Galactic Industries Corp.

Software Products for
Analytical Spectroscopy

Galactic Industries History

1985: Galactic is founded on the concept that software designed for inexpensive PCs could provide analytical scientists with the speed, flexibility and data processing power of traditional instrument workstations. The concept is to free the instrument to do what it is there for: collecting data.

Galactic
GALACTIC INDUSTRIES CORPORATION

Galactic Industries Product Milestones

- *1986: DOS-based Spectral Display & Processing Software - Spectra Calc*
- *1987: Spectral Library Search & first Instrument Control versions of Spectra Calc*
- *1989: Enhancements for Chromatography & Hyphenated techniques - Lab Calc*
- *1992: Windows-based software - GRAMS/386*
- *1994: Real time 3D visualization - GRAMS/3D*
- *1996: Spectral Notebase - GRAMS/32*
- *1997: Full 32-bit software with Network Administration - GRAMS/32 Version 5*

Galactic
GALACTIC INDUSTRIES CORPORATION

Analytical Laboratories Today...

- *Too many different instruments and software packages*
- *Still have instrument "down time" while data is processed on workstation*
- *No common data file formats or central storage of raw data*
- *LIMS good for storing results; limited for raw data*

Galactic
GALACTIC INDUSTRIES CORPORATION

Corporate Software Standardization

- *Unified desktop interface for all raw instrument data*
- *Common data file format*
- *Provide basic functionality for analytical techniques*
- *Network installation, administration & user access control*
- *Database interfaces for archive & retrieval of raw data*

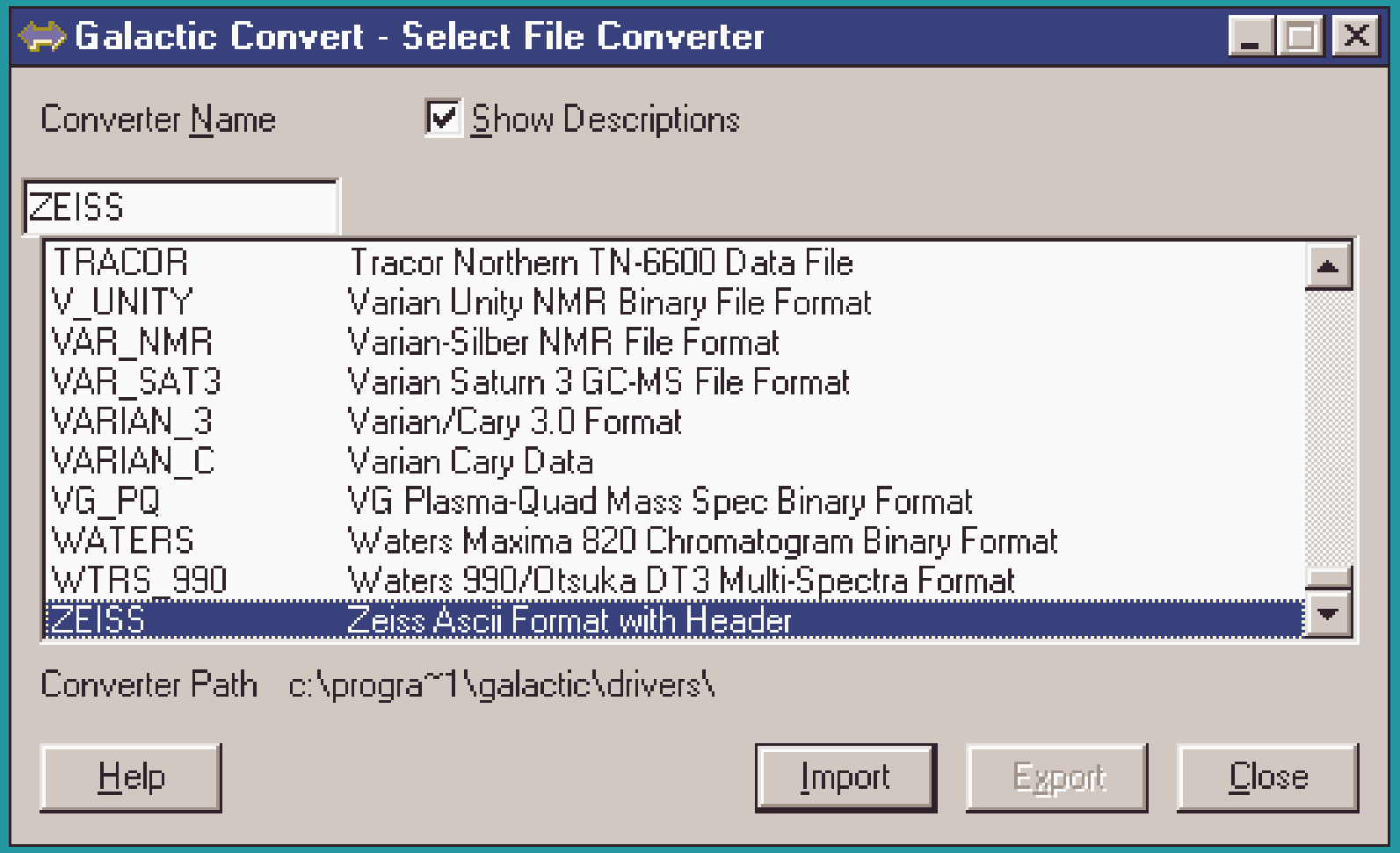
Galactic
GALACTIC INDUSTRIES CORPORATION

