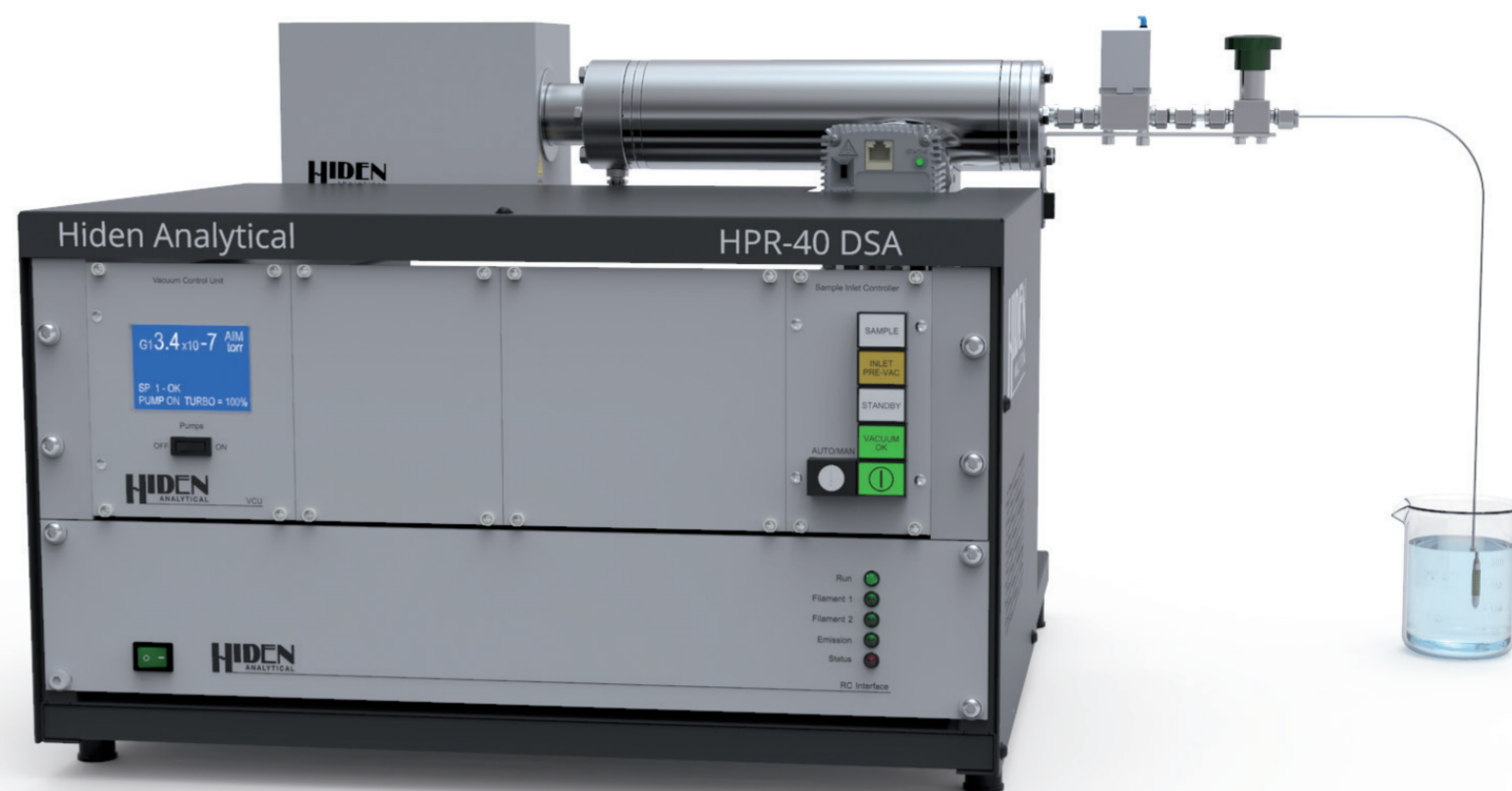
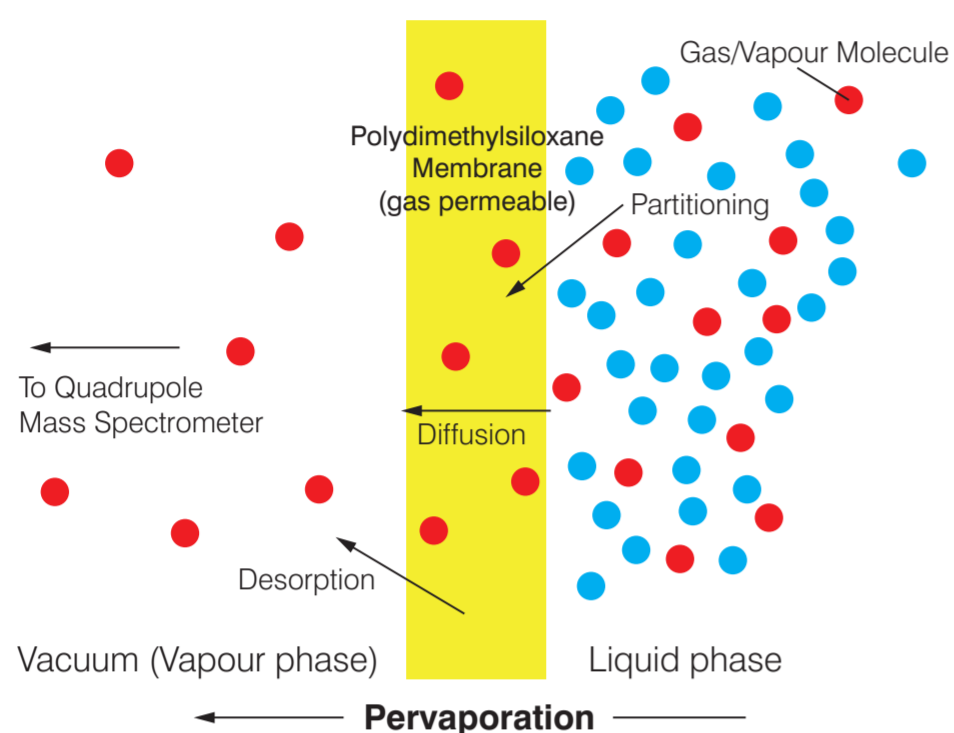




