Hiden 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

- 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
• 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.
• 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
• Data plotted with x-axis as time or temperature
• Y2 axis for secondary plotting of m/z data, temperature or flow vs. time/temperature
• 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.
Quadrupole Mass Spectrometers for Advanced Science

Data Analysis

- Peak fitting analysis routines
- Integrated area
- Baseline subtraction
Data Analysis

• Calibrate MS response vs injected gas amount for quantification of desorbed gases.
Pulse chemisorption algorithms to determine uptake, metal surface area and dispersion from pulse adsorption experiments
• Calculate and plot the pulse adsorption isotherm

- 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.