GRAMS/32® with Spectral Notebase

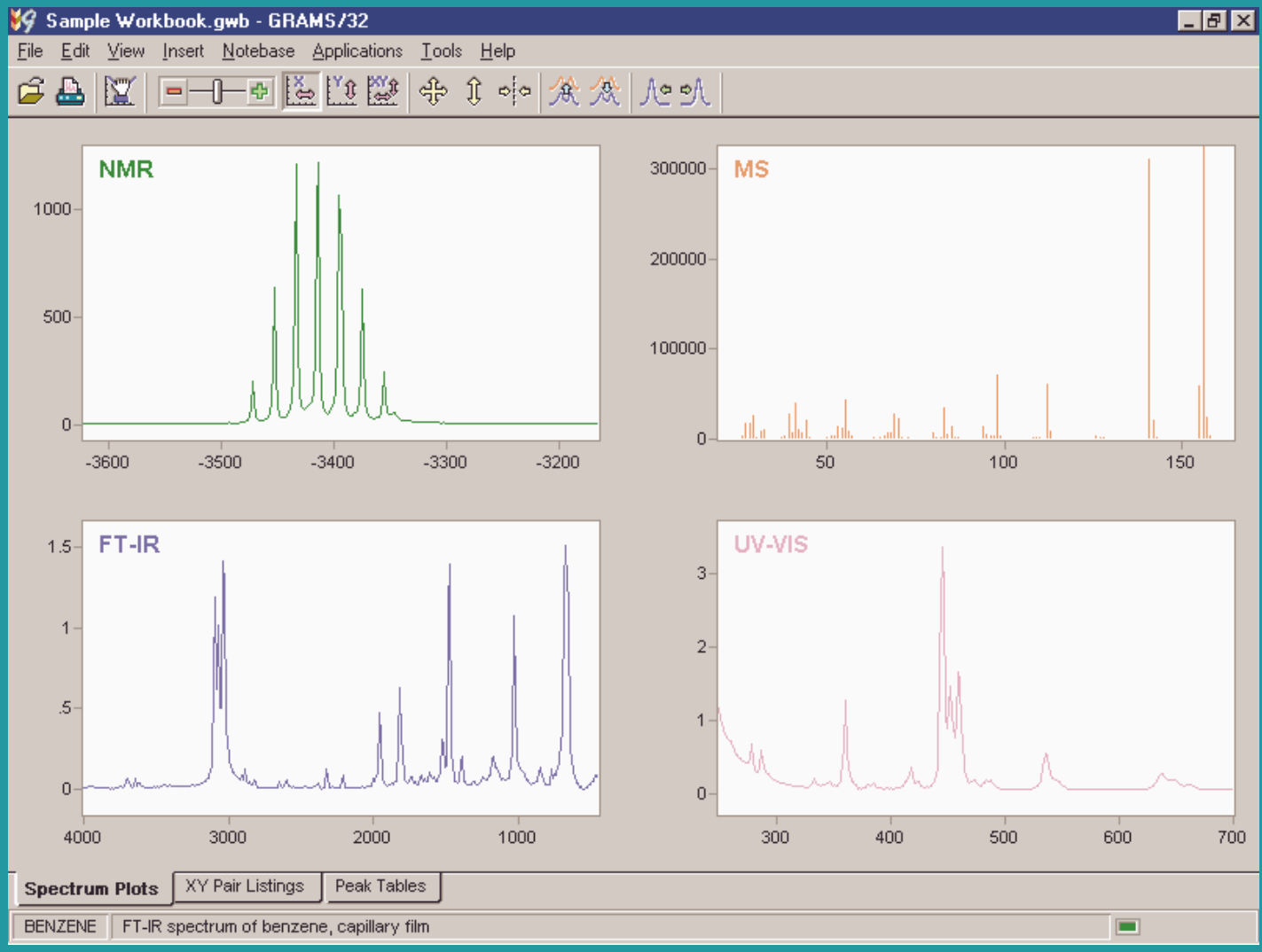
- Import or collect data from hundreds of instruments into common file format
- Fast, powerful data visualization and presentation quality graphics
- Comprehensive data processing library for multiple instrument techniques
- Data security and user administration
- Advanced database data management