# HPR-40 DSA

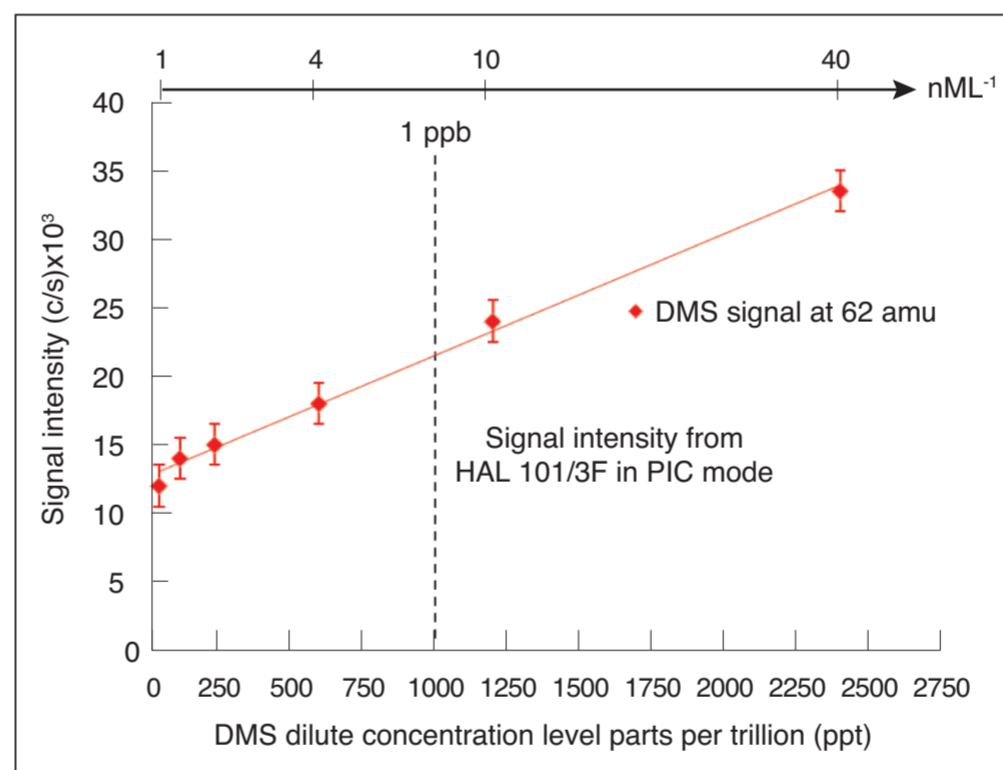
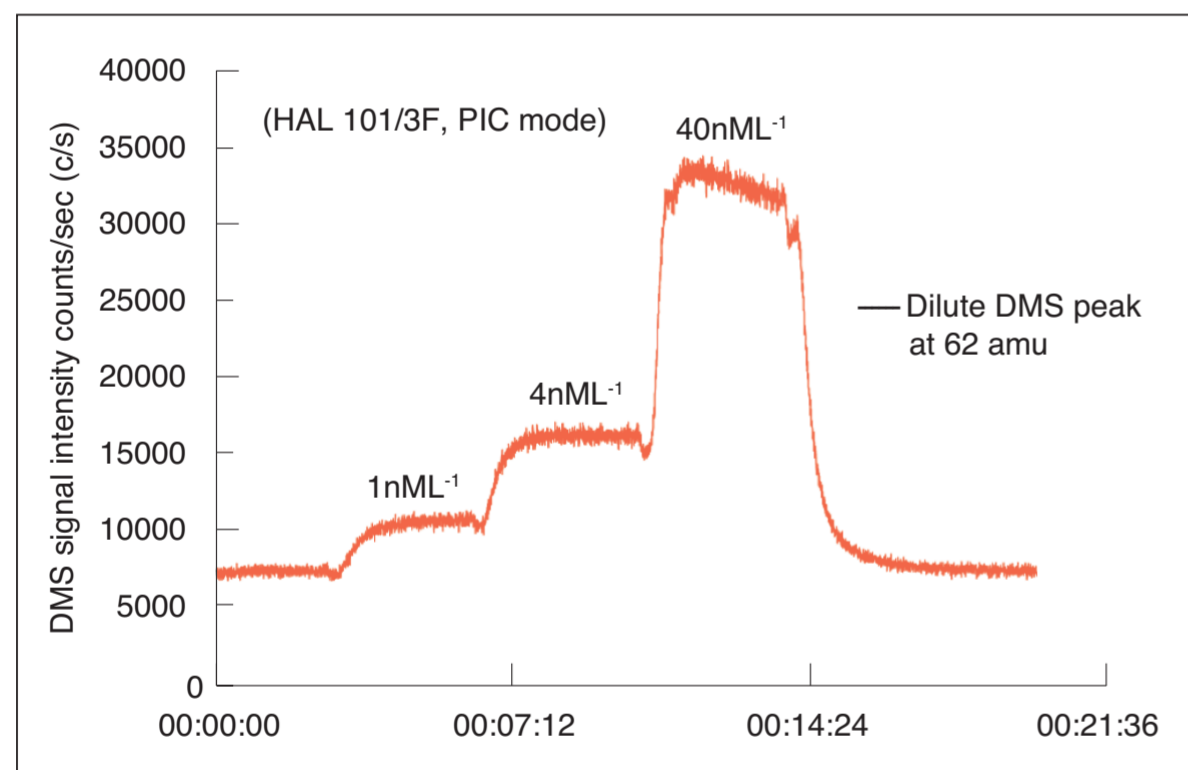
