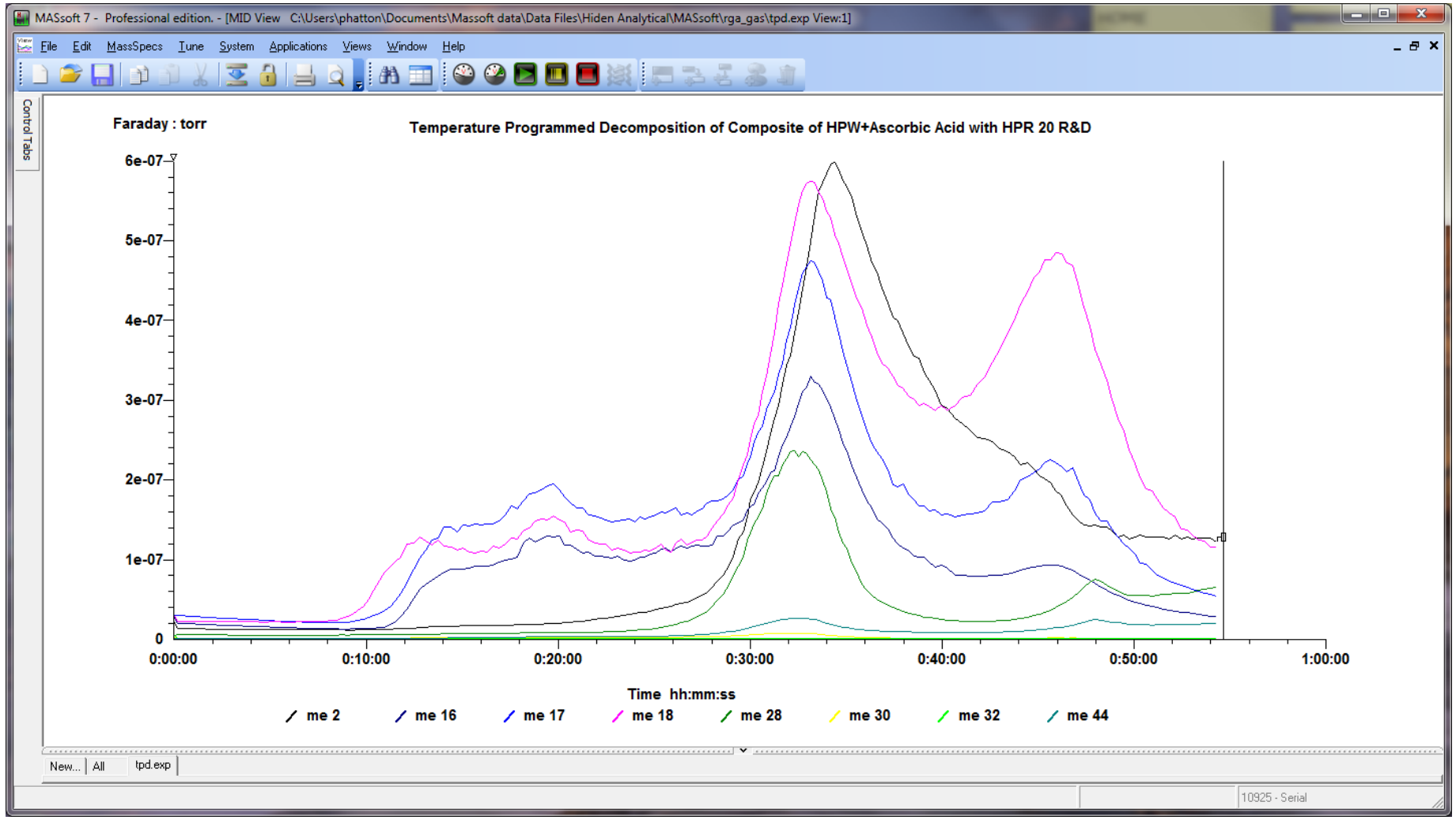
Software for Hiden Mass Spectrometers

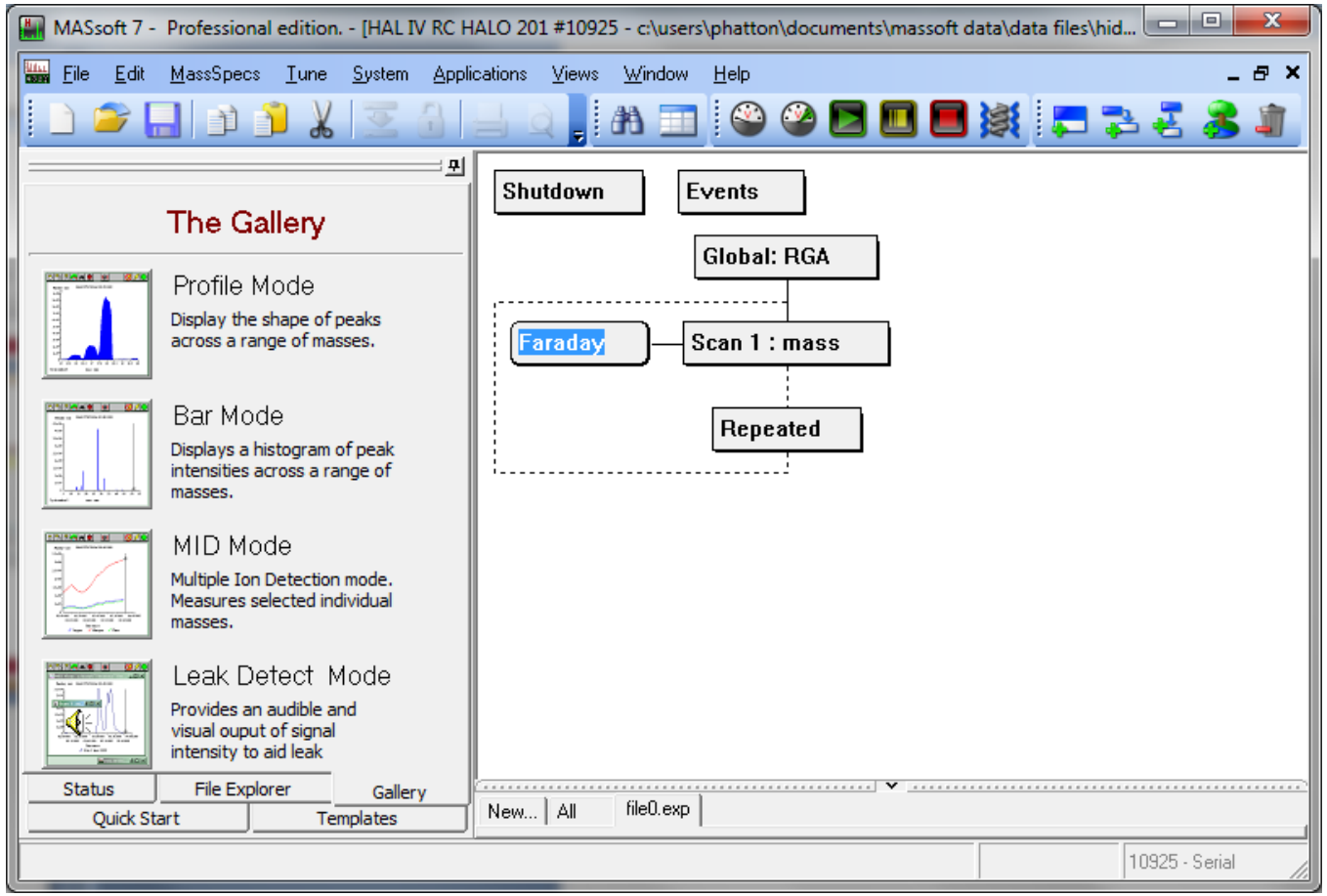
Gas Analysis, Thermal Analysis and Residual Gas Analysis

Including application specific software packages for:
Quantitative gas analysis
Evolved gas analysis – TA-MS
UHV -TPD

