AWARDS

AWARD FOR A DISTINGUISHED CONTRIBUTION IN MASS SPECTROMETRY Award Lecture: 8:00 am, Tuesday

2006 Recipient: R. Graham Cooks



This Award recognizes achievement in or contribution to fundamental or applied mass spectrometry. The 2006 Award is presented to Professor R. Graham Cooks of the Purdue University for his development of the "kinetic method" as a tool for ion/molecule studies. In 1977, he and Terry Kruger sent a Communications to the Editor of JACS titled "Intrinsic Basicity Determination Using Metastable Ions." This introductory work described the measurement of proton affinities based on the competition for a proton by two gas-phase bases. The idea of setting up a competition for charge to determine relative affinity for the charged species could be accomplished using a variety of instruments and ionization modes. Many new spectrometer designs were driven by the value of the kinetic method-related measurements they could provide. A unique contribution of the method was its applicability to organic, organometallic, and inorganic systems inaccessible by other techniques. During the 1980s and 1990s, the kinetic method was applied to gas-phase acidity and basicity; electron, metal ion, and halogen cation affinities; proton affinities of free radicals; and cluster ion structures. In the last five years, the method has seen new biological applications such as the quantitation of chiral drugs. It is notable that Professor Cooks prefaced a recent review

"...the epidemic delusion that only numerical and measurable reality has validity must be article with the Lorenz quote: confronted and contradicted." The increasingly broad applications of this tool to problems ranging from physical chemistry to drug design is a testament to the value of Professor Cooks' contribution, and his perspective on the balance of measurement and results.

THE BIEMANN MEDAL Award Lecture: 8:00 am, Wednesday 2006 Recipient: David E. Clemmer



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 2006 Medal is presented to David E. Clemmer of Indiana University for his achievements and contributions integrating ion mobility separations with a variety of MS technologies. His initial high-impact IMS/MS paper published seven years ago has been cited 78 times. In 2002, he was featured in a Popular Science article, illustrating the breadth of his influence and enthusiasm. His group has built new instruments, and then applied these new tools to the important problems of protein folding, analysis of complex biological mixtures, proteome mapping, and polypeptide sequencing. A single LC-IMS-CID-MS experiment on human plasma has generated 600,000 fragment peaks, 20,000 precursor peaks, and identified 280 proteins. A similar investigation of fruit fly tissue has yielded over one thousand proteins. By consistently applying a multi-disciplinary approach (engineering,

chemistry, software, biology) to problem solving, he is often generating unexpected results. Professor Clemmer feels that "We are moving toward an era when surgery will be the last treatment of choice for patients with cancer. We'll treat cancer and many other diseases at the molecular level."

CALL FOR NOMINATIONS FOR 2007

Award for a Distinguished Contribution in Mass Spectrometry. The person nominated should have made a contribution that has had a significant impact on the fundamental understanding and/or practice of mass spectrometry. Eligibility is not restricted to members of ASMS. The award is announced at the ASMS Annual Conference with the presentation of a \$10,000 cash award and a recognition plaque..

Name of person nominated	
Affiliation	

Affiliation

Address

Nominee's email:

Your Name & email: ____

Supporting letters (one page) will be provided by: _____

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 conferred at the ASMS Annual Conference with the presentation of the Biemann Medal and a cash award.

The above individual is nominated for:

Distinguished Contribution in Mass Spectrometry Biemann Medal

Please enclose the following:

- Short description of the achievement (1-2 paragraphs); 1.
- 2. A list of the nominee's publications pertaining to this award and;
- A copy of no more than two of the nominee's publications relevant 3. to the subject.

Send completed nomination form and enclosures for receipt by November 30 to: ASMS Awards

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