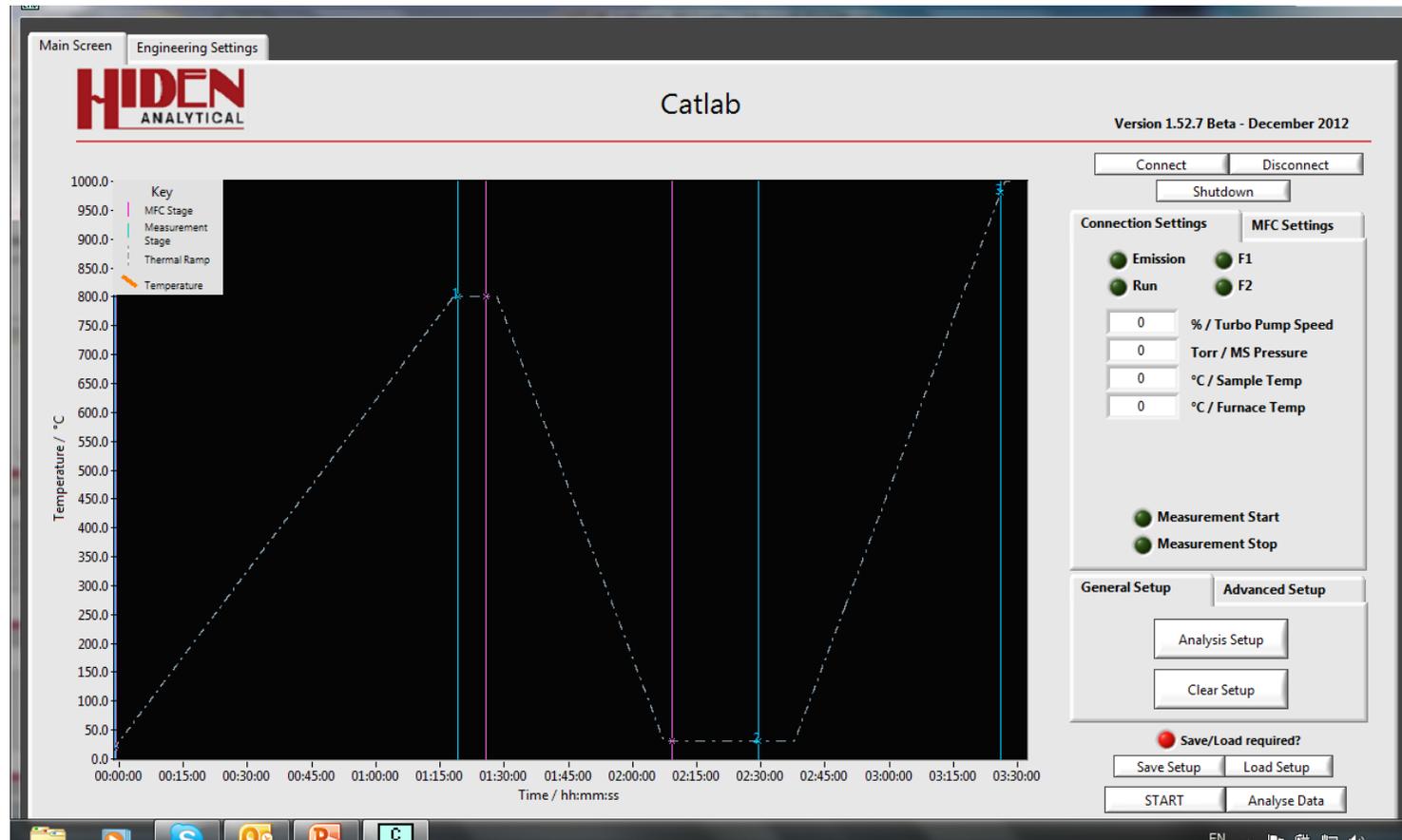


# Hidden CATLAB Software

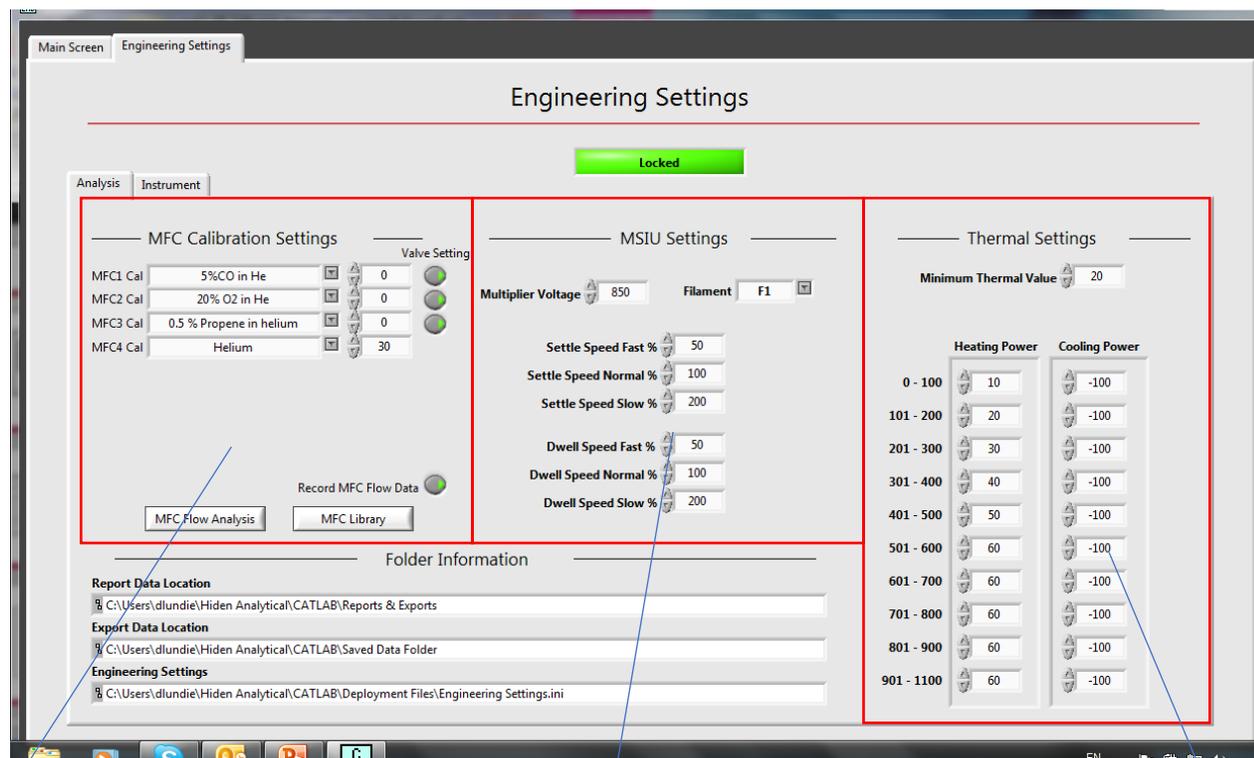
Complete Control of Experimental Parameters