Galactic
GALACTIC INDUSTRIES CORPORATION

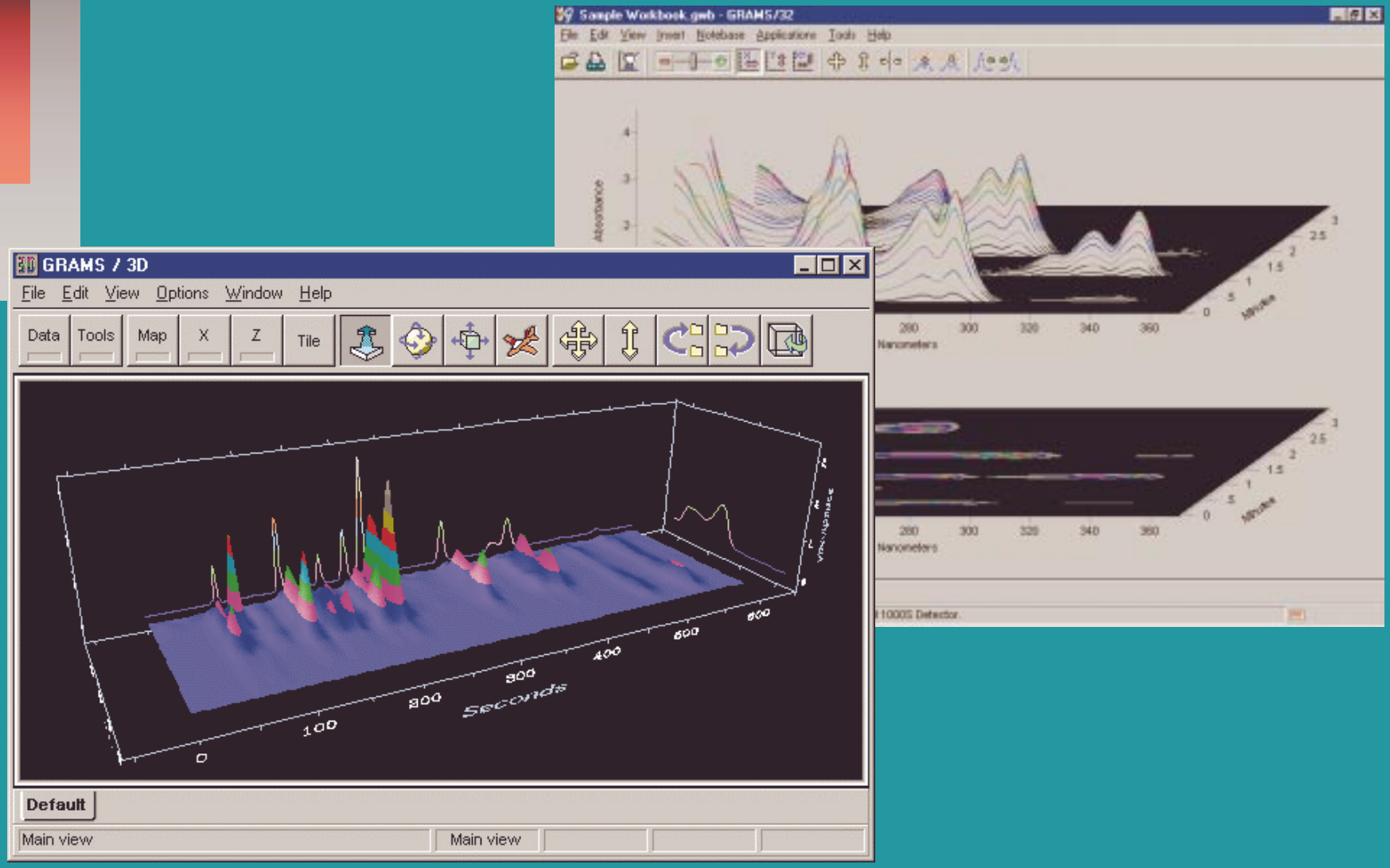
GRAMS/32:
Data File Import



GRAMS/32:
Spectra from Different Techniques



GRAMS/32 & GRAMS/3D: Multi-dimensional Data Visualization

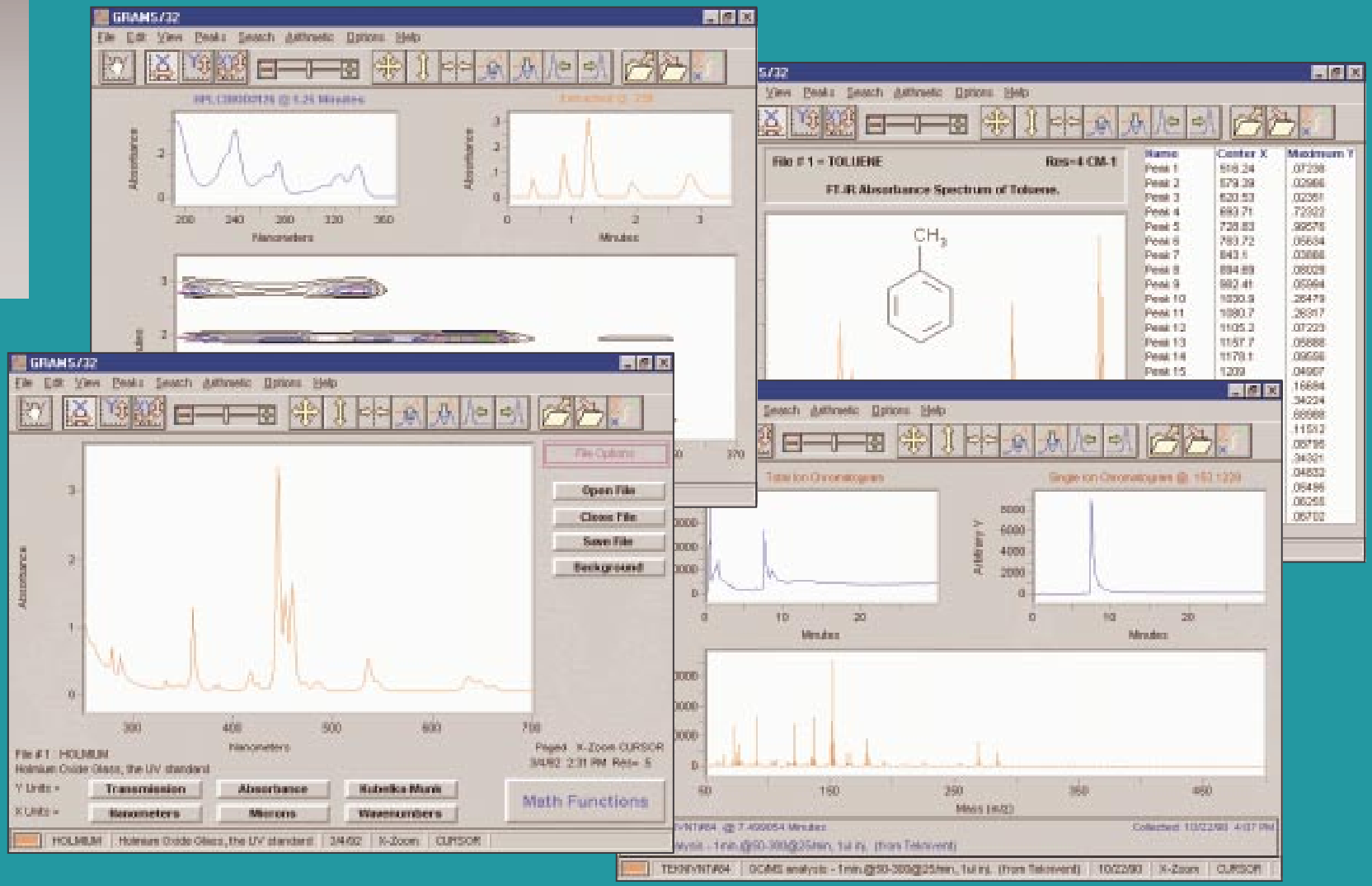


GRAMS/32:
Data Visualization & Graphics

- Real time zoom and scroll
- Multiple data windows: single, overlay, stack
- 2D and 3D data displays
- Add annotations, peak marks, tables, graphics, and more
- Paste other OLE objects like chemical structures, equations, etc.

Galactic
GALACTIC INDUSTRIES CORPORATION

GRAMS/32:
Create Custom "View Pages"