MASsoft Control Software



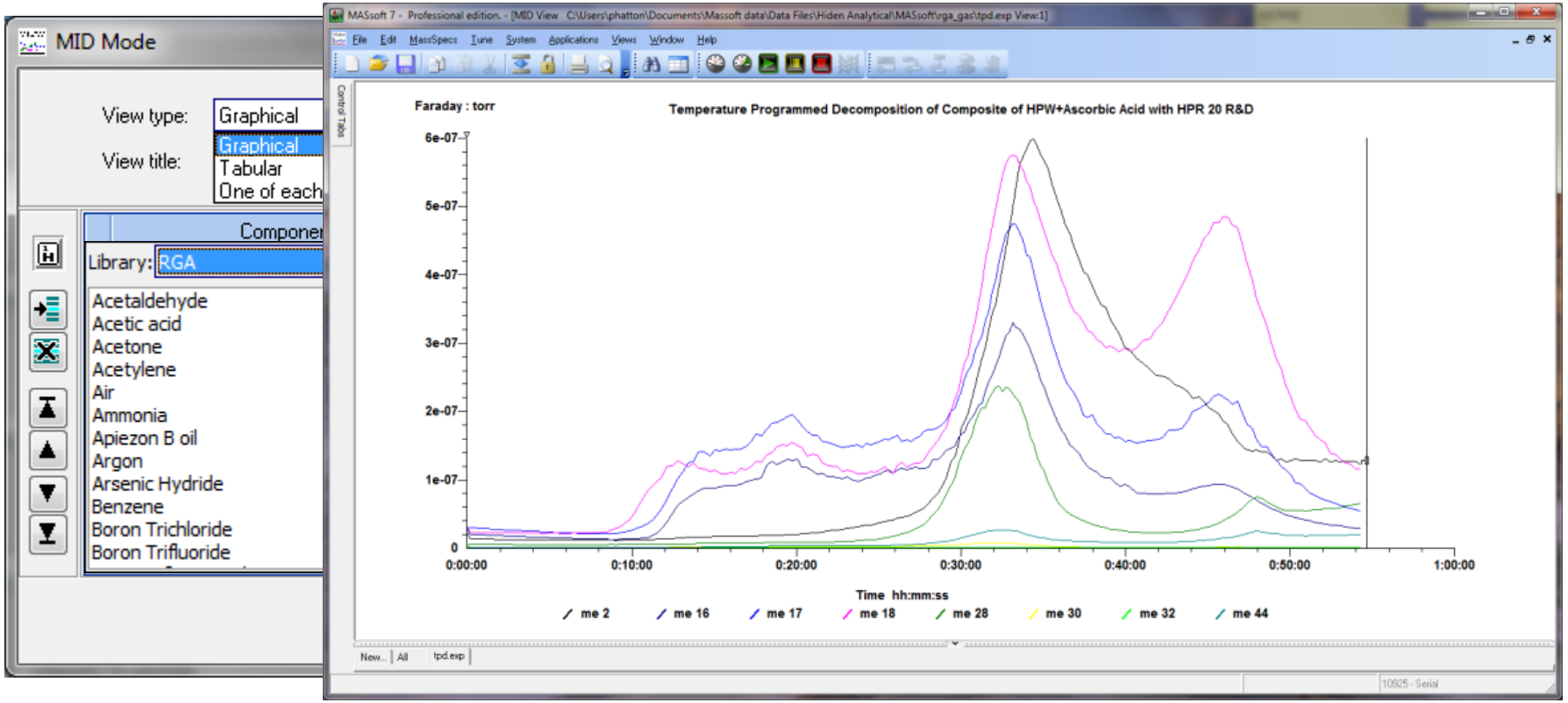
Mass Spectrometer – easy start



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

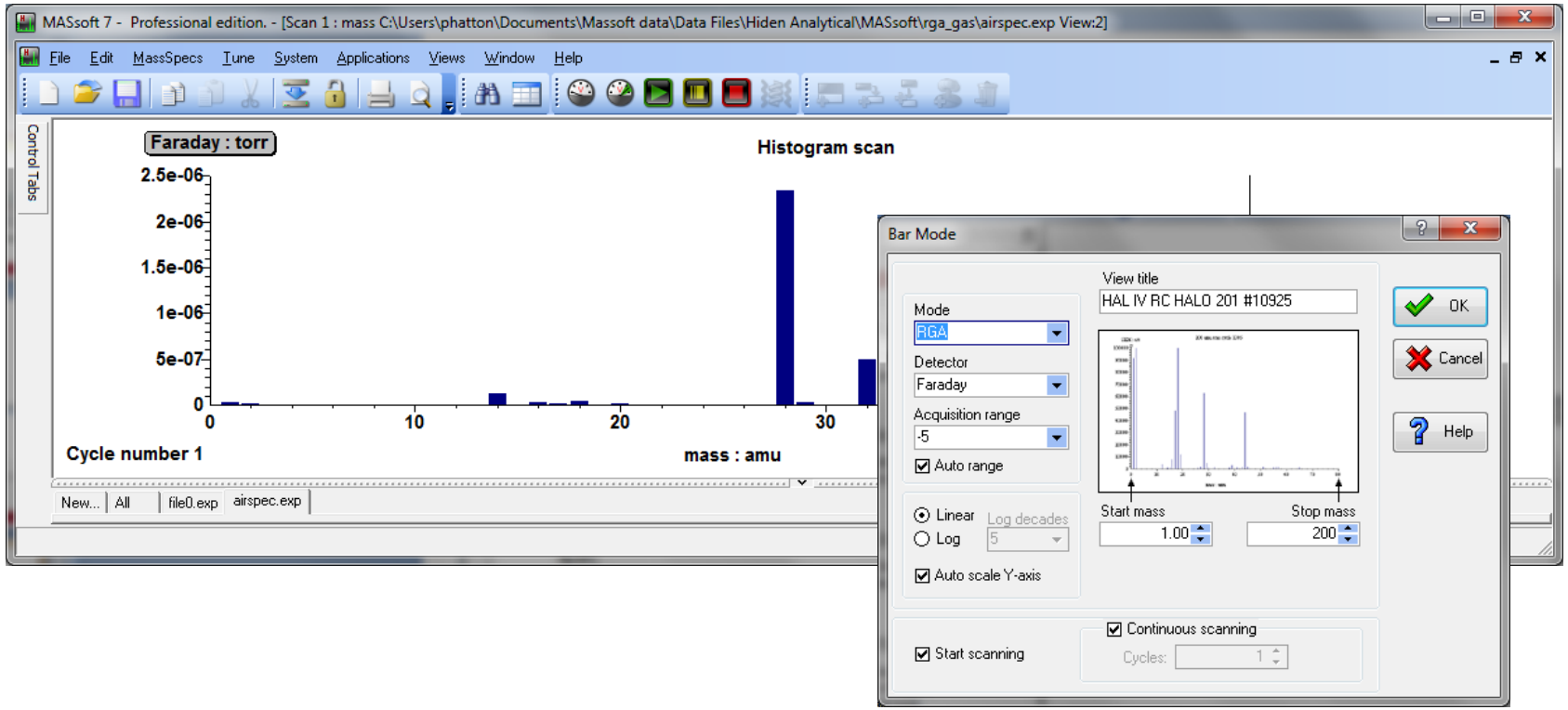
Trend Analysis