# CATLAB Control Software



- Control of MS/Temperature/Gas Flows in one software package

# Hardware Control Parameters



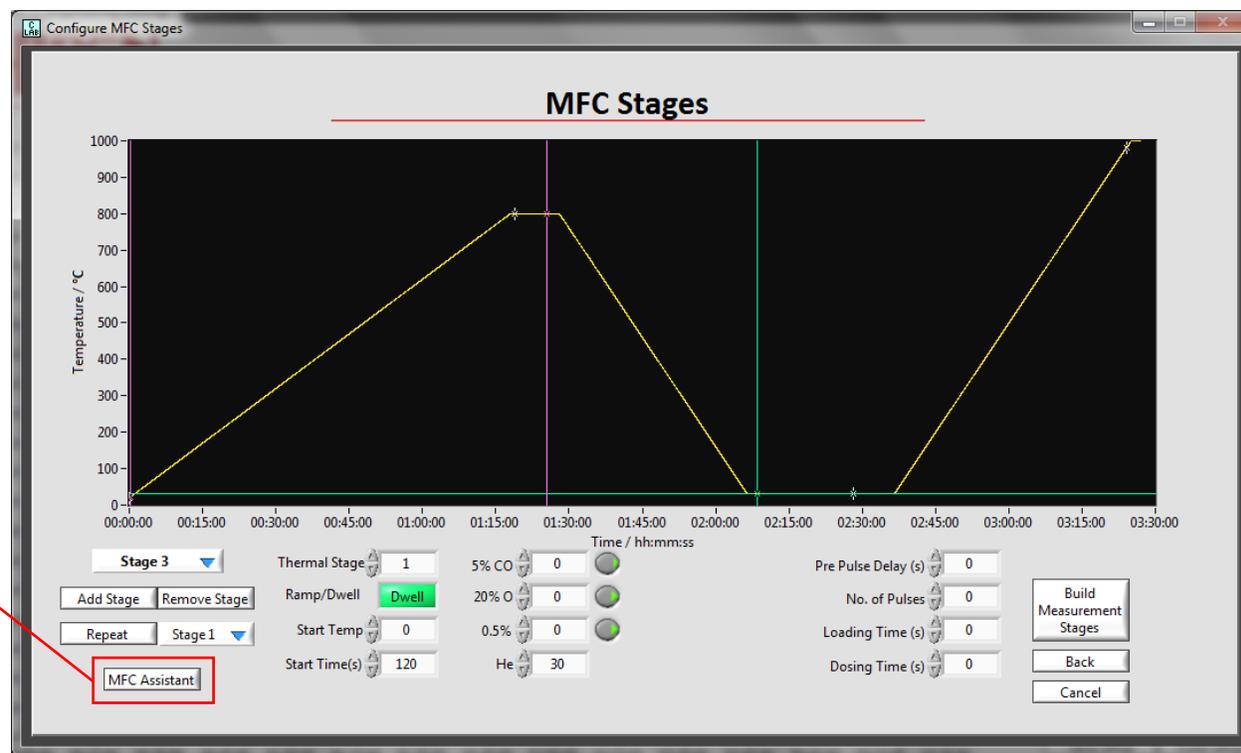
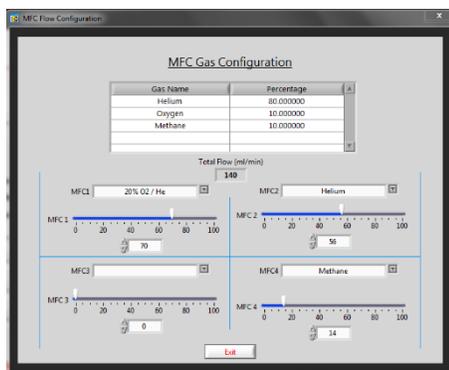
Control and calibration  
of MFCs for different  
gases

