

Software for Hiden Mass Spectrometers

Gas Analysis, Thermal Analysis and Residual Gas Analysis

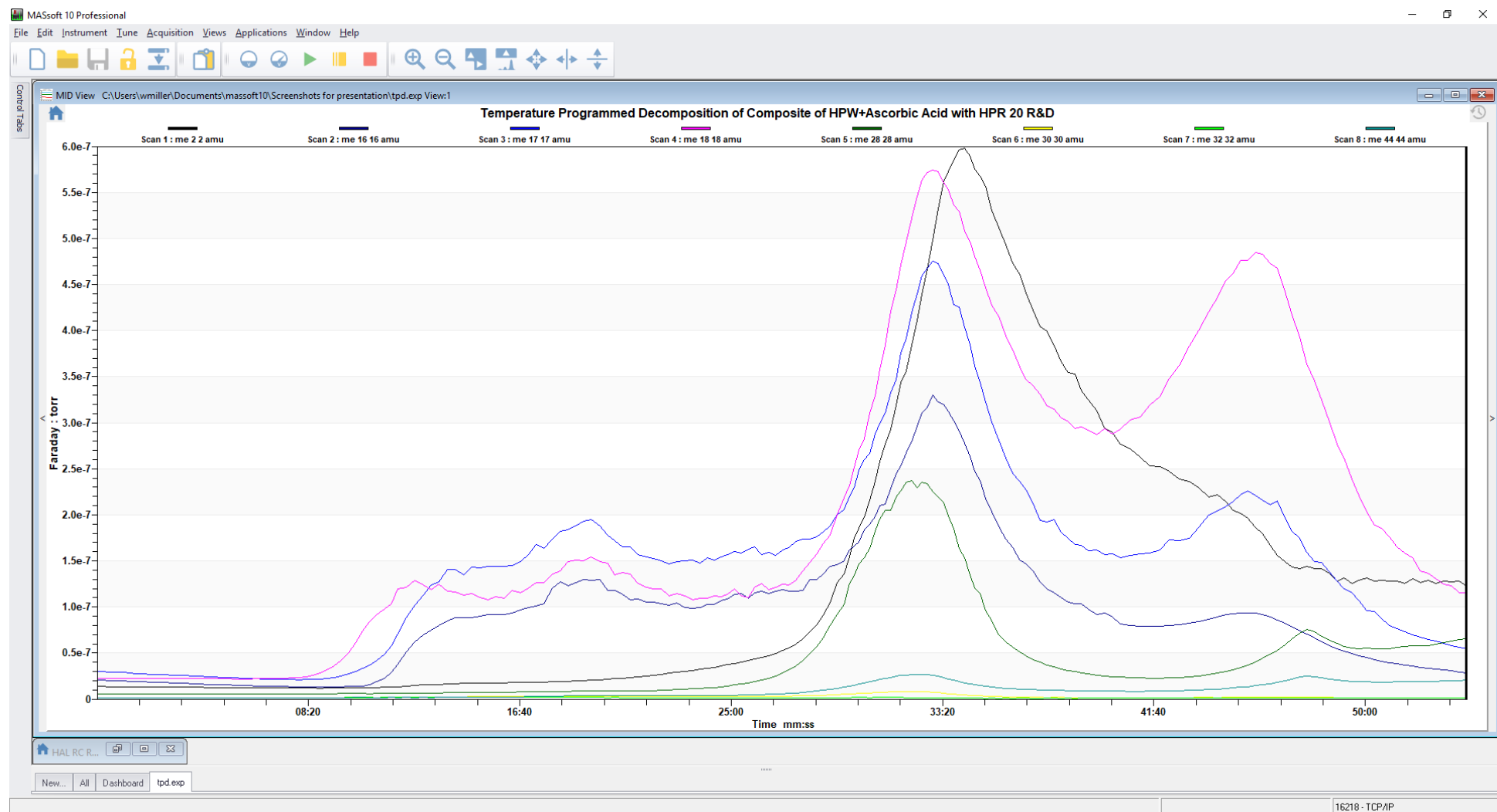
Including application specific software packages for:

Quantitative gas analysis

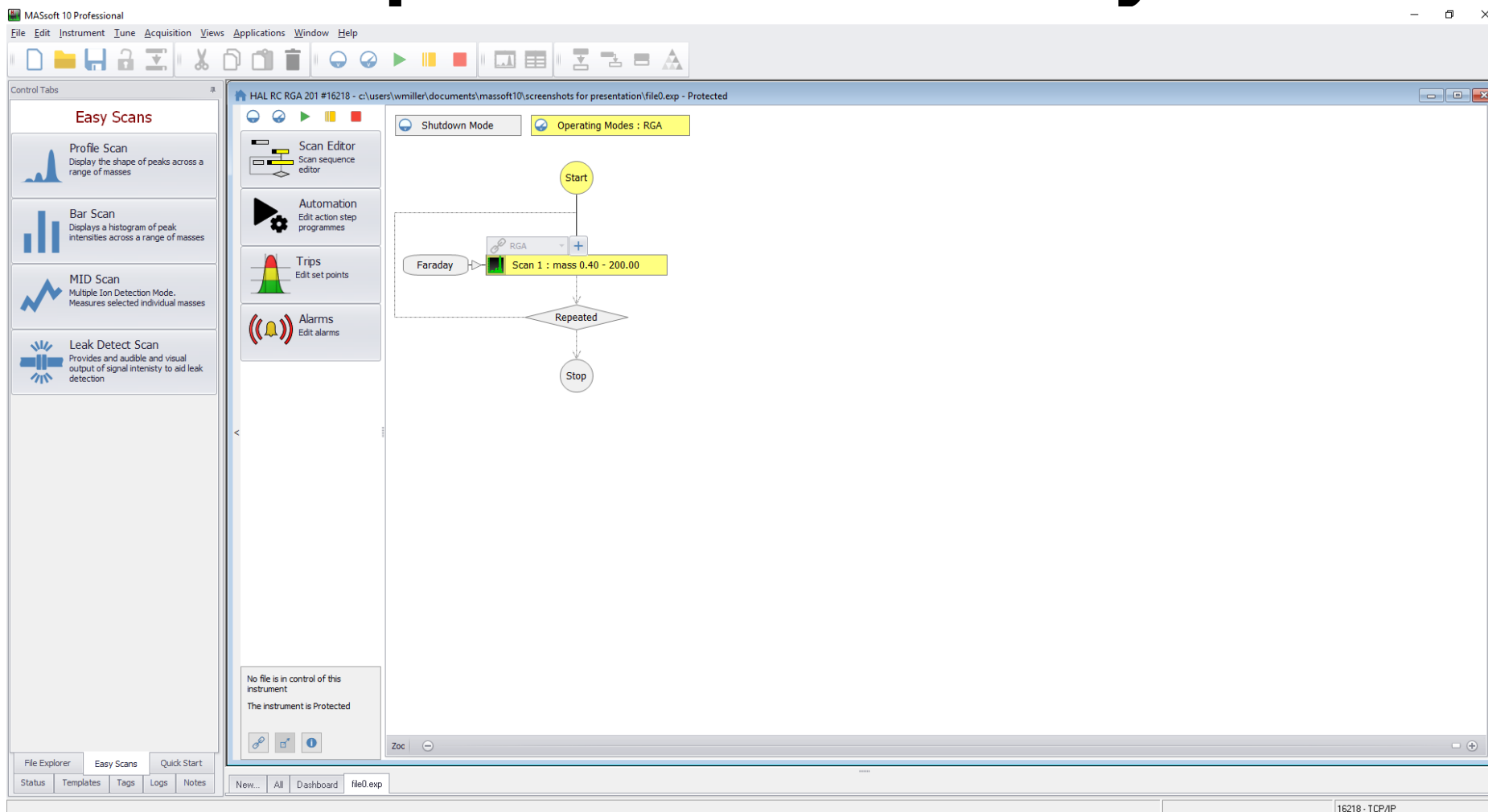
Evolved gas analysis – TA-MS

UHV -TPD

MASsoft Professional Control Software