- 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

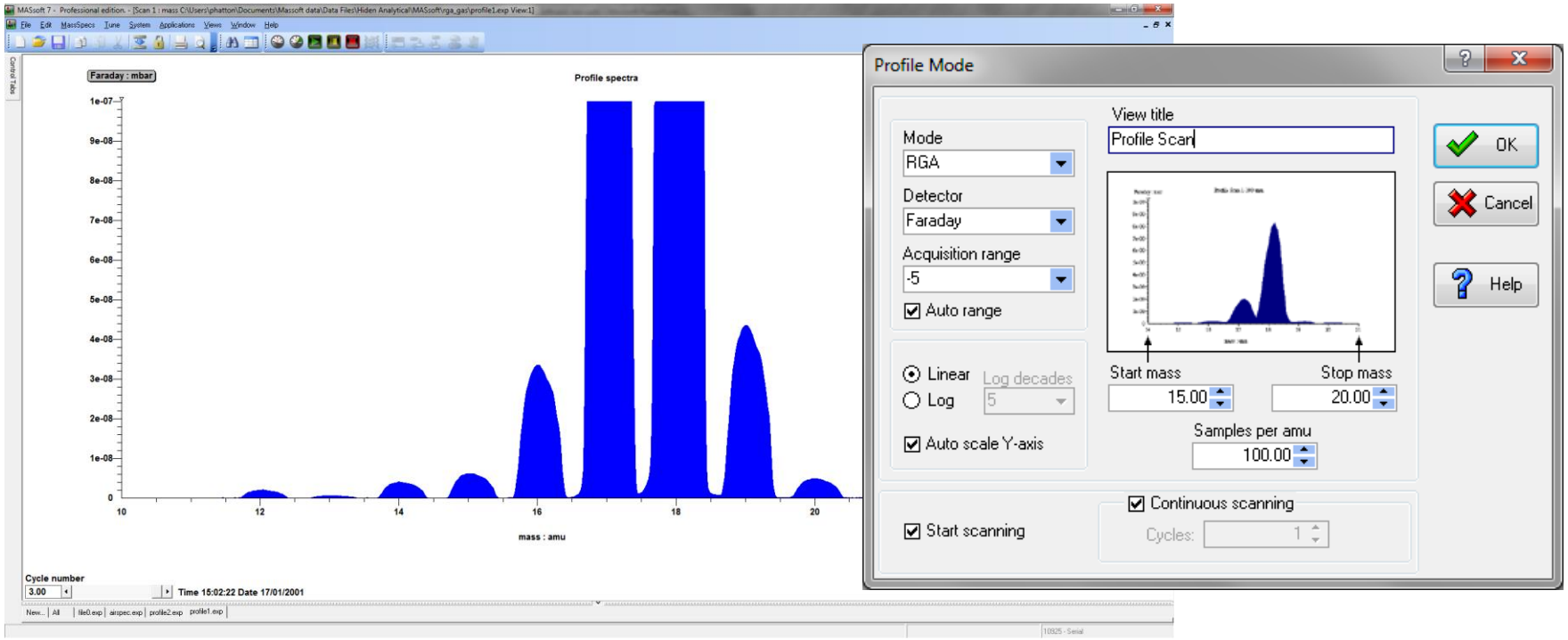
- Histogram scanning mode



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

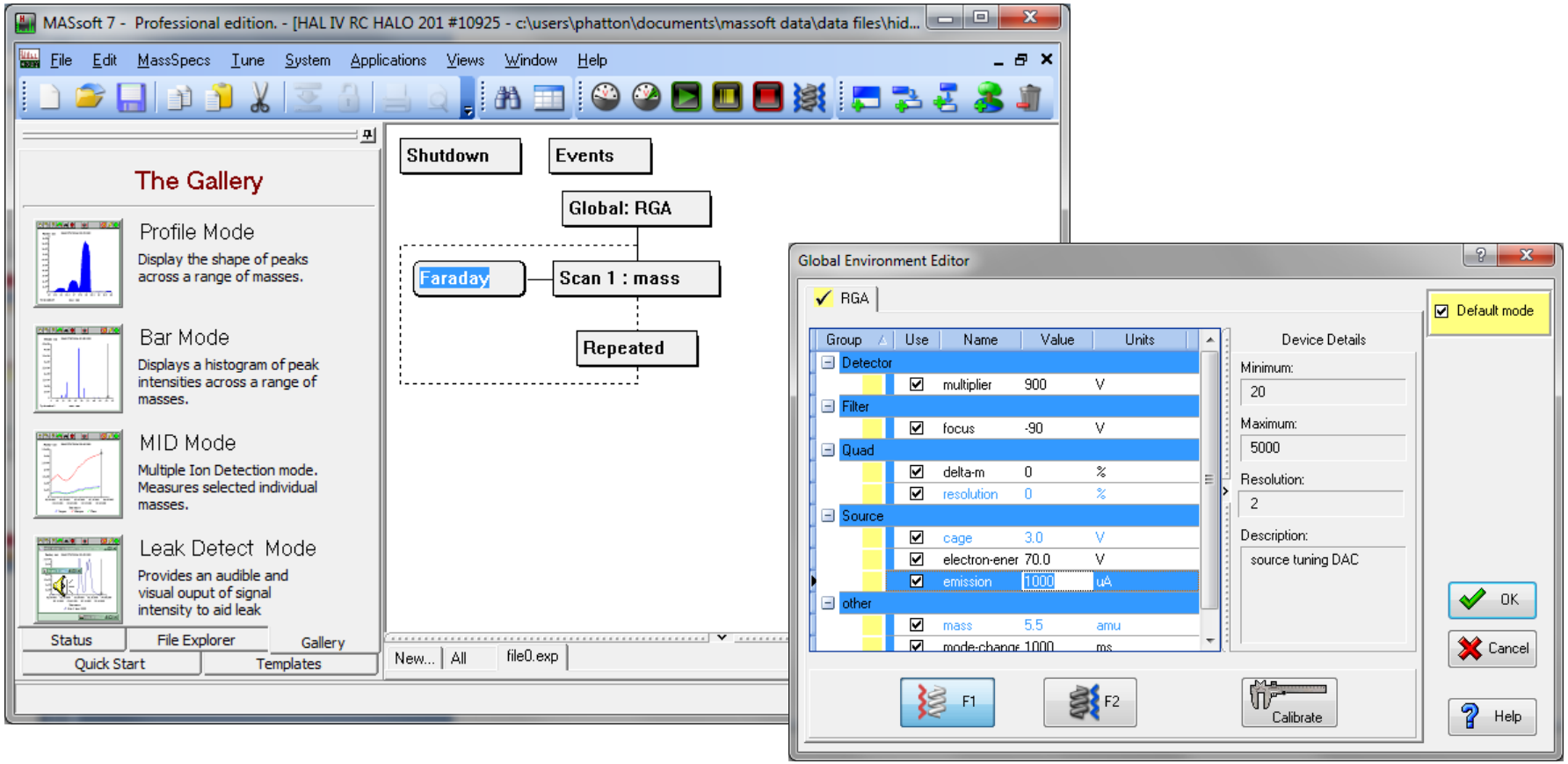
Mass Spectrometer – mass scanning-2