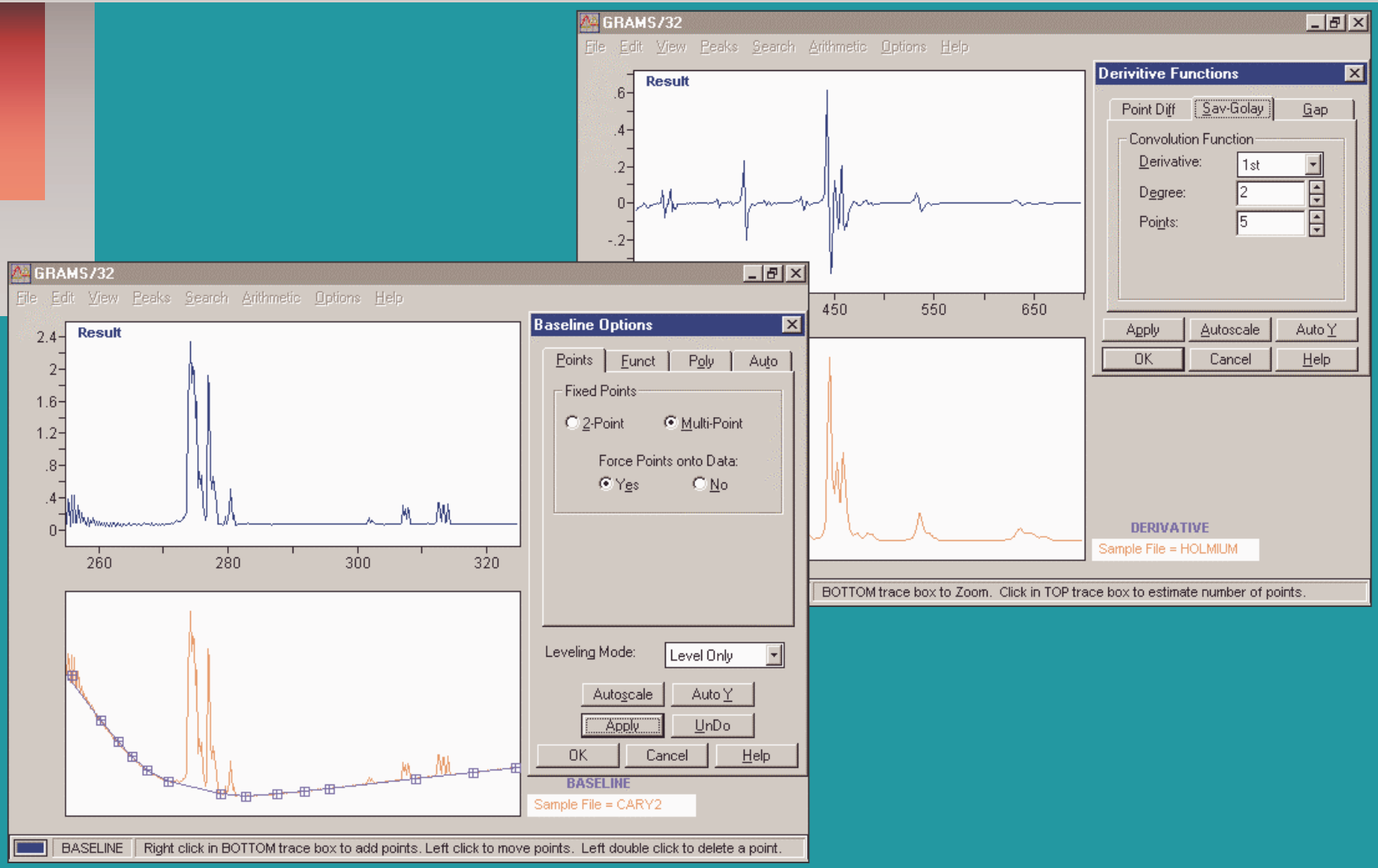


GRAMS/32: Comprehensive Data Processing

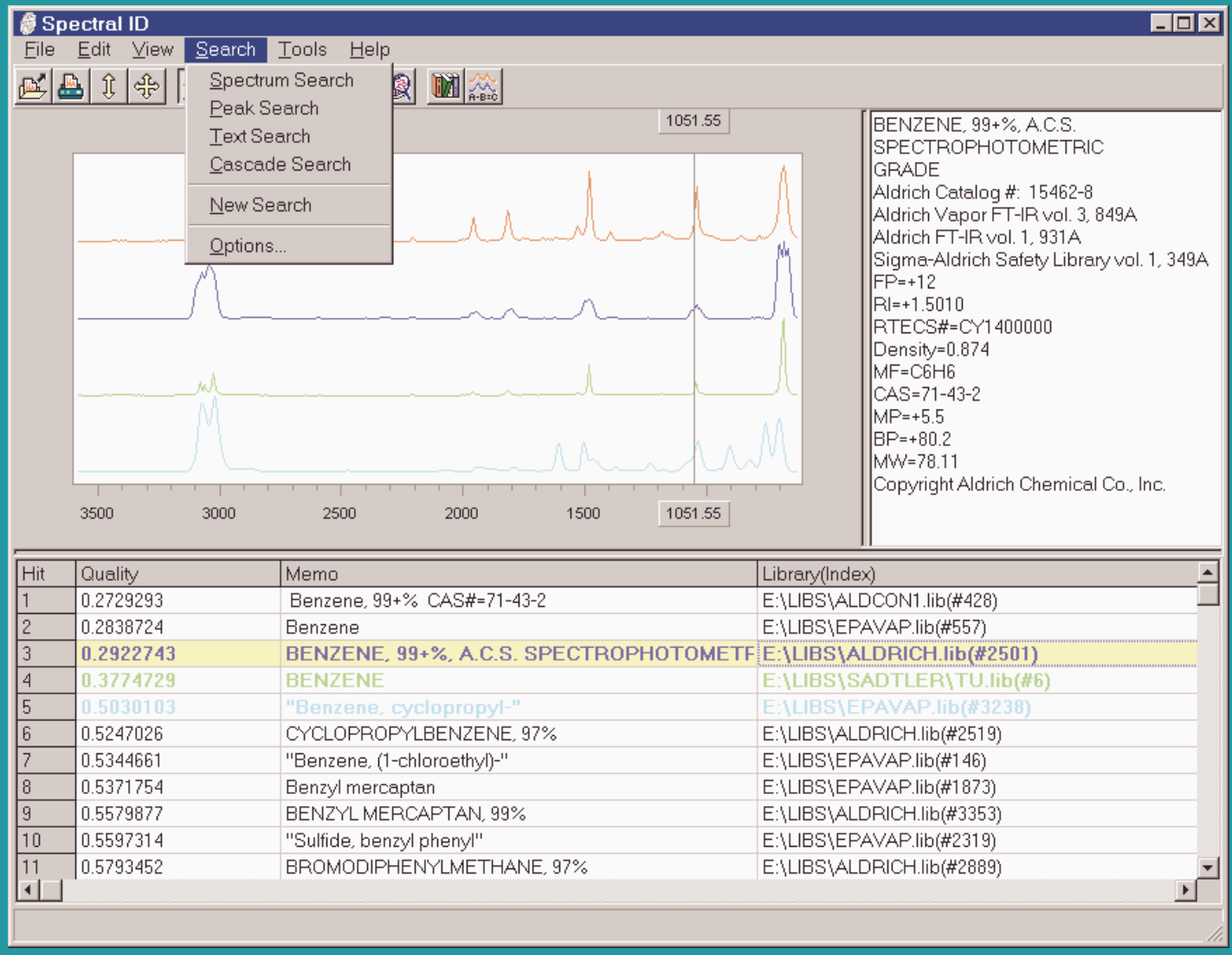
- *General data processing routines*
- *Instrument technique-specific applications*
- *Chemometrics and specialized data processing*
- *Utilities & Macro Wizard*
- *Powerful Array Basic™ language*