Mass Spectrometer Control

Furnace Control

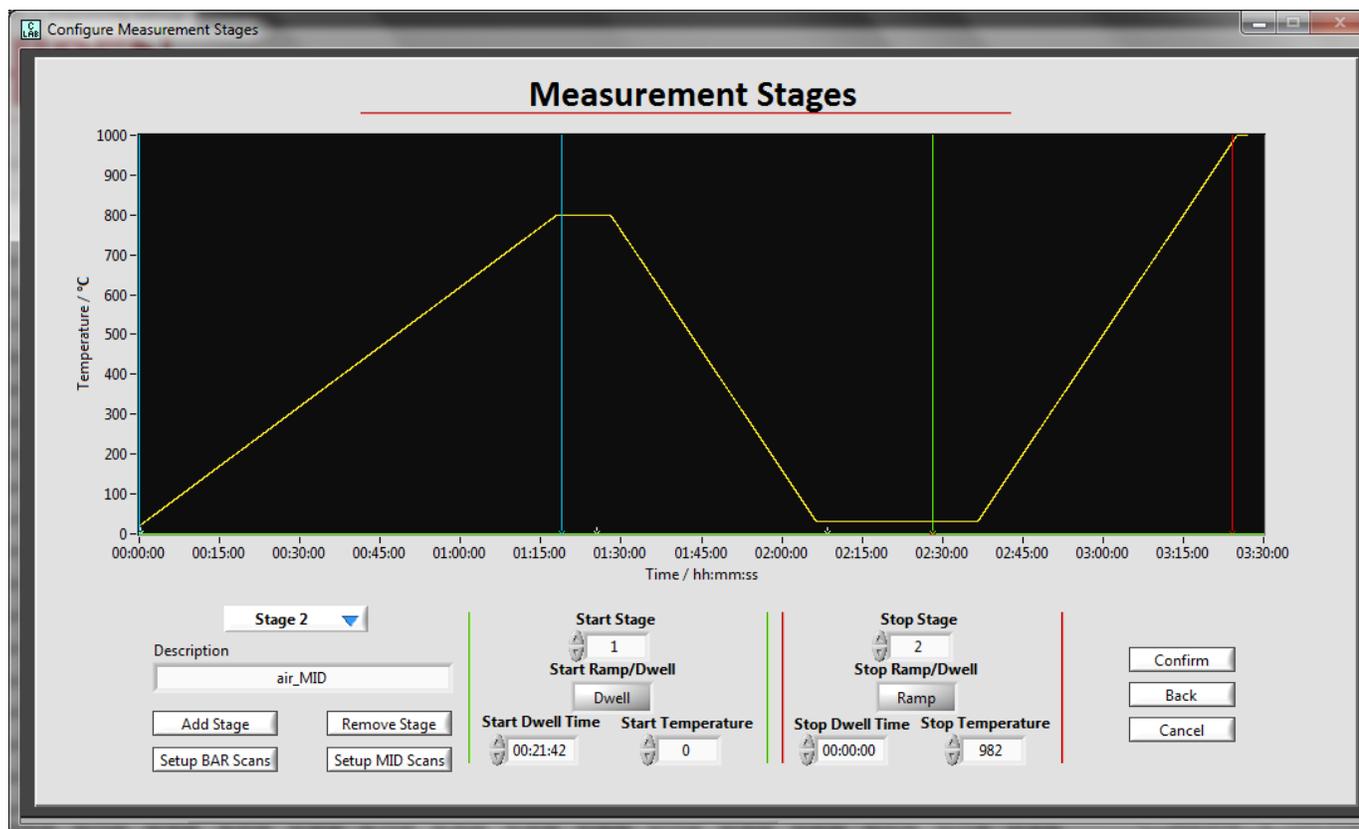
# Experimental Setup

MFC Assistant



- Stage 2: Configure gas flows/Pulses for each stage of the experiment - MFC Assistant to help calculate percentage composition of each component in gas mixture for the selected flow

# Experimental Setup



- Stage 3: Add measurement stages. Stages are triggered by time or temperature depending where on the temperature profile the start/stop is placed - Different MS analysis types can be configured for each stage of the experiment.

# MS Control - BAR Mode



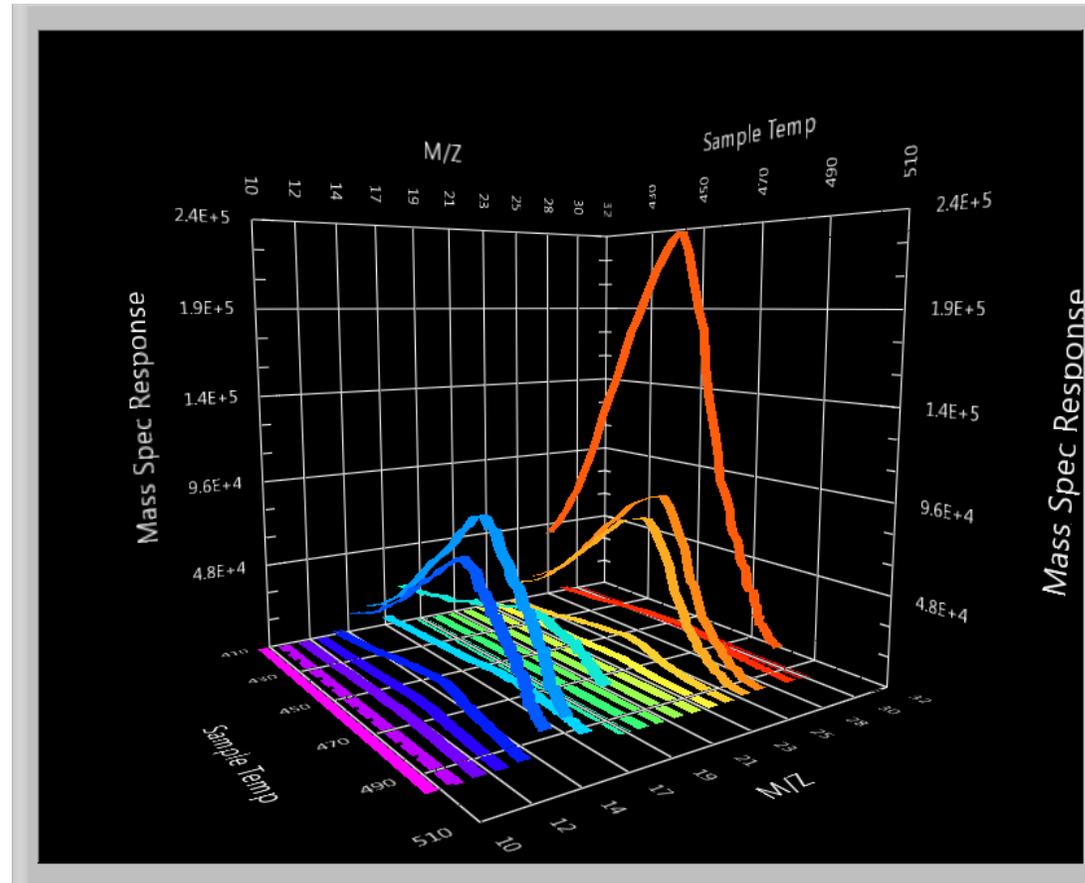
- Multiple Bar scans can be configured in 3 subscan sections for optimised sampling of unknowns.
- Ion source control.

