

Hiden EGAsoft Data Acquisition software for TGA-MS Applications

Auto Sequencing Software

EGA EGASoft	Raph Page Song - Microsoft	
Main Screen Engineering Settings		
	EGASoft	V2.5
Apalysis Description 1-50_BAR		Connect Disconnect Shutdown
Analysis Description		Emission
water_MID		Run F2
Analysis Description		0 Turbo Pump Speed
1-20_BAR		0 Pressure
Analysis Description 1-50_BAR	/	
		Setup Bar Scans
Anaxis Description		Setup MID Scans
Analysis Description		Build Measurement Stages
Analysis Description		Save/Load required?
		Save Setup Load Setup
Active Stage Waiting on Trigger T	otal Stages	START Analyse Data
0	4	

Configure a sequence of optimised scans for multiple stage analysis. Scans separated by start/stop signal

Simple Stop/Start Command Setup

ain Screen Engineering Settings	
Enginee	ring Settings
	Locked
MSI	IU Settings
Multiplier Voltage 🕺 1800	Filament F1
Settle Speed Fast %	Dwell Speed Fast %
Settle Speed Normal %	Dwell Speed Normal %
Settle Speed Slow % 200	Dwell Speed Slow % 200
System Settings Folder Information	
	Connection
	m Port WR Number Socket
тср/ір 🗹 🏹	1 14993 5025
Use Settings from C	comms Configration Utility
Exte	ernal Triggering
Thermal Combo	TTL Control
None	IO Line IO1
De	tector Type
· · · · · · · · · · · · · · · · · · ·	Faraday/SEM
	correct detector type will cause unstable and should NOT be done.

Auto Start/Stop setup configured by simple switch control

Configure Multiple Bar Scans

EGH BAR Scan Se	etup												
					Bar Scan Settings								
	Start Mass	Stop Mass	Increment	Detector	Autorange High	Autorange Low	Start Range	AutoZero	Electron Energy	Emission Current	Settle Speeds	Dwell Time	
Enabled	10	20		SEM	-7	-12	-8	ON	70	20	Normal	Normal	T
Bar Subscar	12												-
	a	à	à		a	a	a		a	à			
Enabled	30	45		SEM 🔳	-7	-12	-8	ON	70	20	Normal	Normal	
Bar Subscar	n 3												-
Enabled	60	70		SEM 🔽	À -7	-12	A -8	ON	70	20	Normal	Normal	T
									_				
						Save	Load	Exit					

Bar scan setup – run up to 3 bar scans at a time.

The mass regions of interest are scanned, the parts of the mass range of no interest are ignored, reducing the data acquisition time. Mass spectrometer parameters can be optimised for each part of the scan.

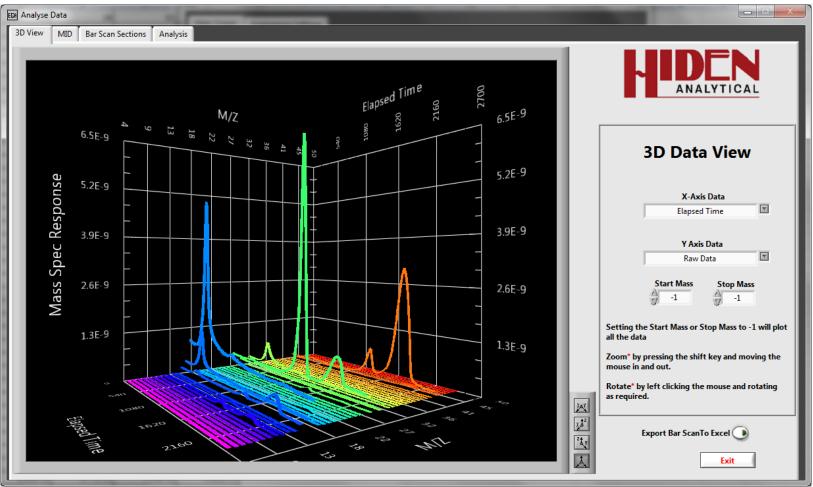
MID Setup



MID scan setup Automatic removal of spectral overlaps

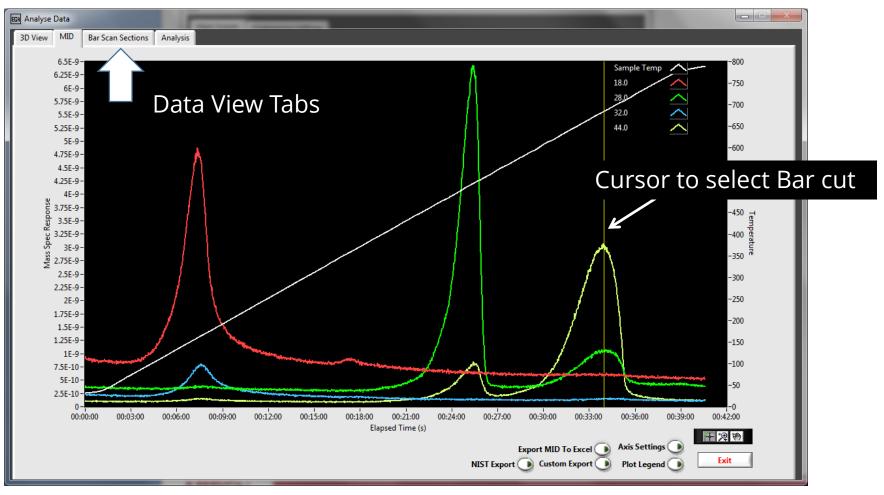
Quadrupole Mass Spectrometers for Advanced Science

