DESCRIPTION

With contributions from noted experts from Europe and North America, *Mass Spectrometry Instrumentation, Interpretation, and Applications* serves as a forum to introduce students to the whole world of mass spectrometry and to the many different perspectives that each scientific field brings to its use. The book emphasizes the use of this important analytical technique in many different fields, including applications for organic and inorganic chemistry, forensic science, biotechnology, and many other areas. After describing the history of mass spectrometry, the book moves on to discuss instrumentation, theory, and basic applications.

ABOUT THE AUTHOR

Rolf Ekman, PhD, is a Professor of Neurochemistry at University of Gothenburg in Sweden.

**JERZY SILBERRING**, PhD, is the Head of the Department of Neurobiochemistry in the Department of Chemistry and the former deputy head of the Regional Laboratory of Physicochemical Analyses at Jagiellonian University in Krakow, Poland.

Ann M. Westman-Brinkmalm, PhD, is a Junior Research Fellow at the Sahlgrenska Academy at University of Gothenburg in Sweden.
Agnieszka Kraj, PhD, is an Assistant Professor in the Department of Neurobiochemistry, Faculty of Chemistry at Jagiellonian University in Krakow, Poland.

**FEATURES**

- Describes the basic techniques of mass spectrometry along with its more common applications
- Details mass spectrometry's uses in organic and inorganic chemistry, biochemistry, forensic chemistry, and biological MS (proteomics, genomics, etc)
- Contains a list of key terms and definitions
- Provides an eminently practical focus, with contributions from MS users in the different fields
- Includes a CD-ROM with tutorials for students, as well as a Web site with links to other resources for students and an FTP site with solutions and lecture preparation materials for instructors
- Emphasizes the importance of using MS along with other techniques (e.g. chromatography) for more powerful analyses
- Contains an introduction to the methodology and instrumentation, and then moves to mass spectra interpretation, the "-omics" and bioinformatics, and an appendix
- Includes appendices with commonly used tables, as well as links to tutorials, software, databases, protocols, journals, and discussion groups