

A DECADE OF ADVENTURES IN QUADRUPOLE ION TRAP MASS SPECTROMETRY

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The relatively recent marriage [1] of two Nobel prize winning technologies (electrospray ionization (ESI) and quadrupole ion trap (QIT) mass spectrometry) has resulted in a powerful and versatile instrument for gas phase ion chemistry studies on a vast “treasure trove” of chemical species. Shortly after arriving at the University of Melbourne in 1996, we followed the pioneering work of McLuckey [1] and Gronert [2] and modified a commercial LCQ mass spectrometer to allow ion-molecule reactions to be examined [3]. Since then we have embarked on a research program to fully utilise the multistage mass spectrometry capabilities of this instrument for studies of organic, inorganic, organometallic and biological systems. In this talk I will provide some highlights of our work [4,5].

References:

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- (5) R. A. J. O'Hair, *Chem. Comm*, 2006, 1469.