# MS Control – MID Mode



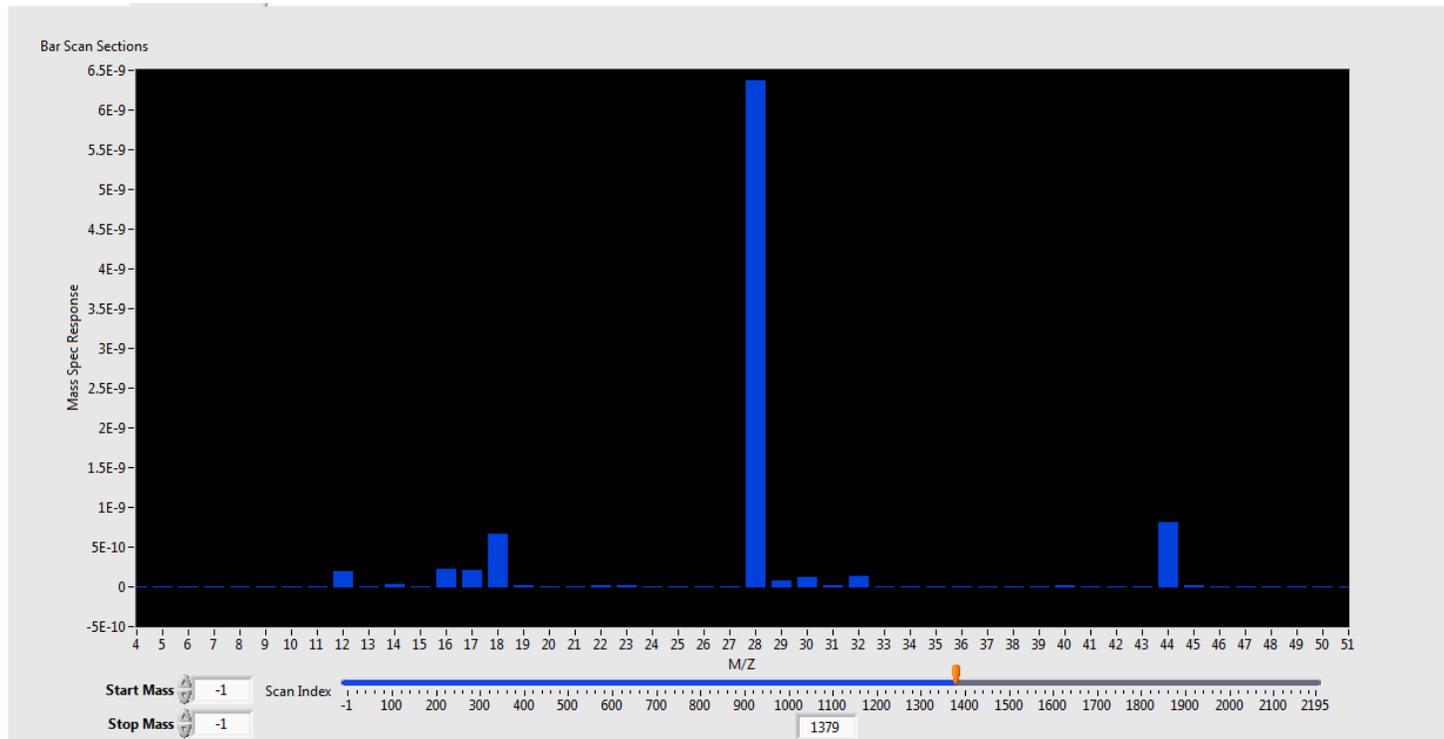
- MID Scan setup for known species .
- Automatic overlap removal.
- Includes library of most common gases.
- Ion source control for each species – preferential ionisation of some overlapping gases