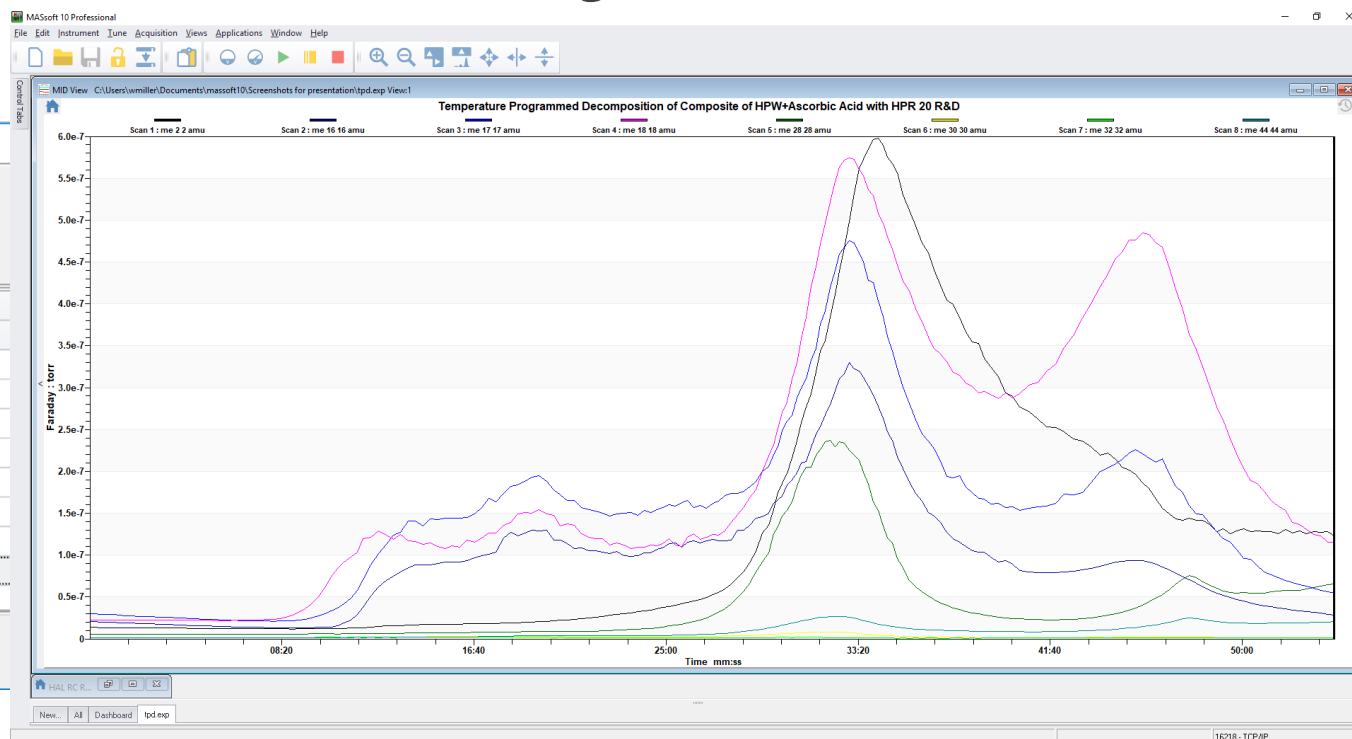
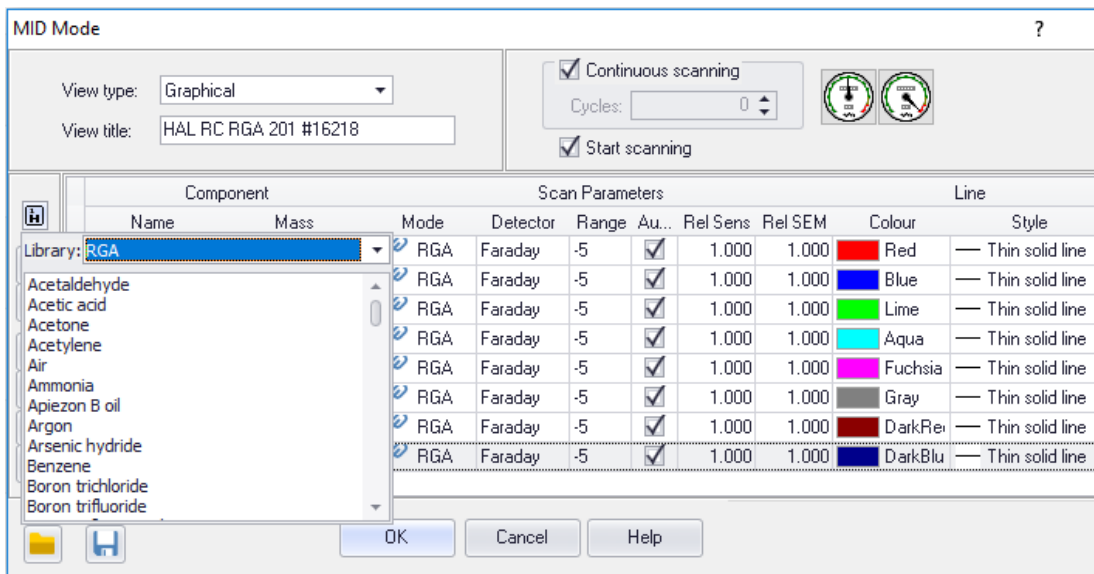
Mass Spectrometer – easy start



