

Workshop on the Gas-phase Electrophoretic Mobility Macromolecule Analyzer (GEMMA)

14th–15th June 2004, Vienna, Austria

Overview

The Gas-phase Electrophoretic Mobility Macromolecule Analyzer (GEMMA) is used to estimate molecular masses of biomolecules such as proteins, carbohydrates, DNA oligomers, and noncovalently bound complexes. Dissociation and assembly of noncovalent protein complexes due to modification of solution conditions such as pH and temperature can be studied. Stoichiometry can often be inferred from the relative intensities of the component peaks. GEMMA is also used to obtain a size spectrum of intact virus particles and to obtain qualitative information on constituent biomolecules.

Operating Characteristics

The GEMMA instrument is based on a novel, patented, charge-reduced electrospray method followed by separation of the resulting singly-charged macromolecules according to their electrophoretic mobility in air. The ions are detected using a condensation particle counter.

Workshop Highlights

This workshop will describe GEMMA components, operating characteristics, and applications. The GEMMA system will be demonstrated and compared to other measurement techniques, and time will be allowed for sample analysis. Attendees are invited to bring their own nontoxic samples. The workshop will conclude with a tour of Günter Allmaier's laboratory at the University of Vienna. Please find additional information at www.tsi.com/particle/seminars/vienna/agenda.htm.

Topics Covered

- Operating characteristics
- Components
- Sample preparation
- Applications
- GEMMA and other technologies for molecular weight determination
- GEMMA demonstration
- Comparison of GEMMA and ESI-MS/MALDI-MS for biomolecule analysis
- Customer sample analysis
- Tour of Prof. Günter Allmaier's laboratory



Speakers

Günter Allmaier

Technical University, Vienna, Austria

Stan Kaufman

TSI Incorporated, Shoreview, Minnesota, USA

Axel Zerrath

TSI Incorporated, Aachen, Germany

Rune Karlsson

TSI Incorporated, Shoreview, Minnesota, USA

Registration

Fee: 100 € per person

Location: Hilton Vienna Danube, Handelskai 269
A - 1020 Wien, Tel: +43 (1) 727770 (Contact hotel for room reservations. Mention TSI for reduced rates.)

To register for the workshop, please contact:

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Additional Information

If you are not able to attend the workshop but would like to receive additional information about GEMMA, contact Ingeborg Duda. You will also find introductory information at www.tsi.com.