The History of SCIEX

SCIEX (Scientific Export) was founded in 1970 by J. Barry French and William Breukelman as a spin out company from University of Toronto Institute for Aerospace Studies. Their mission was to develop analytical instrumentation based on sensor technology used in space exploration and make it available to the wider scientific community. Both have since been appointed to The Order of Canada.

Early products were single and triple quadrupole-based analyzers for analysis of atmospheric ions. The TAGA series of instruments included the TAGA 2000 and 3000 single quads and the TAGA 6000 triple quad mass spectrometers. The TAGA 6000 triple quad mass spectrometers were single and triple quadrupole-based analyzers for analysis of neutral contaminants but let ions pass through. All of the early products were based on the use of a single and triple quadrupole-based analyzer from 1970.

Mobile mass spectrometers were put to work on November 10, 1979, when a Canadian Pacific freight train derailed in Mississauga, Ontario. More than 250,000 people were evacuated in what was the largest peacetime evacuation in North America until 200,000 people were evacuated in what was the New Orleans evacuation of 2005. There were no deaths resulting from the incident, however, the chlorine derailed in Mississauga, Ontario. More than 250,000 people were evacuated in what was the largest peacetime evacuation in North America until 200,000 people were evacuated in what was the New Orleans evacuation of 2005. There were no deaths resulting from the incident, however, the chlorine spill was of great concern to the safety of the community.

Mobile mass spectrometers monitoring put to work. The SCIEX TAGA 2000 mobile mass spectrometer monitoring was put to color immediately following the disaster and operated the “all clear” once the danger passed. The SCIEX TAGA 6000 mobile mass spectrometer monitoring was put to work immediately following the disaster and operated the “all clear” once the danger passed. The SCIEX mobile monitoring also played important roles in the environmental disasters at Love Canal and the Medoc train derailment.

The early 90s saw the introduction of the Voyager-DE, the first Q-TOF product, the QSTAR instrument. Ken Standing, together with Bruce Thomson of SCIEX, were responsible for the company's discovery of collisional focusing, a patented technique, owned by SCIEX, which improves ion transmission in Q0 and Q2.

Technologies for the new millennium were developed in the 1990s, including collisional focusing, instrument and sensor platform technologies, such as the SCIEX API III™ LC-MS/MS System. Early work on collisional focusing was done by Jack Henion, Ed Lee, and Tom Covey at Cornell along with Dr. Bryan Thomson from SCIEX. They connected the atmospheric pressure ionization source of a TAGA 6000 to a collisional-assisted electrospray ion source. The company recognized the importance of the technique and commercialized it for the new source without any differential pumping. Introduced in 1990, the API III was the first commercial dedicated LC-MS/MS system.

The SCIEX R&D team that brought the API III to PittCon 1989, Atlanta, including Tom Covey, Bruce Thomson, Ron Bonner, and Bori Shushan. The development was in part possible through a $17 million grant from the Premier’s Council Technology Fund of Ontario. The SCIEX Innovation in Mass Spec Continues into the New Millennium...