- Pre set modes of operation, templates and full control of mass spectrometers parameters

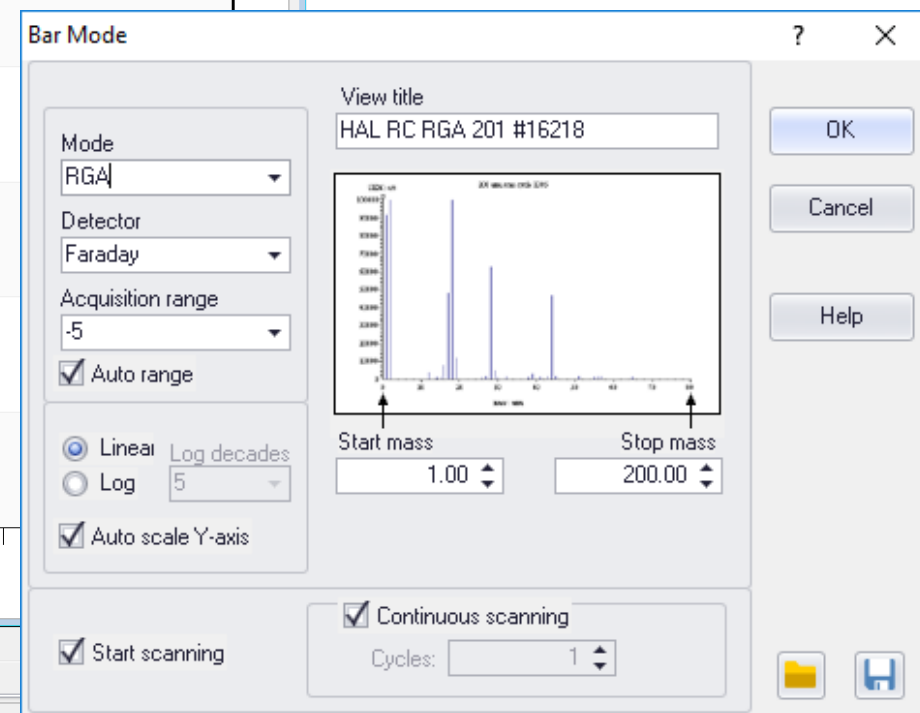
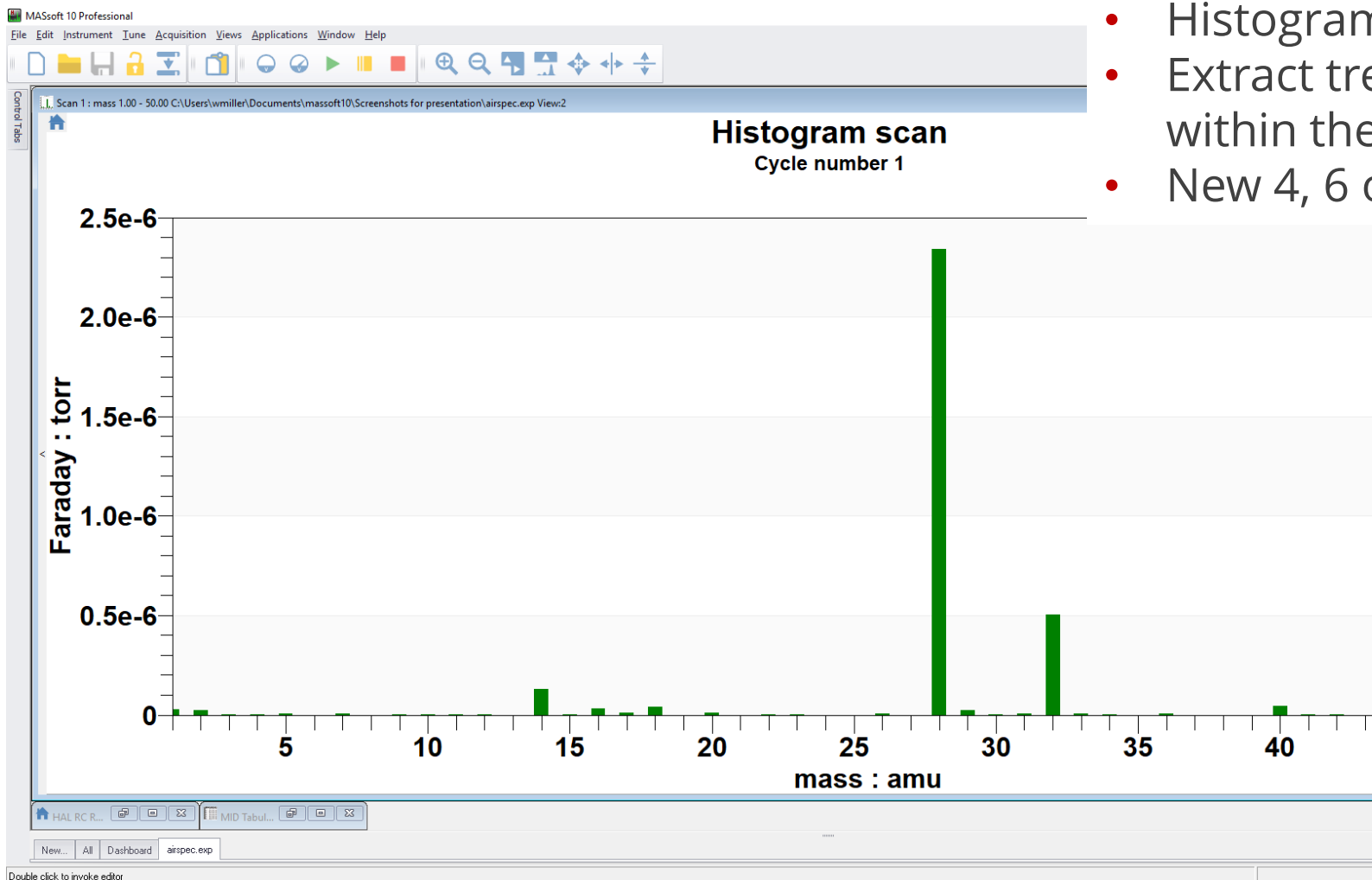
Trend Analysis

- Unlimited number of mass channels
- Full mass spectrometer control on a per channel basis
- Automatic mass peak selection from on board user editable library
- Quantitative analysis with user editable algorithms



Mass Spectrometer – mass scanning -1

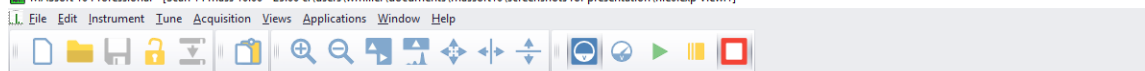
- Histogram scanning mode
- Extract trend analysis for any mass peak(s) within the scan
- New 4, 6 or 8 decade dynamic range scan