3D Bar Scan Viewer



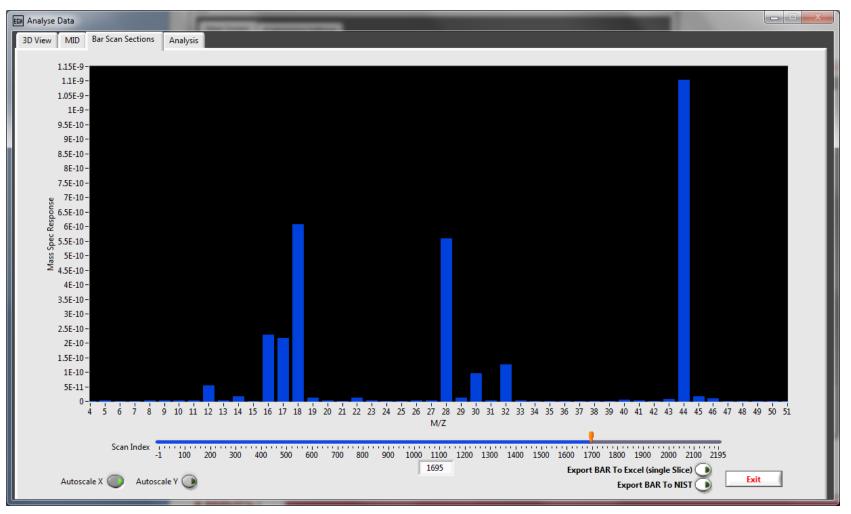
Real time 3D data viewer for easy determination of bar scan trends

