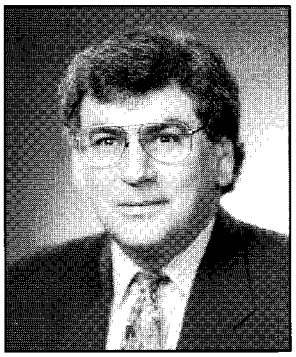
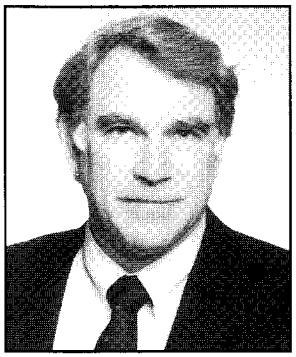
Award for a Distinguished Contribution in Mass Spectrometry



Melvin B. Comisarow



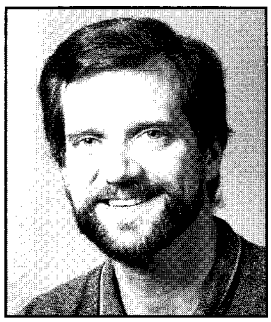
Alan G. Marshall

The ASMS Award for a Distinguished Contribution in Mass Spectrometry recognizes a focused singular achievement in or contribution to fundamental or applied mass spectrometry. The 1999 Award is presented jointly to **Professor Melvin B. Comisarow**, University of British Columbia, **and Professor Alan G. Marshall**, Florida State University/National High Magnetic Field Laboratory, for the invention and development of Fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS).

FT-ICR is best known for its ultrahigh mass resolution, which exceeds that of any other type of mass spectrometer. More than 250 FT-ICR MS systems, representing a capital investment of $100M in current dollars, have been installed worldwide. Comisarow's group is involved with the development and exploitation of FT-ICR mass spectrometry, fundamental research on Fourier methods in spectrometry and application of these techniques to problems in chemistry. Marshall and co-workers have provided comprehensive theoretical treatment of FT-ICR MS, introduced the stored-waveform inverse Fourier transform (SWIFT) technique (for optimal mass-selection), and ion traps which achieve near-optimum performance. Both groups have carried out extensive work with the required computer technology and mathematical algorithms for enhanced spectral resolution and accuracy.

The award will be presented at 8:00 AM, Tuesday, June 15, Chantilly Ballroom.

The Biemann Medal



Matthias Mann

The Biemann Medal recognizes a significant achievement in basic or applied mass spectrometry made by an individual early in his or her career. The award is presented in honor of Professor Klaus Biemann and is endowed by contributions from his students, postdoctoral associates and friends. The 1999 award is presented to **Professor Matthias Mann** from the University of Southern Denmark - Odense for his ingenious applications of mass spectrometry to protein chemistry and molecular biology.

Matthias Mann was formerly at the European Molecular Biology Laboratory. While at EMBL, his group pioneered the development of techniques for the ultra-sensitive analysis of gel separated proteins, including nanoelectrospray, peptide sequence tags, instrumental methods in MALDI, and digestion and sample preparation methods. These methods were validated in the first large-scale protein identification project, which determined more than 150 proteins by mass spectrometry alone. From 1995 these techniques were used by the group to solve important and longstanding problems in molecular biology such as the identification of FLICE (a central component in programmed cell death), telomerase (a key component in cancer and aging), and many other proteins of great biological importance.

In 1998 Dr. Mann was appointed full professor in bioinformatics at the University of Southern Denmark – Odense. His group plans to completely integrate mass spectrometry into molecular biology. A specific focus is the determination of gene function via the mass spectrometric determination of the components of multiprotein complexes. In addition to his University appointment, Dr. Mann is the research director of Protana A S, a biotechnology company that he co-founded.

The Biemann Medal will be presented at 8:00 AM, Wednesday, June 16, Chantilly Ballroom.