Galactic
GALACTIC INDUSTRIES CORPORATION

GRAMS/32:
General Data Processing

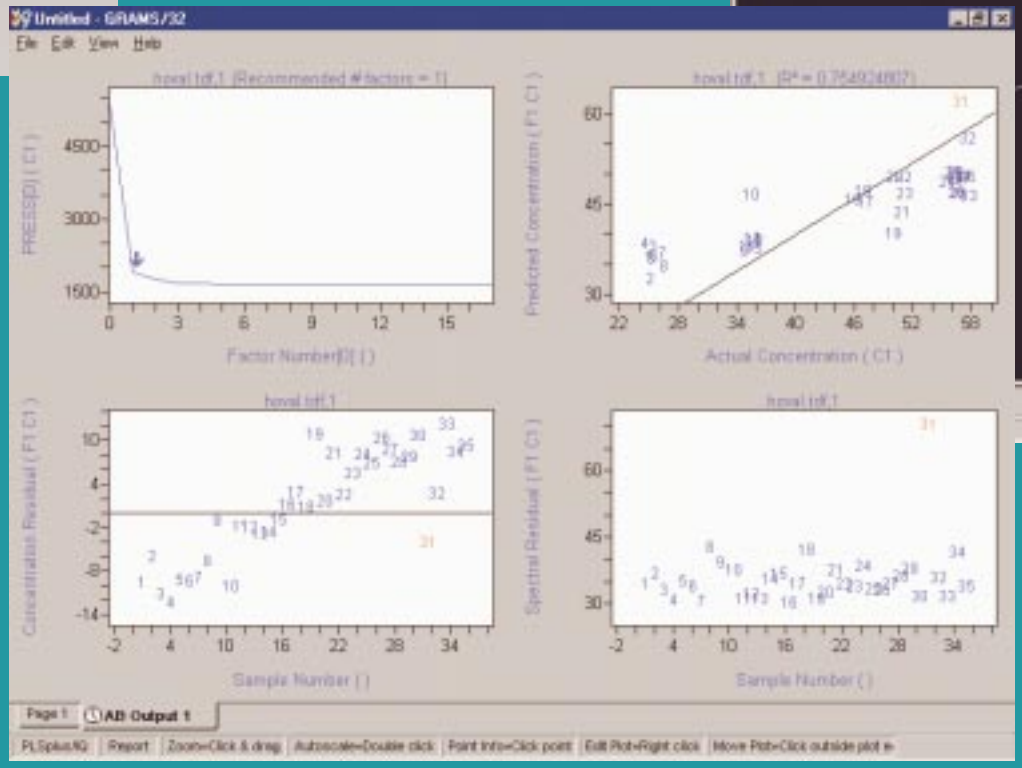


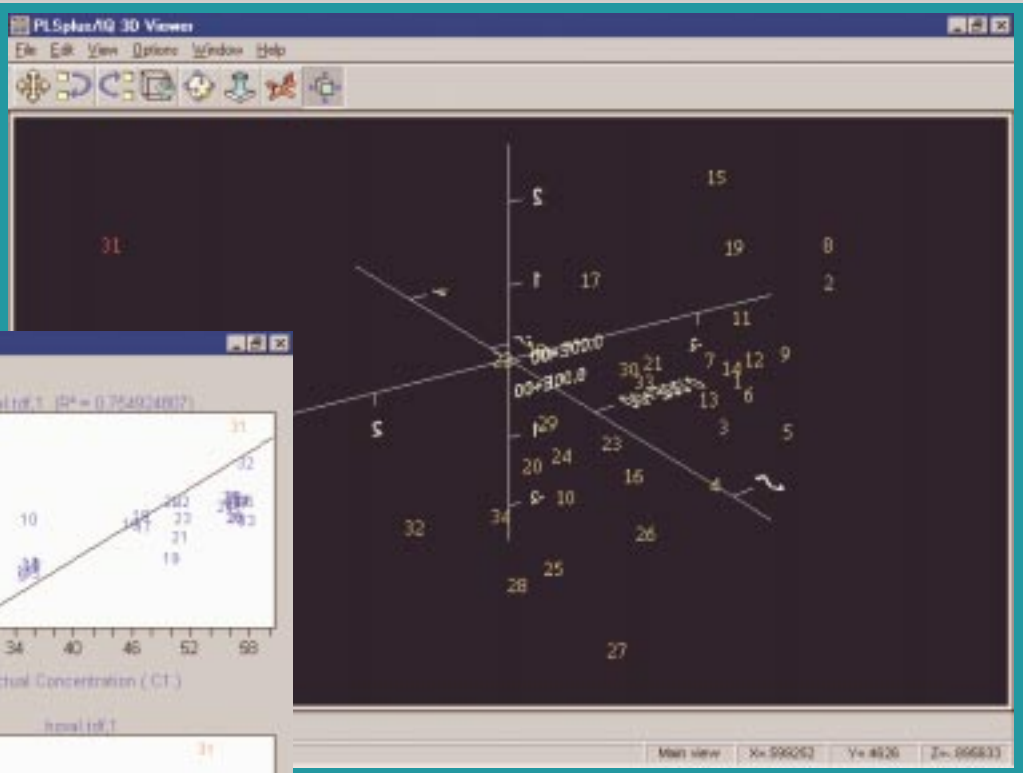
GRAMS/32:
IR Spectral Library Searching



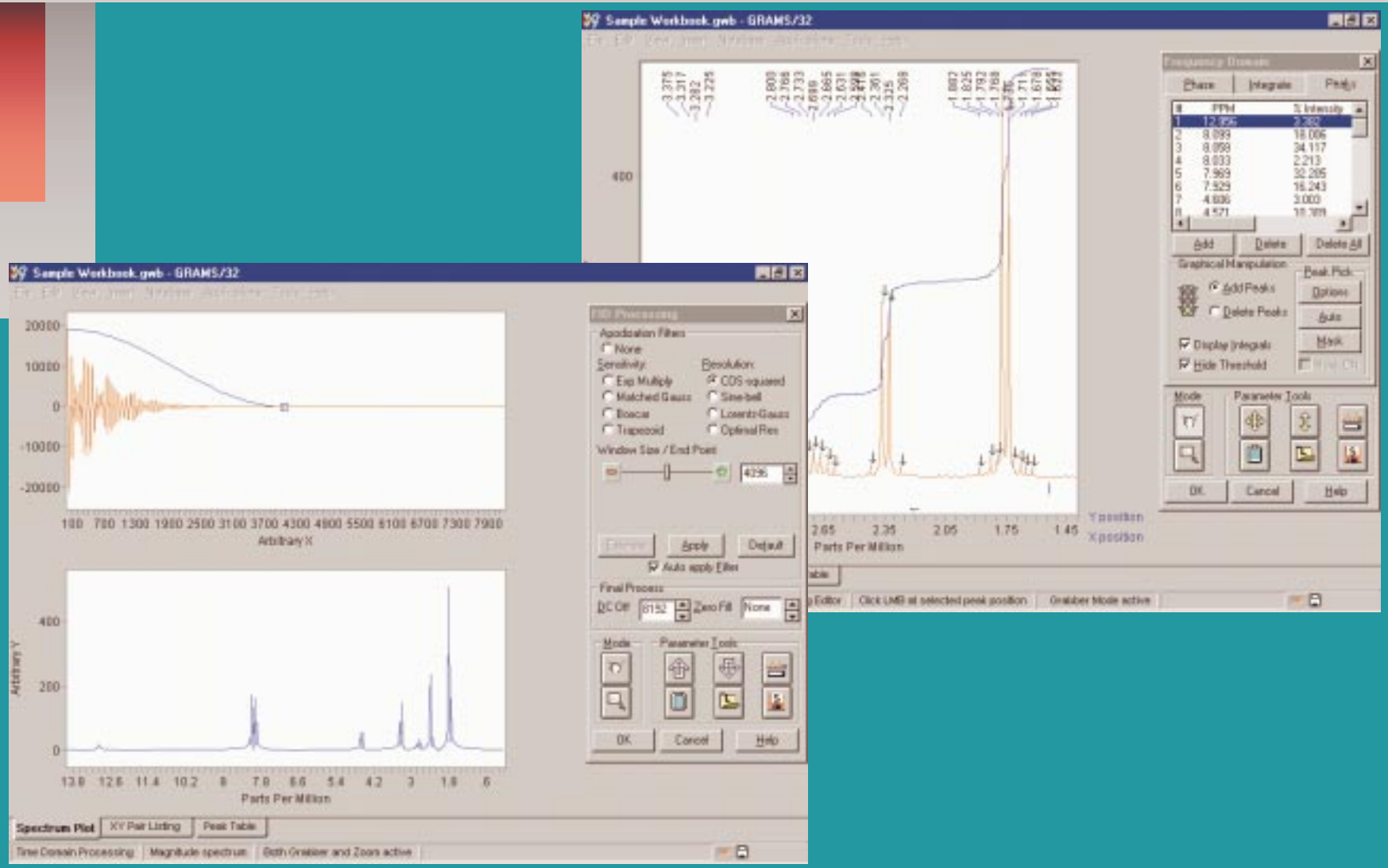
Hit	Quality	Memo	Library(Index)
1	0.2729293	Benzene, 99+% CAS#=71-43-2	E:\LIBS\ALDCON1.lib(#428)
2	0.2838724	Benzene	E:\LIBS\EPAVAP.lib(#557)
3	0.2922743	BENZENE, 99+%, A.C.S. SPECTROPHOTOMETF	E:\LIBS\ALDRICH.lib(#2501)
4	0.3774729	BENZENE	E:\LIBS\SADTLER\TU.lib(#6)
5	0.5030103	"Benzene, cyclopropyl-"	E:\LIBS\EPAVAP.lib(#3238)
6	0.5247026	CYCLOPROPYLBENZENE, 97%	E:\LIBS\ALDRICH.lib(#2519)
7	0.5344661	"Benzene, (1-chloroethyl)-"	E:\LIBS\EPAVAP.lib(#146)
8	0.5371754	Benzyl mercaptan	E:\LIBS\EPAVAP.lib(#1873)
9	0.5579877	BENZYL MERCAPTAN, 99%	E:\LIBS\ALDRICH.lib(#3353)
10	0.5597314	"Sulfide, benzyl phenyl"	E:\LIBS\EPAVAP.lib(#2319)
11	0.5793452	BROMODIPHENYLMETHANE, 97%	E:\LIBS\ALDRICH.lib(#2889)