MID View

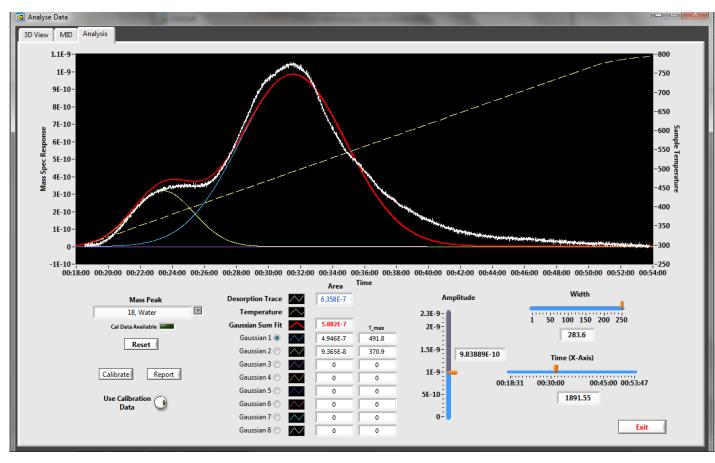


Simple MID setup - display up to 16 trends at a time

BAR View

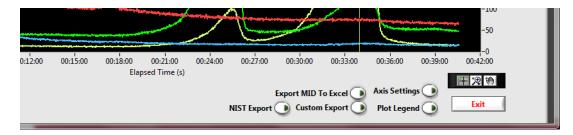


Data Analysis Software



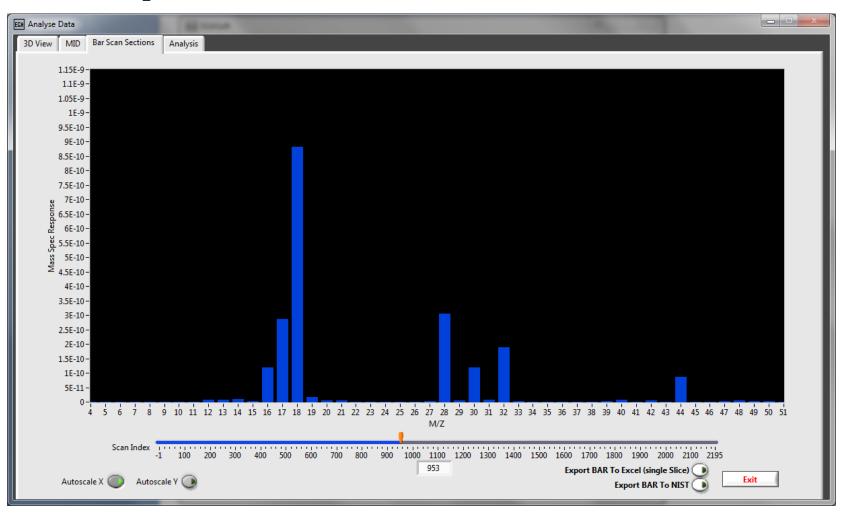
Peak integration/fitting routines

Data Export Facility



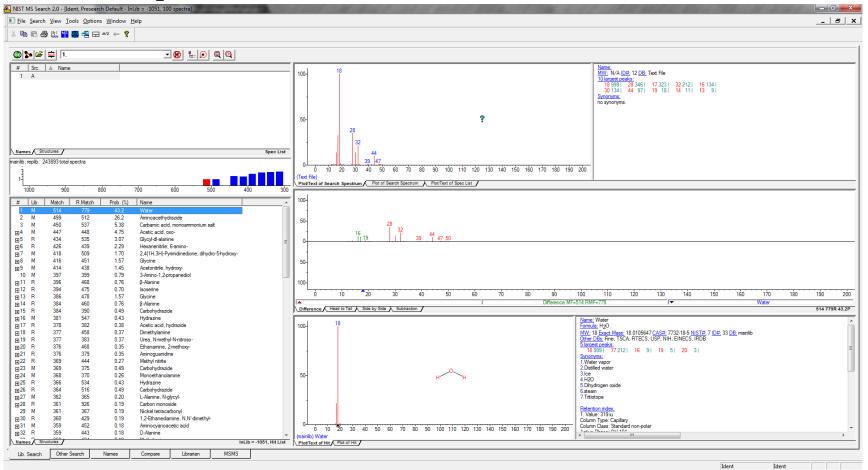
- Export to correct format for import to TGA software
- Export to Excel
- Export to NIST MS library: Two methods included:
 - 1. Complete spectra from selected BAR scan
 - 2. Selected peaks from MID view

NIST export from a selected BAR scan



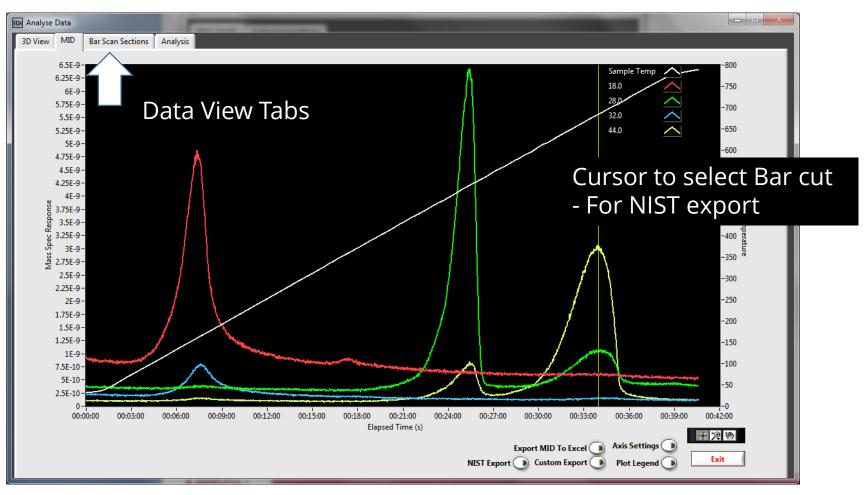
Quadrupole Mass Spectrometers for Advanced Science

NIST import from a selected BAR scan



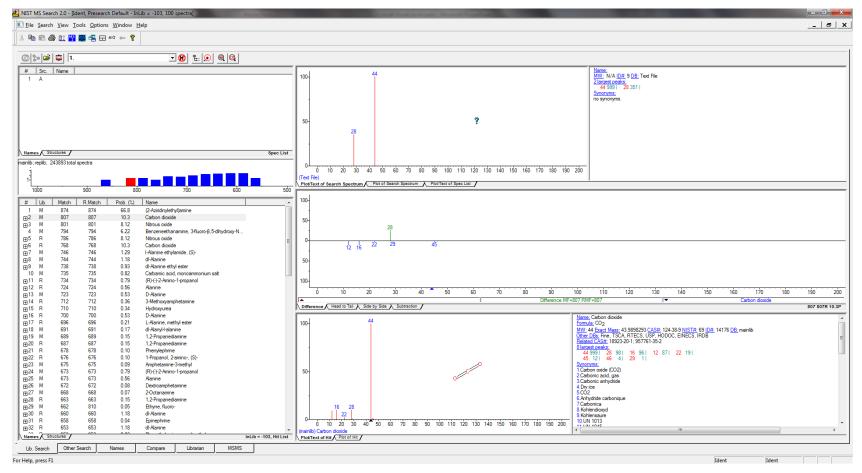
When importing a Bar scan the whole mass spectrum is used in the NIST search routine

MID View - export to NIST



Simple MID setup - display up to 16 trends at a time

NIST with imported selected MID peaks



Importing MID peaks allows the user to choose groups of peaks to narrow the NIST search