

The TAGA® 6000 MS/MS System at the 1982 Pittsburgh Conference in Atlantic City, N.J.

The TAGA® 6000 MS/MS System includes an extensive array of hardware features designed into the system to take full advantage of this powerful new instrument concept. Computer-aided design of ion transfer techniques, a well-defined CID gas target and high performance quadrupoles ensure optimum transmission of ions through the system. Two stages of collision-induced dissociation (CID) and up to 150 ev. of collisional energy maximize the information obtainable. The open-geometry Atmospheric Pressure Chemical Ionization Source produces the molecular ions especially suited to MS/MS and is exceptional in that the only maintenance required is an infrequent 10 minute cleanup. An ultra-high capacity, ultra-clean cryopump and a totally automated and failsafe vacuum system form the heart of the TAGA® 6000 MS/MS. Positive and negative ion pulse counting with extremely low system noise enable detection of many compounds in the low picogram or ppt range.

System control, data acquisition and data manipulation are fully computerized with a PDP11/23 minicomputer having 21 megabytes of data storage capacity and a multi-tasking operating system. An interactive graphics terminal and keyboard provide ease of operator control and a thermal process hard copy unit produces clean dry records of experimental results.

A highly user-oriented software package is incorporated in the Data System of both the TAGA® 3000 MS and TAGA® 6000 MS/MS. All electrical and mass spectrometry functions can be altered by an operator through keyboard control. Data acquisition and manipulation software on the TAGA® 6000 MS/MS System has been designed specifically for the special needs of a tandem mass spectrometer. To aid the user in running a series of experiments, the TAGA® Command Language was developed. This language, which is similar in structure to BASIC, allows an operator to program several analytical experiments which the TAGA® 6000 system will then carry out

without operator intervention. Several auxillary software programs are also incorporated into the Data System to aid the user in report preparation and specialized data analysis. The operating system used for the Data System, RSX-11M, is a multi-user and multi-tasking system and thus, data collection and data manipulation can take place concurrently by one or more users.

In addition to the laboratory-based TAGA® 3000 MS and TAGA® 6000 MS/MS, SCIEX™ markets a fully mobile version — a fully transportable laboratory facility. Direct air sampling by the computer-controlled TAGA® System provides on-site environmental analysis of complex chemical mixtures. A broad range of trace compounds present at any accessible site can be detected and identified and the concentrations measured. The extent of environmental contamination can be plotted throughout an area rapidly enough to determine the source locations. The highly sensitive and selective TAGA® can detect subtle changes in the flow pattern, composition and concentration levels of multiple traces.



On-site data collection and analyses with the fully mobile TAGA® System.

Today, TAGA® installations are located in Canada, the United States and England.

SCIEX™ provides a complete customer support program. With their large Research and Development Applications Laboratory and Software Departments, the Company is able to provide special accessories for the TAGA® Systems as well as the appropriate software and chemical methodologies to meet or supplement user's requirements.

SCIEX™ is also engaged in contract research and development, as well as contract mobile and laboratory-based analytical services.