

High-Pressure Mass Spectrometry

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We have been exploring the use of miniature cylindrical ion traps for analytical mass spectrometry. Our experiments have shown that ion traps of 1-mm diameter can be operated at a buffer gas pressure well above that used in conventional instruments. Studies of the effect of sample pressure on signal intensity have also produced some interesting results. Rules of thumb for extrapolating mass spectral performance to even higher pressure will be presented.

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