpointed a contaminant material without the need for spectral subtractions. Because OMNIC Specta had indexed all historic data, the contaminant was quickly identified as a material from a formulation that was several years old. The expert system integral to OMNIC Specta allowed the manufacturing process to be corrected quickly without a lengthy investigation.

Characterization
An R&D team working on a deformulation problem looked to FT-IR to identify components and their approximate ratios in a new competitive product. Using a Thermo Scientific Nicolet iS50 FT-IR spectrometer with OMNIC Specta, the team pulled apart the spectrum of a complicated mixture quickly and easily. This avoided manual subtract and search iterations that distort spectra and reduce the reliability of the identification. Years of historic data were used automatically to determine the constituents in the material in minutes.

Identification
A crime lab had what appeared to be an atypical mixture of drugs and cutting agents. A Thermo Scientific™ DXR™ SmartRaman spectrometer using OMNIC Specta Multi-Component Search for one-step identification, allowed the investigator to get convincing results faster. OMNIC Specta provided visual confirmation and confidence in the identification of the individual components, saving considerable time in the investigation.