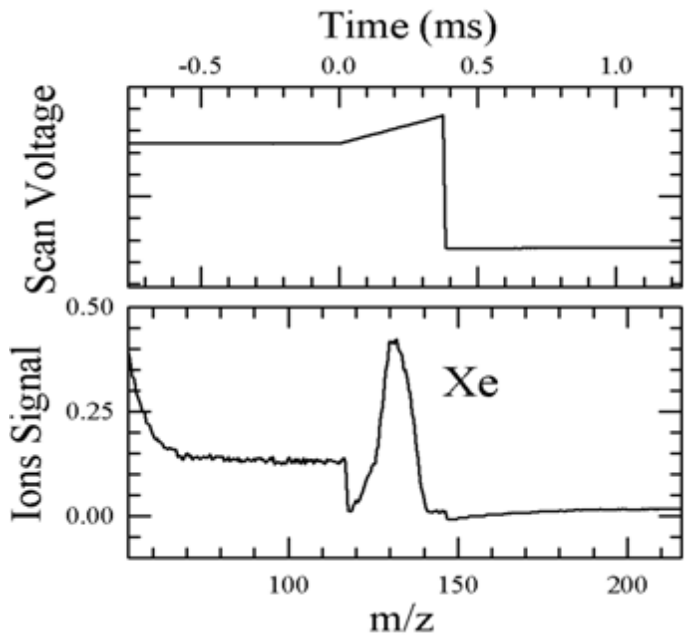
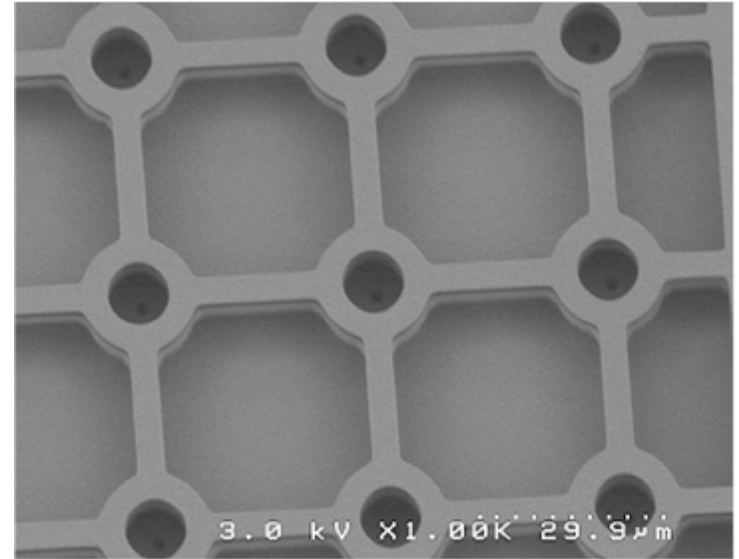


# Micrometer Scale Ion Trap Mass Spectrometers

We have been exploring the use of 2-D arrays of very small ion traps for use in miniature portable mass spectrometers. The figures below show mass spectra that were recorded using a 30 by 30 array of 10- $\mu\text{m}$  diameter microfabricated traps shown in the photograph to the right.

Microfabricated 10  $\mu\text{m}$  silicon ion trap array



Operating Frequency:  
200MHz

Pressure:  
1e-4 Torr