# MS Display – 3D Bar



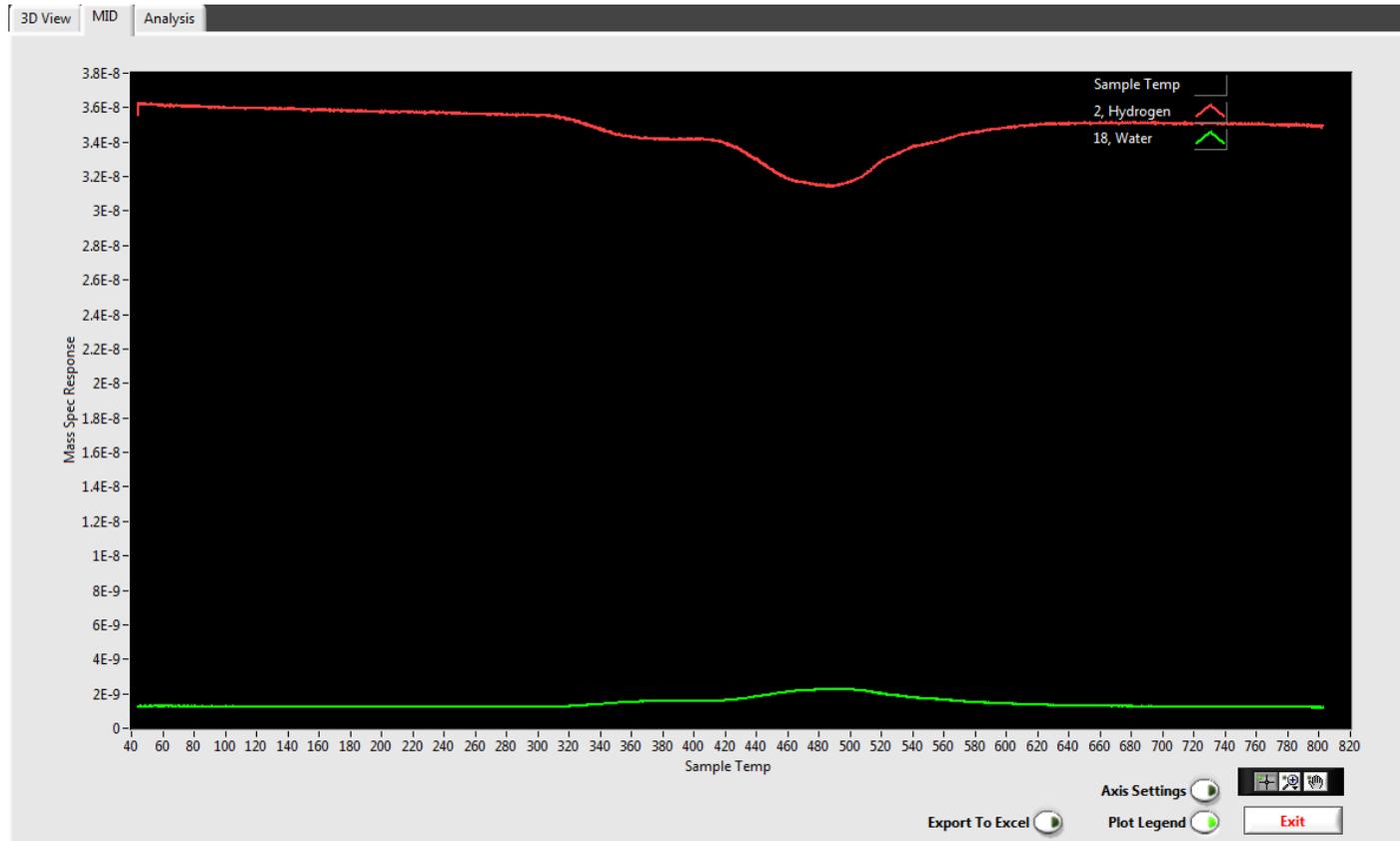
- 3D Bar Graph mode for easy identification of bar mode trends.
- Rotate or zoom in on regions of interest.

