

## Poster-Session

### Ion energy distributions in dual frequency RF plasmas

J. A. Rees, S. Bort, D. L. Seymour and P. J. Hatton

*Hidden Analytical Ltd., Warrington*

[info@hidden.co.uk](mailto:info@hidden.co.uk)

Ion energy distributions (IEDs) for both positive and negative ions have been measured, using a mass/energy spectrometer system, for two plasma reactors which can be operated using a combination of two RF power sources. One reactor uses capacitatively-coupled inputs and the other includes an inductively-coupled input. Typical data for 2.26, 13.56 and 27.1 MHz inputs are presented for a range of phase relationships. The IEDs clearly show significant differences between the data for different species of ions. The differences result, in part, from the ion-molecule collisions occurring particularly in the plasma/surface sheath regions.