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 1998 award is presented jointly to Dr. David A. Dahl, Idaho National Engineering and Environmental Laboratory and Professor Don C. McGilvery, Monash University, for development of the SIMION ion optics design and analysis programs.

SIMION allows the exploration and understanding of the trajectories of charged particles in a mass spectrometer. This information is vital in evaluating and improving an instrument’s design and performance and serves as a cornerstone for instrument development. SIMION provides a powerful and versatile approach for addressing the most challenging issues in the development of mass spectrometry and allows the exploration of innovative and creative solutions. The application of SIMION has been invaluable to the design of mass spectrometers for the last decade.

The award will be presented at 8:00 AM, Wednesday, June 3, followed by the award lectures.

The 1998 BIEMANN MEDAL

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 1998 award is presented to Professor Robert R. Squires from Purdue University for his ingenious applications of mass spectrometry to the structural and thermochemical characterization of reactive organic and organo metallic intermediates, and for the development of powerful new instrumental techniques and imaginative experimental procedures for investigating gas-phase ion chemistry.

A unique combination of flowing afterglow methodology with tandem mass spectrometry and high-level theoretical studies has enabled Prof. Squires to tackle an impressive variety of important problems. Among his many accomplishments are the invention of a method for analyzing the stereochemistry of gas-phase ion/molecule reactions; design of clever synthetic strategies for generating organic and organo metallic ions in the gas phase; novel applications of the kinetic method in ion structure analysis; and the measurement of a wealth of thermochemical data via energy-resolved collision induced dissociation for reactive organic species such as radicals, carbanions, carbenes and biradicals.

The Biemann Medal will be presented at 8 AM, Tuesday, June 2, followed by the award lecture.