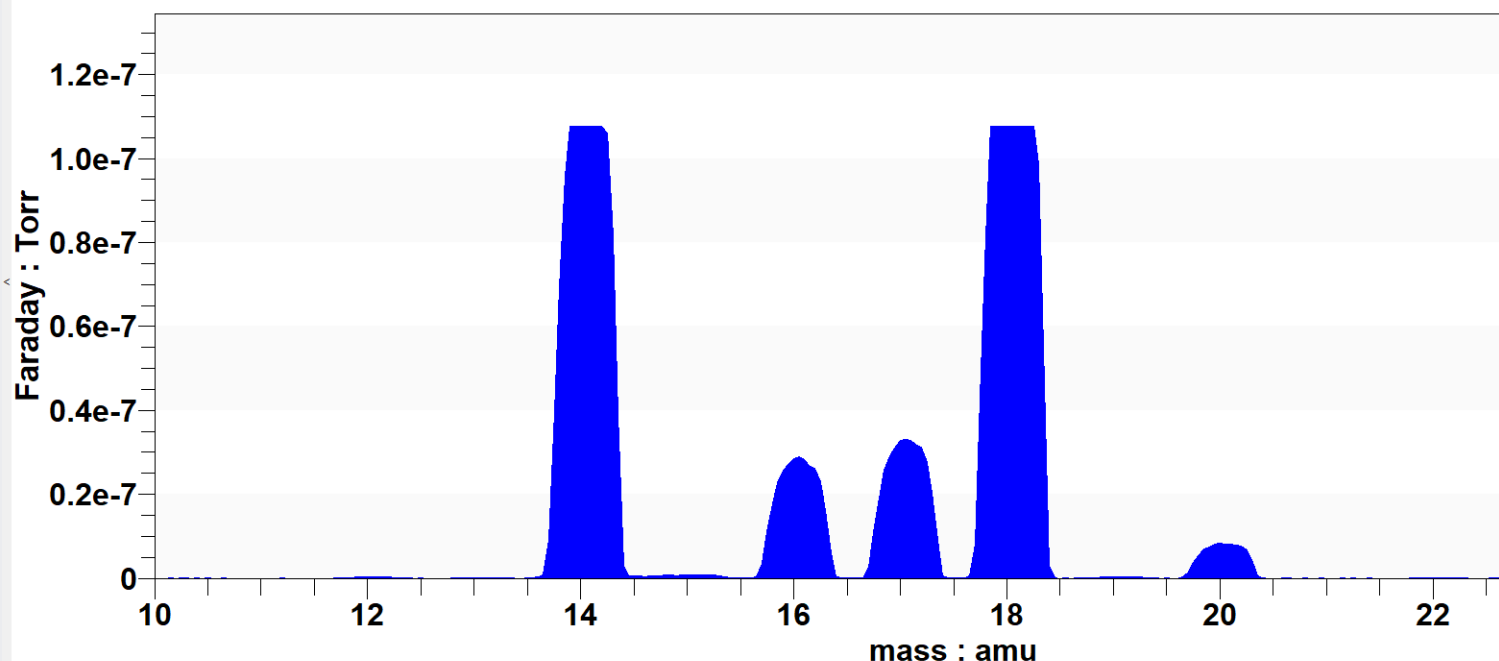
Mass Spectrometer – mass scanning-2

- Optimised multistage analysis - configure different analysis for different parts of the experiment
- Peak profile diagnostic mode

MASoft 10 Professional - [Scan 1: mass 10.00 - 25.00 c:\users\wmiller\documents\masoft10\screenshots for presentation\file0.exp View:1]