GRAMS/32: PLS Calibration Development





GRAMS/32:
"1-D" NMR Data Processing



GRAMS/32:
Data Security and Administration

- Automated data processing audit trail
- User passwords and access privileges
- Electronic signatures
- Galactic “Certified” data processing applications
- Encrypt custom algorithms and processing routines

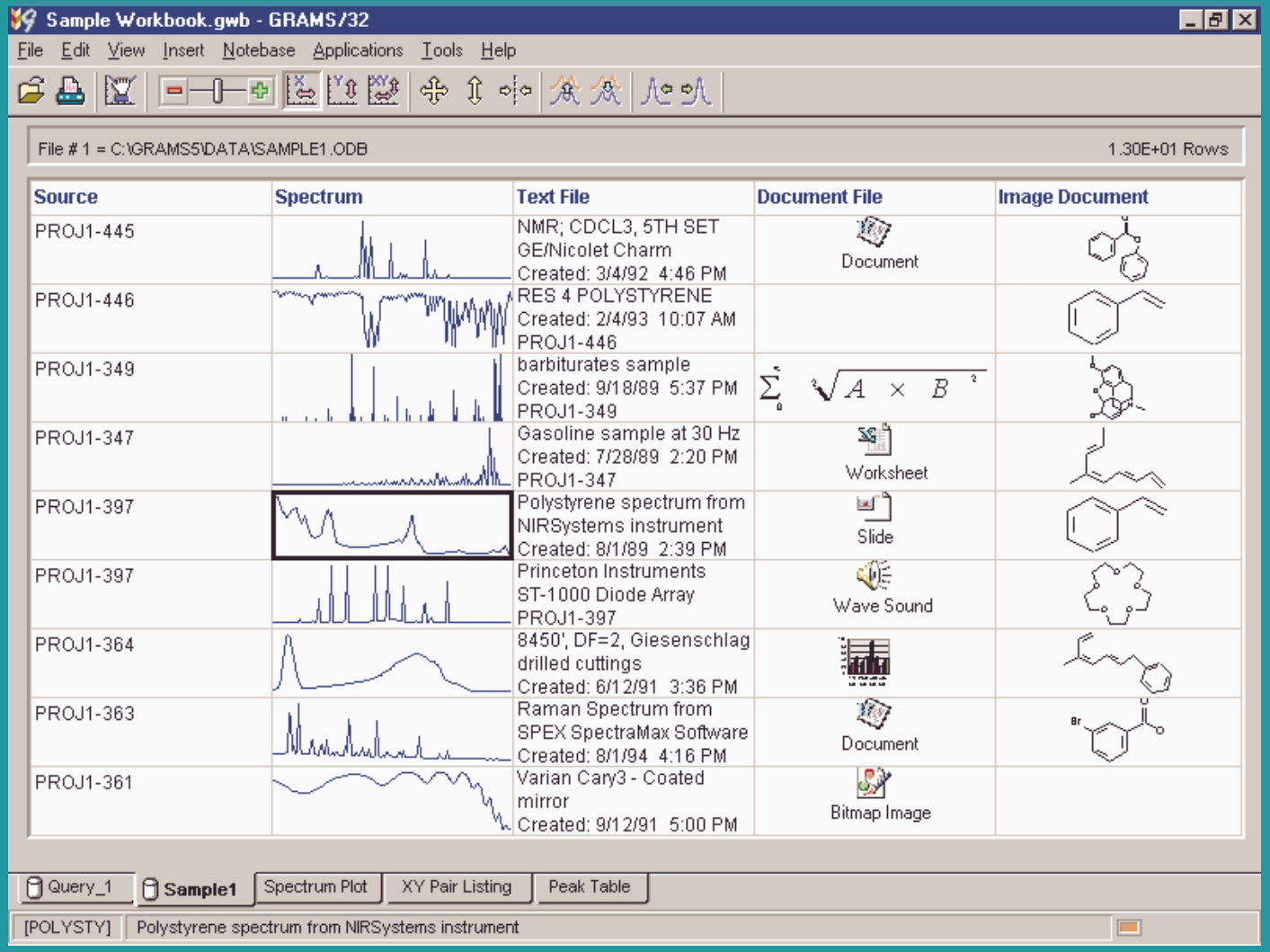
Galactic
GALACTIC INDUSTRIES CORPORATION