- Peak profile diagnostic mode



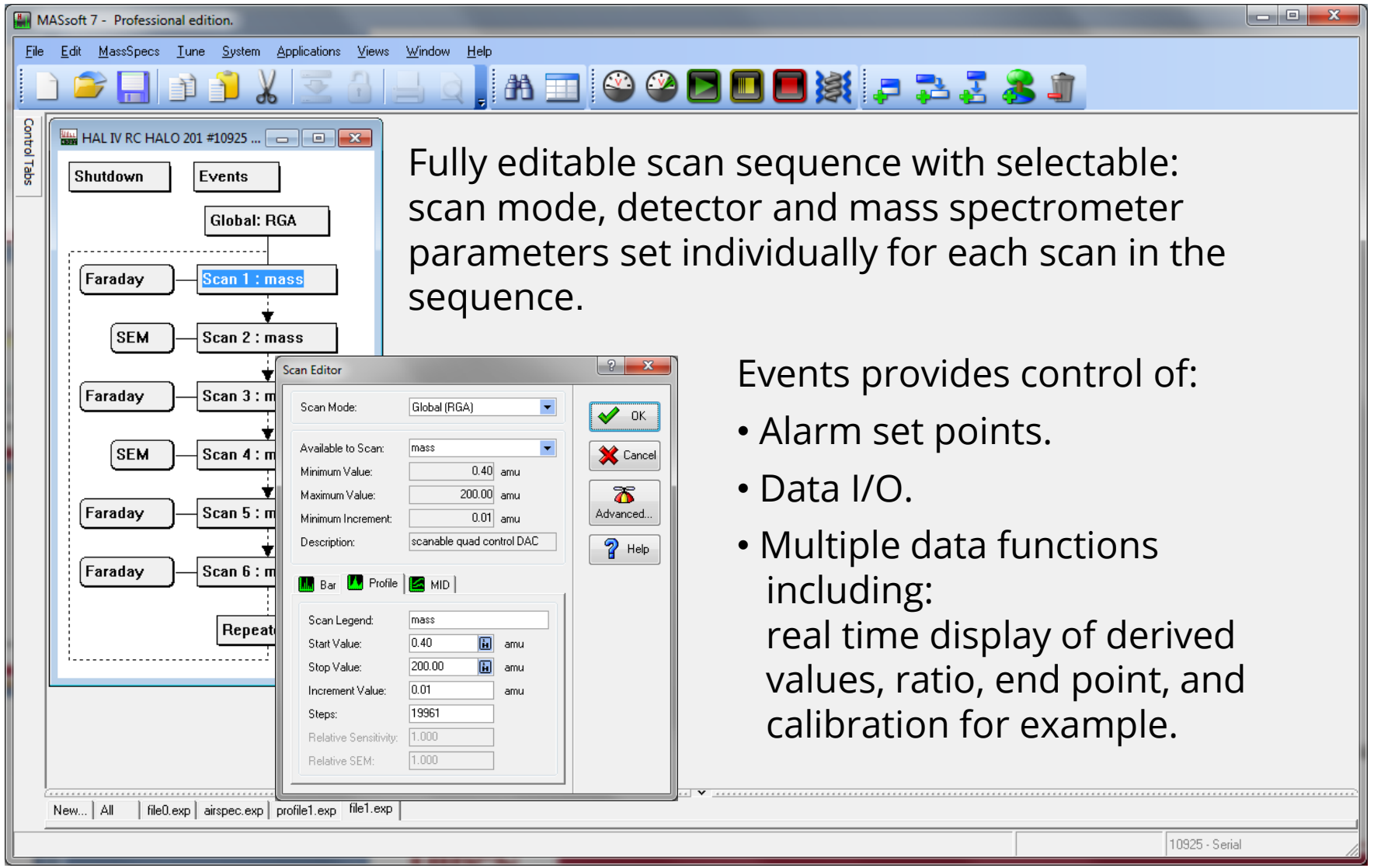
- Optimised multistage analysis - configure different analysis for different parts of the experiment

MS Control