Profile Spectra



Cycle number

1

New... All Dashboard file0.exp

Profile Mode

Mode: RGA

Detector: Faraday

Acquisition range: -5

☒ Auto range

☒ Linear Log decades

☐ Log 5

☒ Auto scale Y-axis

View title: Profile Scan

Start mass: 15.00

Stop mass: 20.00

Samples per amu: 100.00

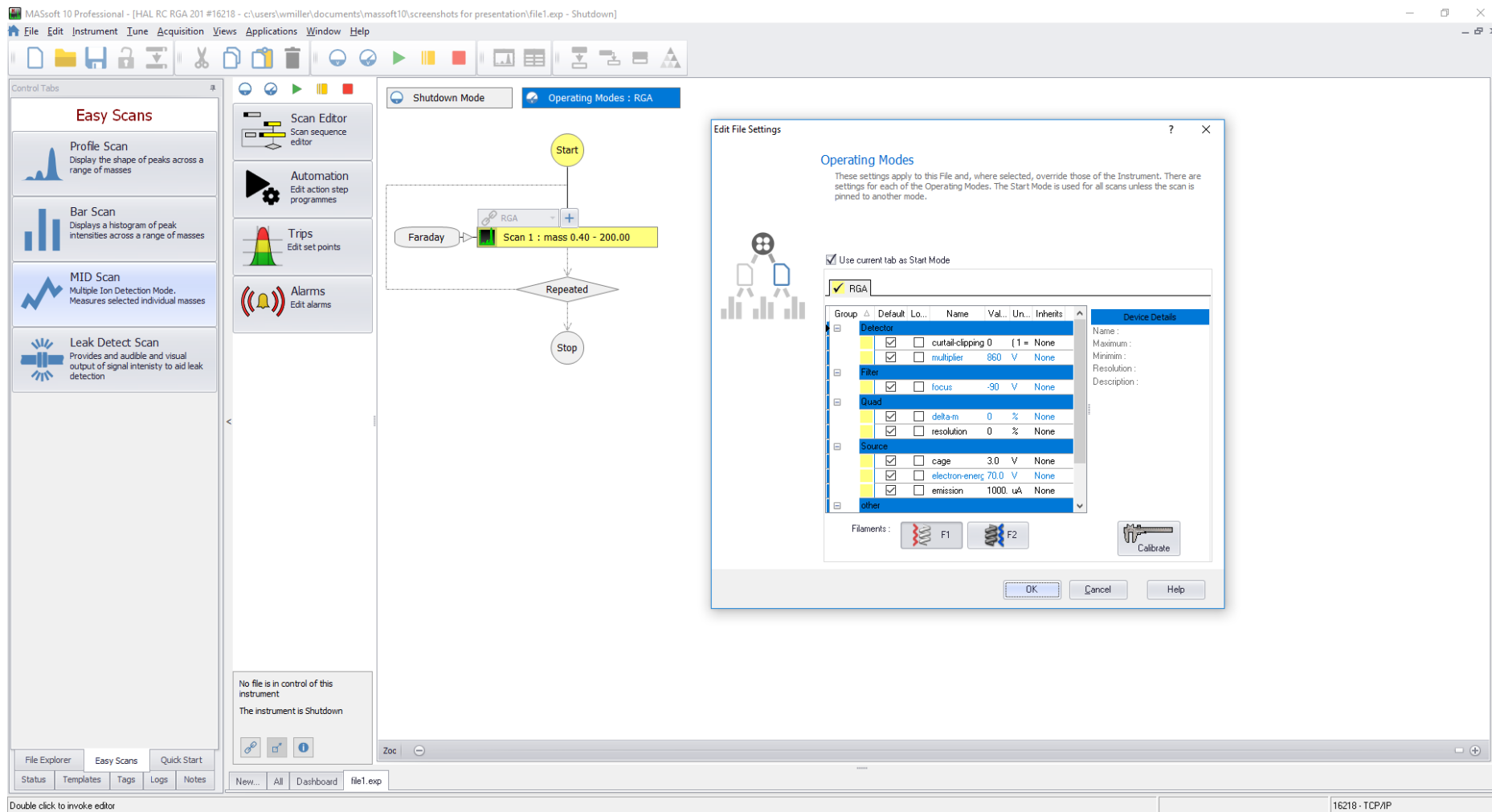
☒ Continuous scanning

Cycles: 1

☒ Start scanning

OK Cancel Help

MS Control



- Pre set modes of operation, templates and full control of mass spectrometers parameters

MS Control

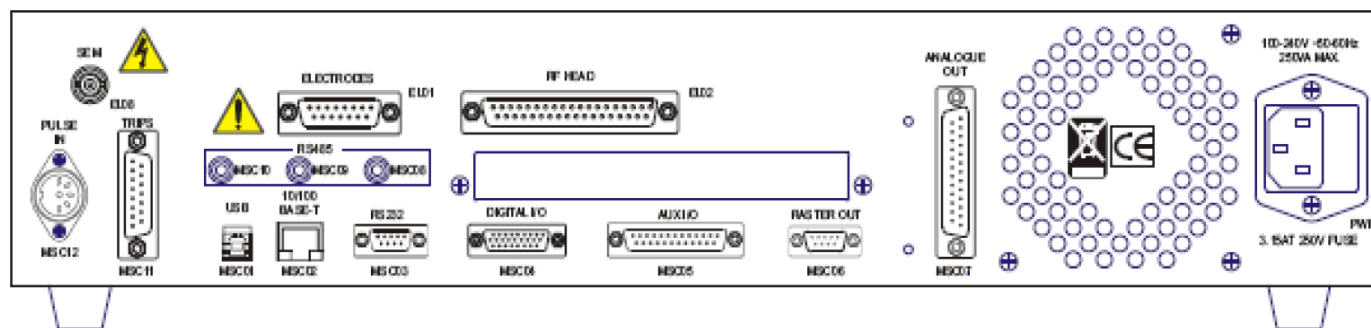
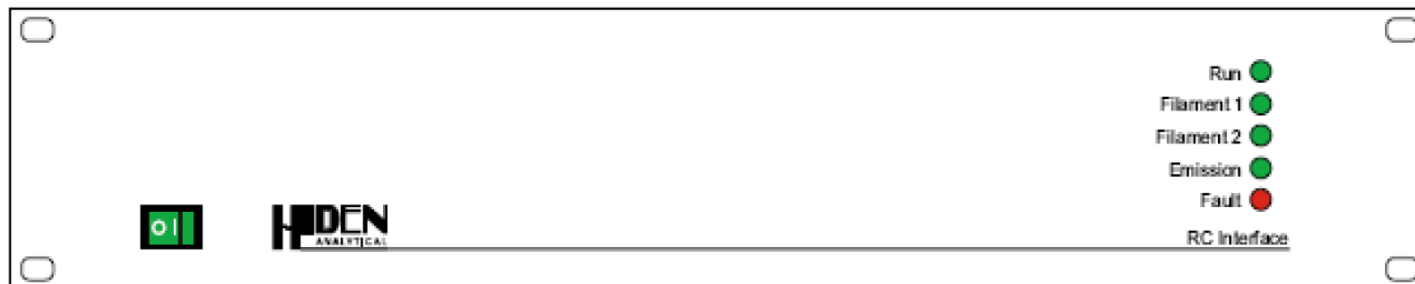
The screenshot displays the MAssoft 10 Professional software interface. The main window shows a scan sequence editor with a sequence of scans (Scan 1 to Scan 6) and their associated detectors (Faraday, SEM). A 'Scan Editor' dialog box is open, allowing configuration of scan parameters. The dialog includes fields for 'Variable' (mass), 'Start Value' (0.40), 'Stop Value' (200.00), 'Increment Value' (0.01), 'Steps' (19961), 'Relative Sensitivity' (1.000), and 'Relative SEM' (1.000). A 'Variable Details' panel on the right provides additional information about the 'mass' variable, including its name, maximum, minimum, resolution, and description.

Fully editable scan sequence with selectable: scan mode, detector and mass spectrometer parameters set individually for each scan in the sequence.

Events provides control of:

- Alarm set points.
- Data I/O.
- Multiple data functions including:
real time display of derived values, ratio, end point, and calibration for example.