GRAMS/32: Spectral Notebase™ Database

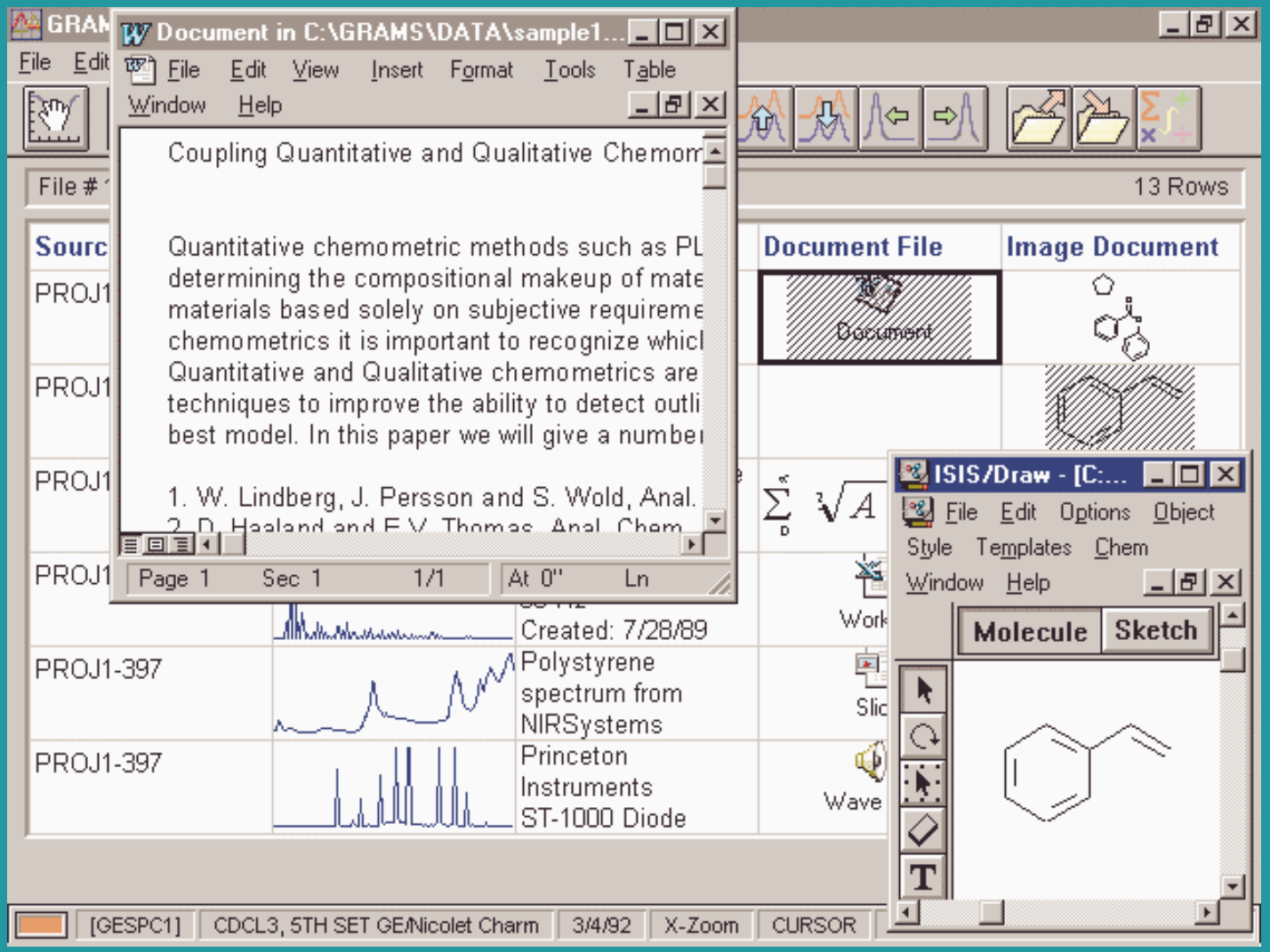
- Archive, organize, search and retrieve instrument data
- Built-in MS Access database engine
- ODBC connectivity for commercial relational databases
- Easy-to-use Wizards for creating databases and queries

Galactic
GALACTIC INDUSTRIES CORPORATION

GRAMS/32:
Spectral Notebase Browsing



GRAMS/32:
Spectral Notebase Editing



GRAMS/32 Software

- Provides a common environment for gathering, viewing, and processing data from many different sources
- Spectral Notebase organizes and archives all laboratory data in industry standard databases