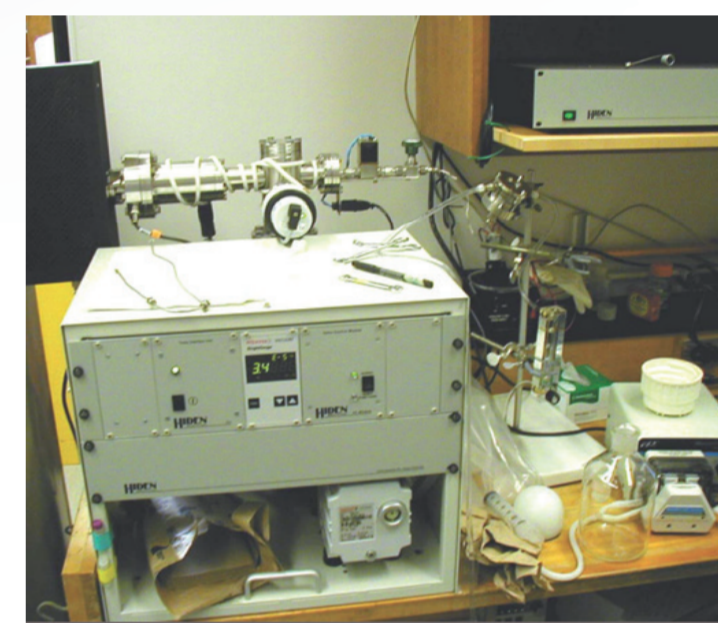
## Membrane Inlet Mass Spectrometers for Dissolved Species Analysis