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

MS Control

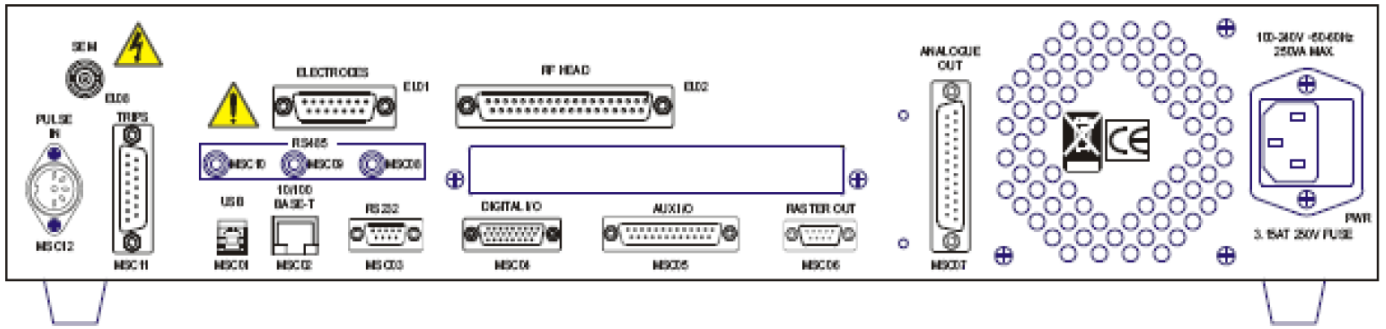


Fully editable scan sequence with selectable: scan mode, detector and mass spectrometer parameters set individually for each scan in the sequence.