# MS Display - 2D Bar



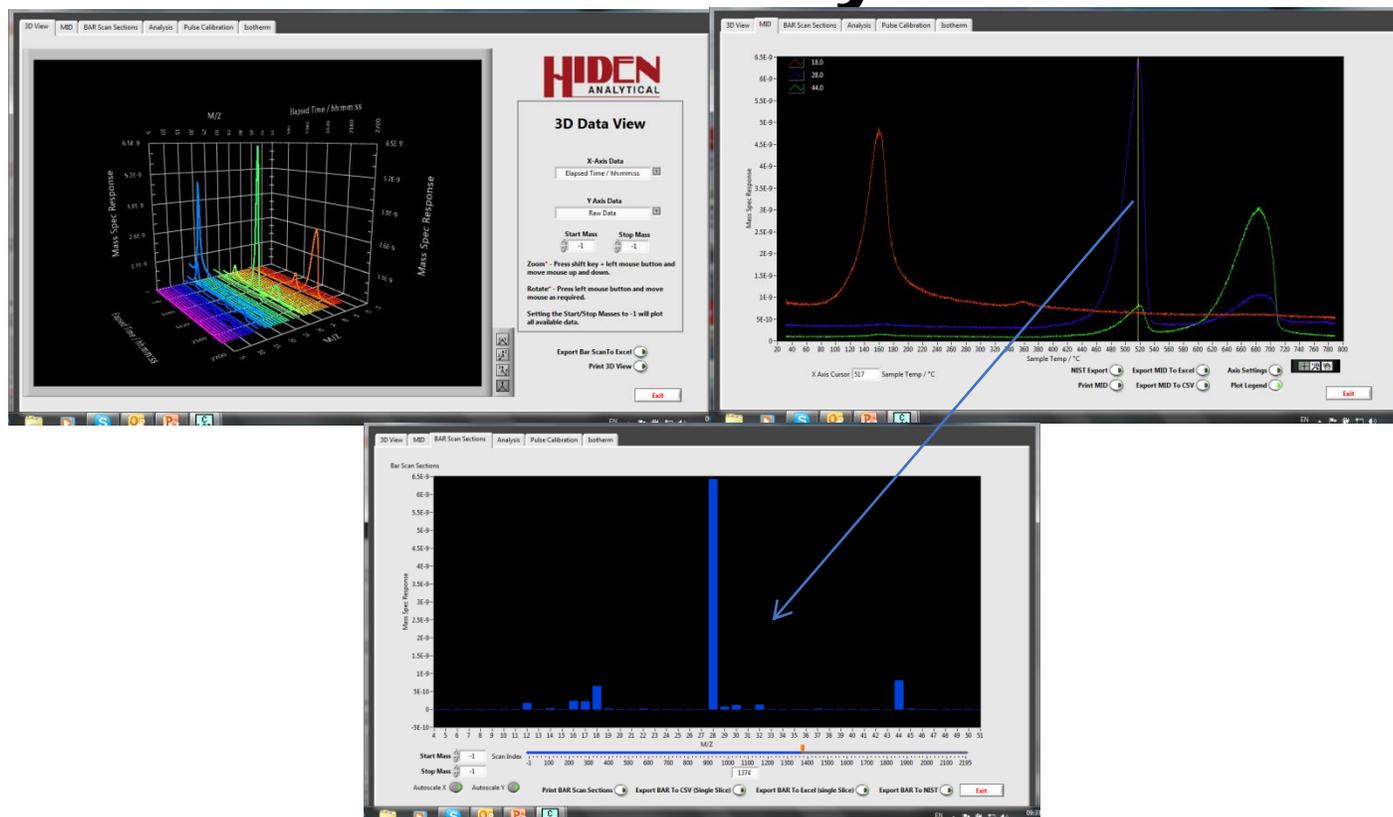
- View single cycle of BAR scan data

# MS Display – MID



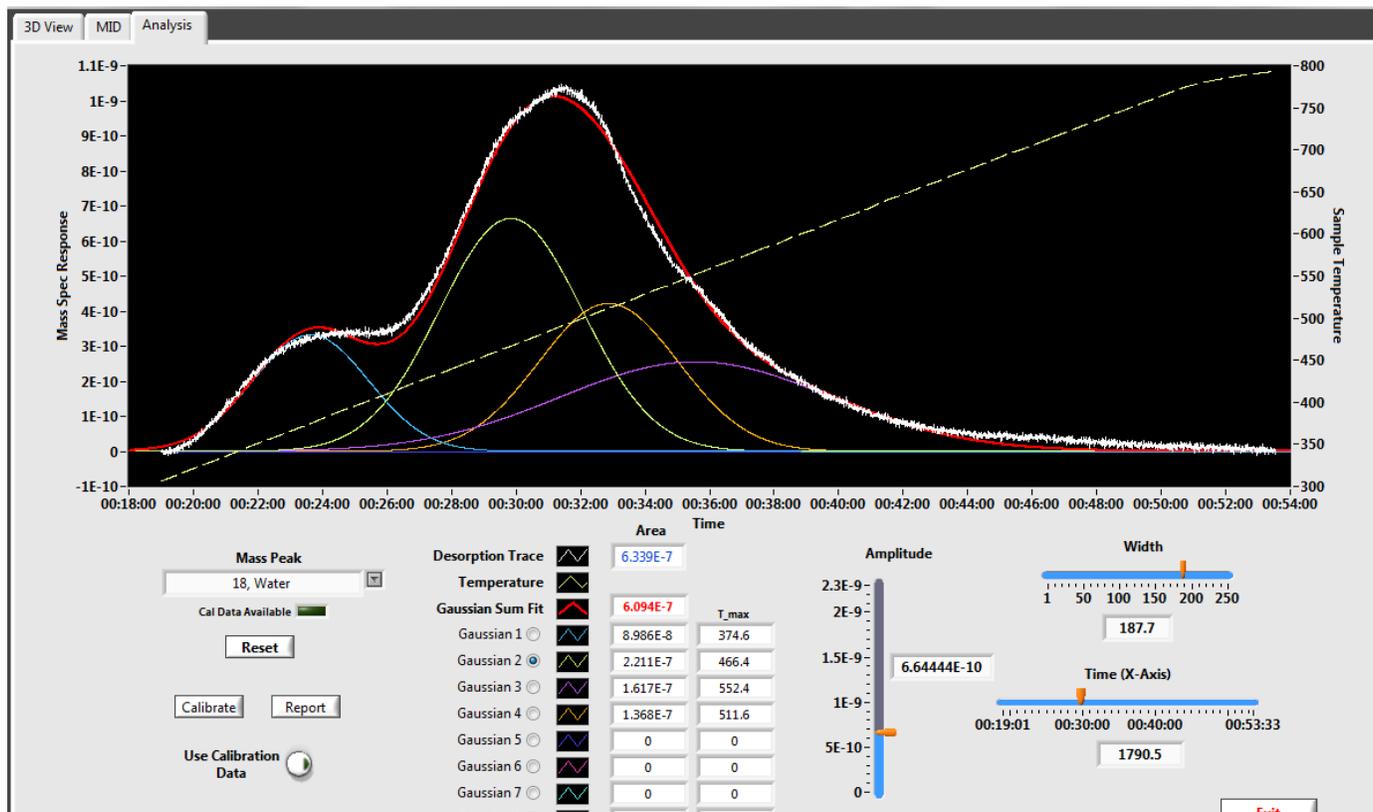
- Data plotted with x-axis as time or temperature
- Y2 axis for secondary plotting of m/z data, temperature or flow vs. time/temperature

