



## Jeffrey S Patrick

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### High performance mass spectrometry in the differential metabolomic analysis-speed, accuracy and resolution in many flavors

The growing demands of metabolomics analyses requires the use of analytical tools with more power. Yields of higher information content from more efficient separation techniques and fast screening are of high interest. Here the use of differing mass spectrometric tools will be discussed and applied to metabolomic problems. Specifically, GCxGC using high speed time of flight, GC and LC with high resolution time of flight and direct analysis using ultra high resolving API time of flight are applied to animal and plant metabolomic analyses. The attributes and pitfalls of each technique are discussed in the context of a metabolomics study.

#### Biography

Jeffrey S Patrick has completed his Ph.D. at Purdue University under the guidance of Prof. Graham Cooks. After more than 15 years in biological mass spectrometry and biomarker research, he is currently the Director of Marketed Technology at LECO, a manufacturer of high performance time of flight mass spectrometers. He has published more than 40 papers in reputed journals and presented more than 50 orals at global conferences.

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