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

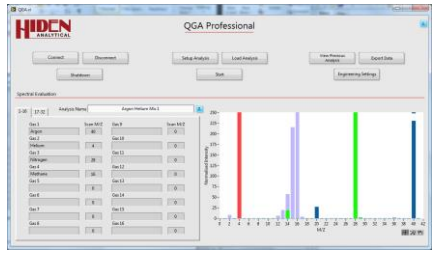


- Ethernet TCP/IP ,USB and RS232 communication links
- I/O subsystem with:
  - multi protocol RS485 links for external devices, mass flow controllers, CO analyser, total pressure gauges for example
  - 5 channel TTL for process control / automatic start - stop trigger
  - Analogue inputs and analogue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

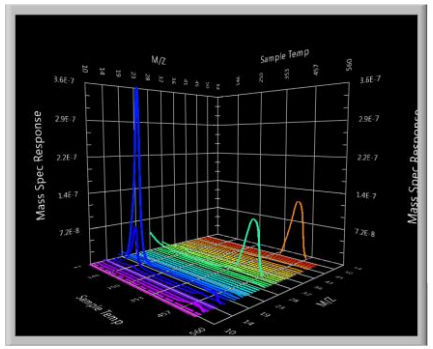
Application specific software packages for:

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

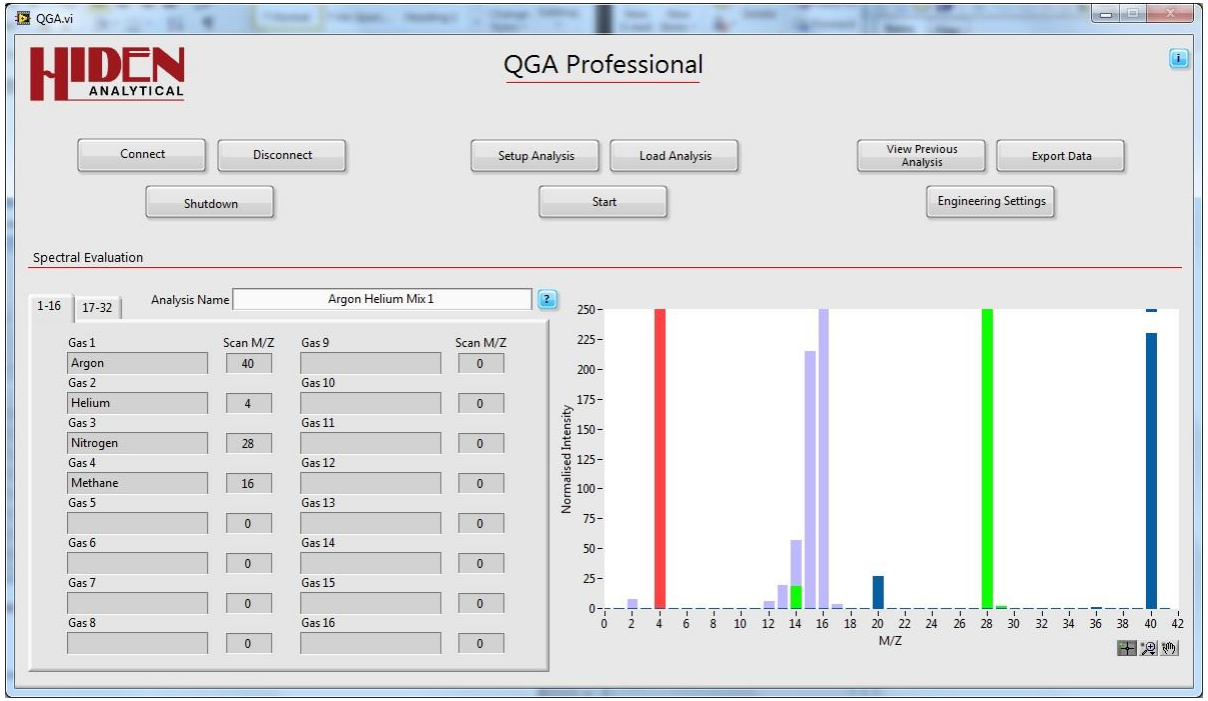
- QGA – Quantitative Gas Analysis