Mass Spectrometer Interface Unit

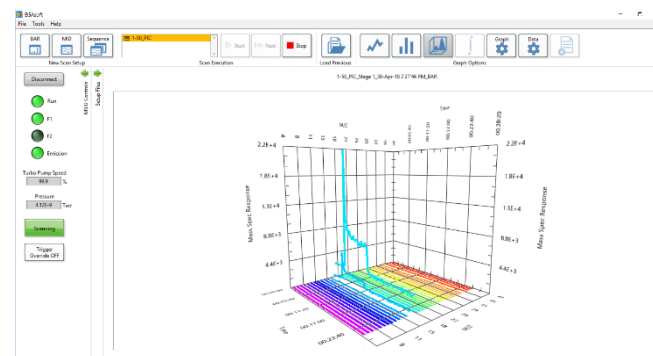
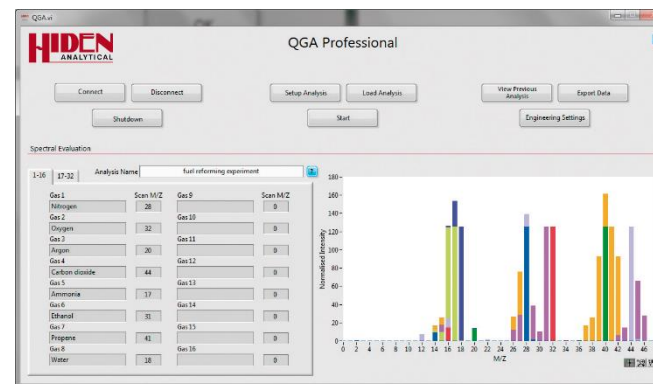


- Ethernet TCP/IP ,USB and RS232 communication links
- I/O subsystem with:
 - multi protocol RS485 links for external devices, mass flow controllers, CO analyser, total pressure gauges for example
 - 5 channel TTL for process control / automatic start - stop trigger
 - Analogue inputs and analogue signal output options

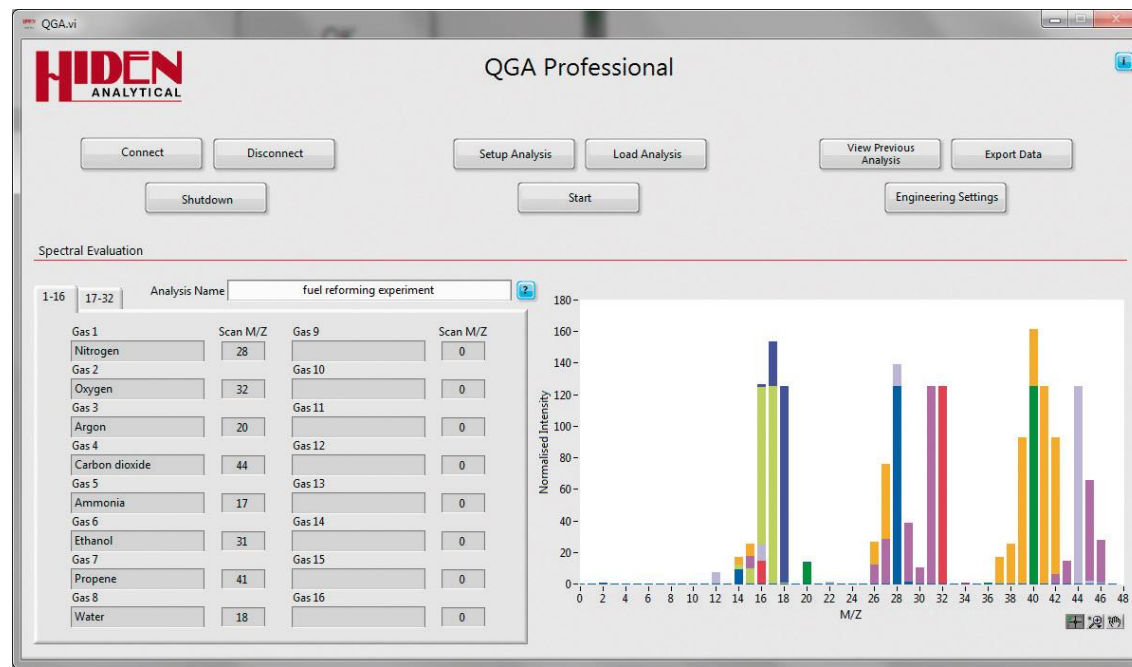
Application specific software packages for:

Quantitative gas analysis
 Evolved gas analysis – TA-MS
 and UHV -TPD

- QGA – Quantitative Gas Analysis
- EGAssoft – Evolved Gas Analysis

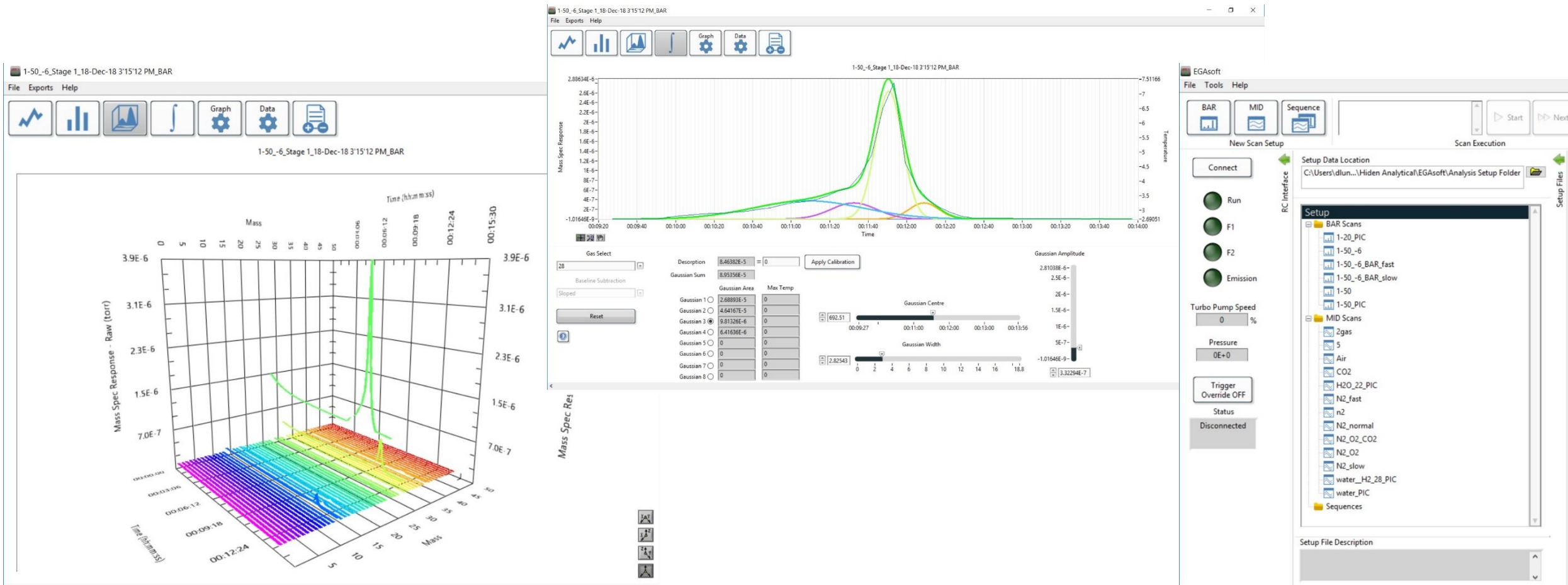


QGA – Quantitative Gas Analysis



- Quantitative gas analysis of up to 32 gases
- 10 peak spectral library with intelligent library scan feature
- Flexible major and minor component gas calibration with background correction
- Data view with three y axes for simultaneous display of quantitative data, corrected data and raw data and/or external signals temperature data for example
- Capability to read multiple inputs, temperature or pressure for example
- X- axis can display time or an external input, a temperature ramp for example
- Data inputs for external gas analysers, a CO analyser for example to compliment the mass spectrometer analysis
- Multi-stream analysis for automatic sequenced analysis of up to 80 connected gas streams
- Automatic triggering of the start of analysis from an external input
- OPC data output

EGAssoft – Evolved Gas Analysis

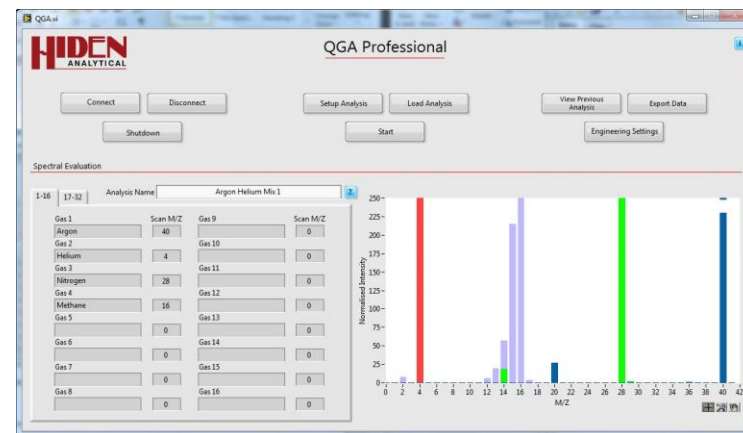
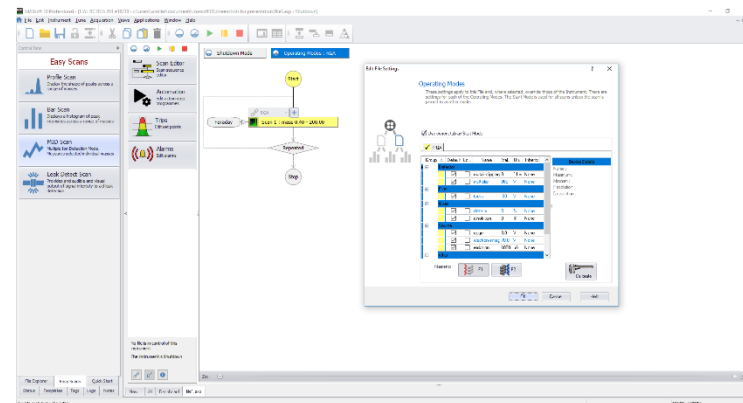


EGAssoft provides for data acquisition and analysis for TA-MS, TPD and UHV- TPD. Integration with TGA systems including auto stop/start trigger and data export.

Summary

Hidden MS software delivers:

- Fast start – simple operation
- Complete control of MS parameters
- Multi stream analysis
- Quantitative analysis:
with spectral overlap and background correction
- 3D plotting for evolved gas analysis
- Signal inputs, process control, OPC and data export



- 
- A photograph of a modern, two-story office building with a grey facade and large glass windows. The building has a prominent glass entrance on the left and a long row of windows on the right. A "HIDEN ANALYTICAL" sign is visible on the upper right side of the building. The building is surrounded by greenery, including trees and bushes, under a clear blue sky. A large, semi-transparent white circle is overlaid on the left side of the image, containing the text of the list.
- www.HidenAnalytical.com
 - The Hiden website is an excellent resource with product pages, brochures, catalogues, product pages with some application notes, presentation and other information.
 - Contact +44 1925 445225 for direct support.