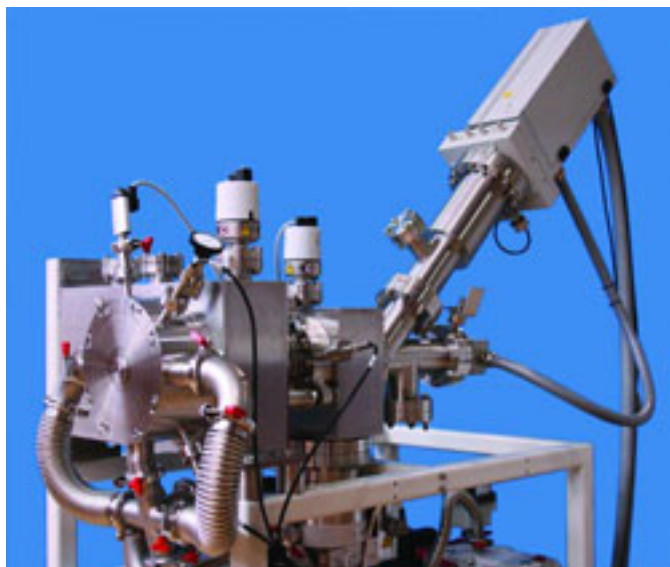


Molecular Beam Mass Spectrometer



Hidden Analytical's Hiden HPR-60 mass spectrometer is a research tool conceived for direct analysis of ions, radicals, and neutral species in reactive processes. The system typically operates in pressure regimes from 5 mbar to 5 bar and mass spectrometer options provide for measurement of neutrals, positive ions, negative ions, and ion energies, with choice of mass range up to 2,500 amu.

The system samples direct from the process using a sequence of up to three pressure-reduction stages with intermediate aligned beam skimmer cones, providing a sampling range from 5 mbar to 100 mbar for the two-stage system and to 5 bar with the third stage. The configuration forms a supersonic molecular beam for direct, near collision-free transfer of sampled species direct to the UHV-operating mass spectrometer. The potential of each skimmer stage can be independently biased to enhance beam focusing and transmission of ionized species.

An integrated molecular beam chopper is available as a system option for automated simultaneous acquisition of foreground/background data, enabling real-time display of the molecular beam intensity with instantaneous subtraction of the beam background signal. Vacuum system operation is automated and systems are provided with integral over-pressure protection.

Hidden Analytical, www.HidenAnalytical.com [1]

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