

Identification and Quantitation of Pesticide Residues by Single Quadrupole LC/MS.

John Vukovic Waters Ltd.

LC/MS on quadrupole-based MS instruments has long been used for quantitative analysis. However, for purposes of sensitivity and compound confirmation, chromatographers have defaulted to using either IonTrap or Triple Quadrupole instruments. The significant advances in instrument design and functionality now enable single quadrupole instruments to provide these capabilities as well. Using in-source Collision-Induced Dissociation (CID), reproducible fragmentation for confirmation of pesticide residues in foodstuffs is illustrated. Further, when coupled with multichannel single ion monitoring, sub-ppb sensitivity is evidenced.