



Modern Mass Spectrometry

By Schalley, Christoph A.

Book Condition: New. Publisher/Verlag: Springer, Berlin | Also available online | Mass spectrometers are used by almost all chemists and many researchers from neighboring disciplines such as physics, medicine, or biology as a powerful analytical tool. Its advantages are high sensitivity, speed, and almost no sample consumption. During the last two decades, mass spectrometry experienced a boom of new developments pushing its limits further and further at an increasing speed just similar to the progress in NMR spectroscopy in the 1970s. However, a mass spectrometer does not only serve as a machine for solving complicated analytical problems, it evolved meanwhile to a complete laboratory for the investigation of molecules, clusters, and other species under the environment-free conditions of the highly diluted gas phase. These special conditions existing only in high vacuum change the properties of the particles under study significantly with respect to their energetics and reaction pathways. For example, temperature is a macroscopic property of a large ensemble of particles in thermal equilibrium and is thus not defined for a single ion. This fact has severe implications for the measurement of kinetic and thermodynamic data of gas-phase species. On the other hand, the examination of gas-phase properties has the advantage that systems reduced to minimum...



READ ONLINE
[2.48 MB]

Reviews

This book might be worthy of a go through, and a lot better than other. it had been writtern really properly and helpful. You may like just how the author write this publication.

-- Prof. Mattie Beatty

This publication is indeed gripping and intriguing. It is actually writter in basic terms and not difficult to understand. I am just pleased to explain how here is the greatest publication we have read through during my own lifestyle and could be he best pdf for at any time.

-- Ervin Crona