- EGAsoft – Evolved Gas Analysis

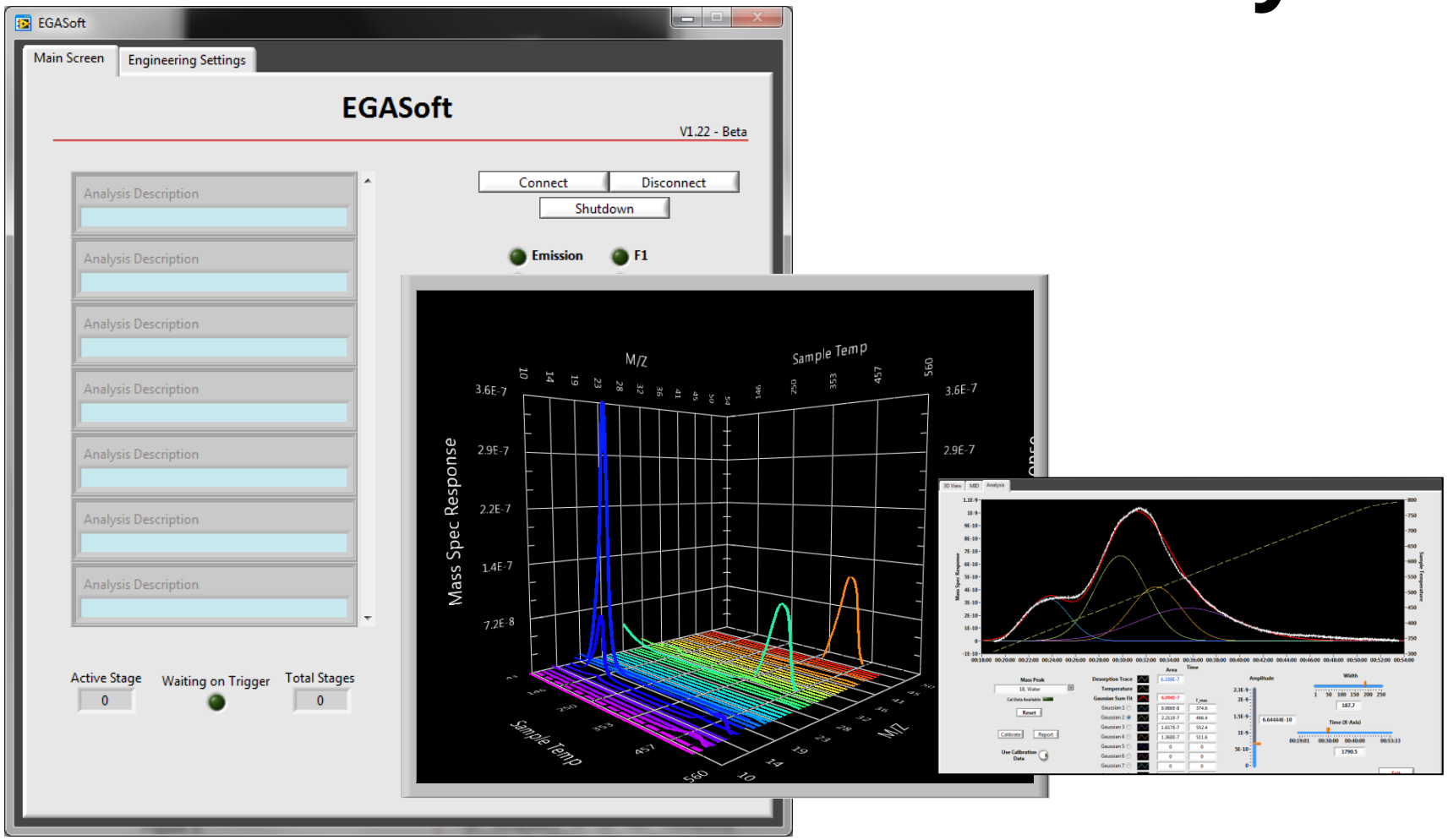


QGA – Quantitative Gas Analysis



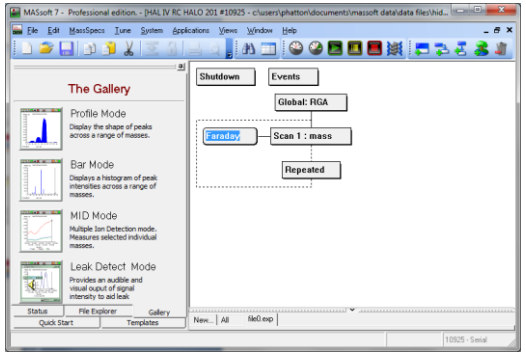
- Quantitative gas analysis of up to 32 gases
- 10 peak spectral library with intelligent library scan feature
- Flexible major and minor component gas calibration with background correction
- Data view with three y axes for simultaneous display of quantitative data , corrected data and raw data and/or 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

EGAsoft – Evolved Gas Analysis



EGAsoft 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



Hiden 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