The Hiden HPR-40 DSA is a mass spectrometer system with simple user interface designed for fast real-time high dynamic range multispecies analysis. The system includes a quadrupole mass spectrometer with mass range: 200 amu as standard and with dynamic range from sub PPB to 100%. The standard 200 amu mass range is sufficient for most applications including the analysis of air gases, VOC's, and the noble gases. A key feature of real-time MS is the ability to select multiple species from an extensive library for

analysis and to acquire real-time trend analyses for studies over either short experiments or for extended periods.

The Hiden HPR-40 DSA system has been deployed on ocean going vessels on extended expeditions for making real-time measurements of species in sea water with trend analysis of concentration of a range of species vs depth and geo location recorded. The system is versatile and adaptable to specific research requirements.



Data obtained with assistance from P.D.Tortell, Department of Botany, University of British Columbia.



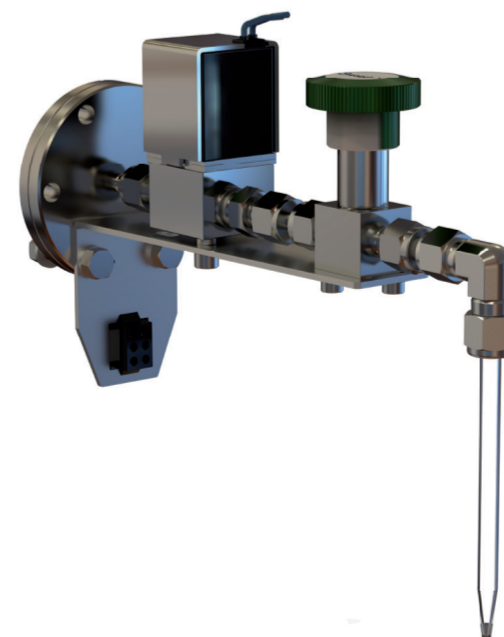
### FLOW THROUGH DISSOLVED SPECIES PROBE

The Flow-through Probe is directly mounted on the MS with two ports to allow flow from an external reservoir. It is used for a wide range of dynamic applications.



### CUVETTE CELL

The Cuvette Cell is designed to allow temperature control and illumination of a liquid sample – e.g. for algae studies.



### ENZYME KINETICS PROBE

The Enzyme Kinetics Probe was specifically developed to be submerged in enzyme containing samples. All wetted parts are made of glass to avoid sample contamination and side reactions.



### DIRECT MEMBRANE INLET PROBE

The Probe Inlet is a membrane inlet that can be submerged in any liquid or slurry sample. It is used for a wide range of applications.