# Data Analysis



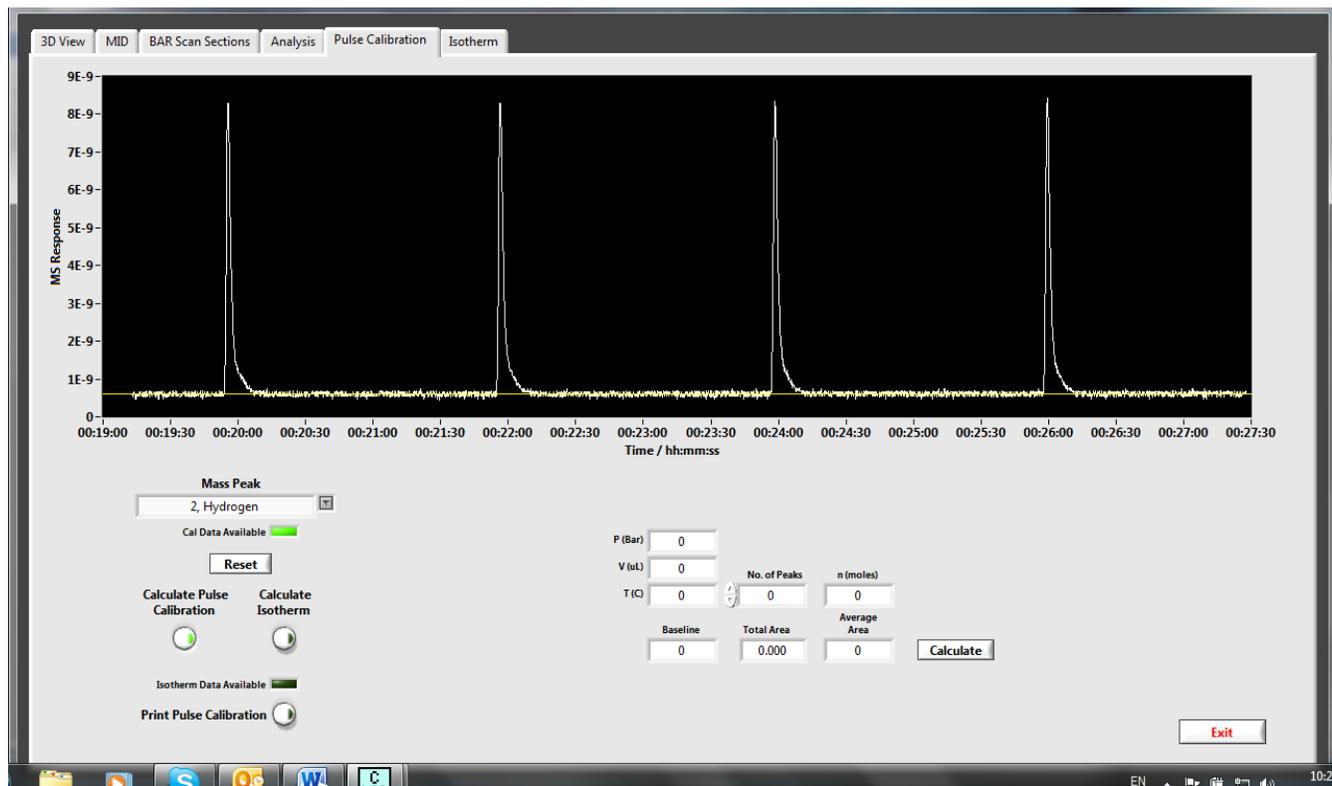
- 3D Bar, 2D Bar and MID modes all available in data analysis mode.
- Multiple export/print options.
- Export selectable masses or whole scan to NIST database for identification of unknowns
- 2D Bar and MID view linked to enable viewing of Bar scan at any point in the MID trace and vice versa.

# Data Analysis



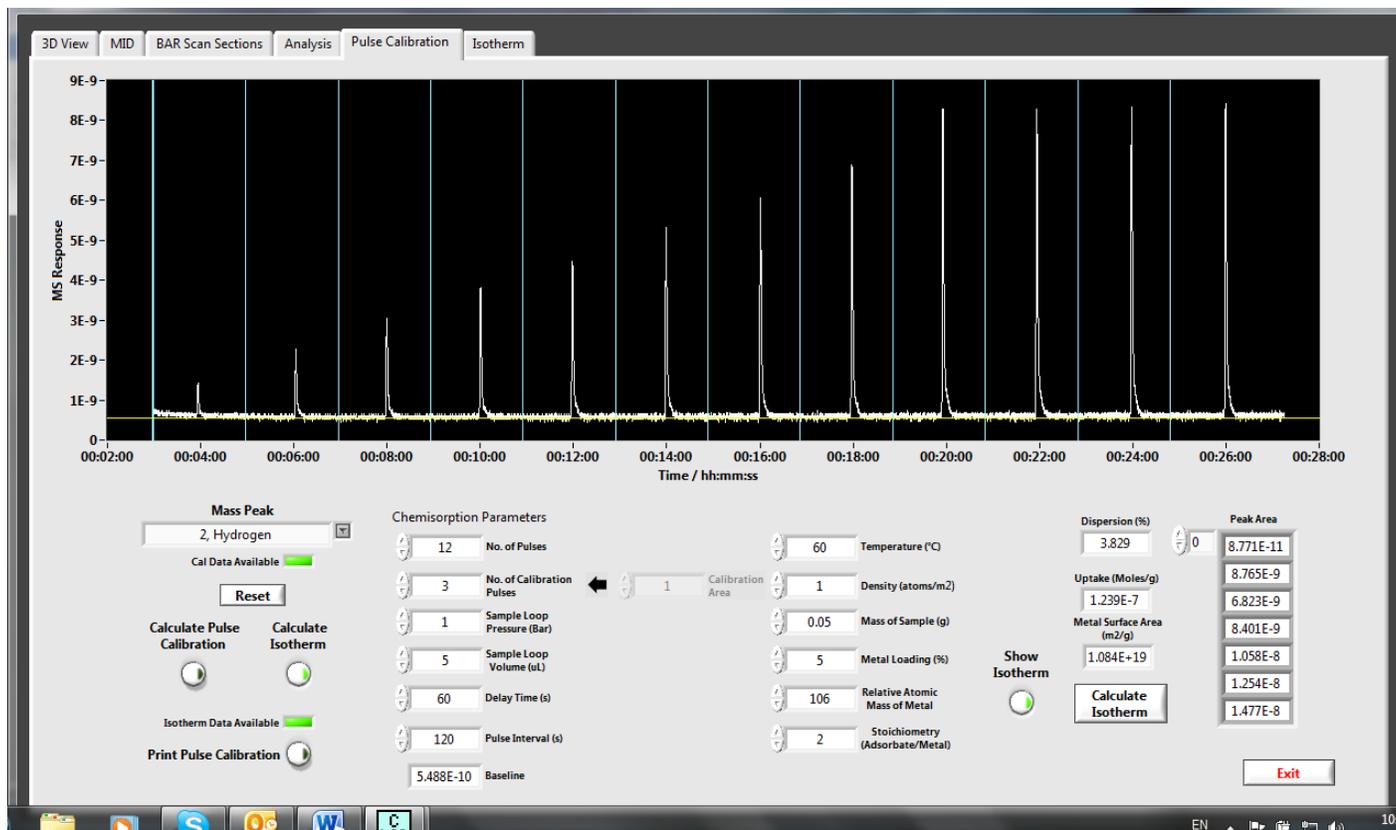
- Peak fitting analysis routines
- Integrated area
- Baseline subtraction

# Data Analysis



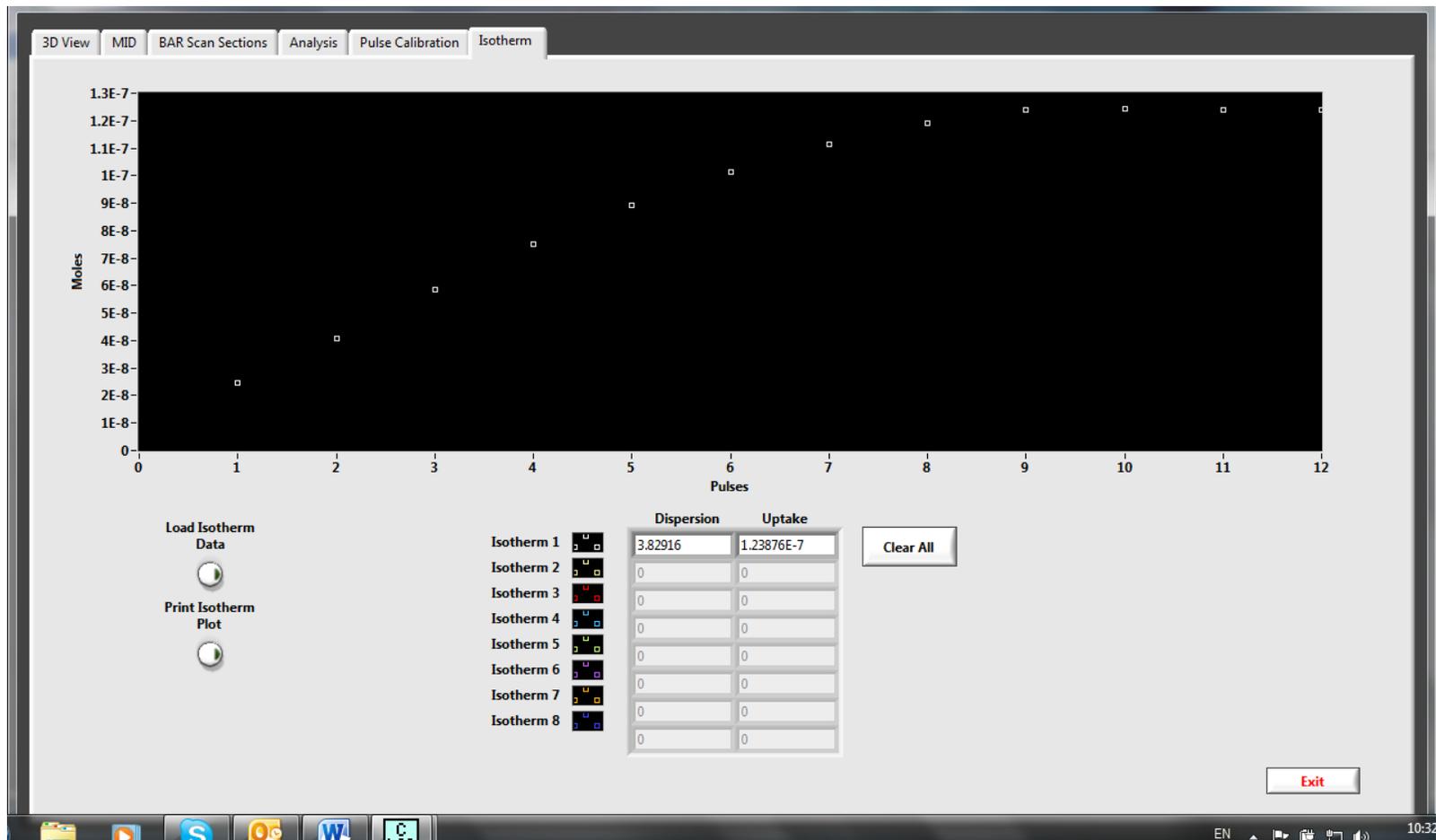
- Calibrate MS response vs injected gas amount for quantification of desorbed gases.

# Data Analysis



- Pulse chemisorption algorithms to determine uptake, metal surface area and dispersion from pulse adsorption experiments

# Data Analysis



- Calculate and plot the pulse adsorption isotherm

- 
- A photograph of a modern, two-story office building with a grey facade and large glass windows. The building has a prominent entrance on the left side. A large, semi-transparent white circle is overlaid on the left side of the image, containing text. The sky is clear blue, and there are some trees and bushes in the foreground.
- [www.HidenAnalytical.com](http://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.