

- Organic Laboratory.
- Electronic Circuitry Development Laboratory.
- Product testing facilities – experienced in testing vacuum systems involving cryogenics and ultra high vacuum.
- Effective working arrangement with the Aerospace Institute Laboratory of the University of Toronto. Work is carried out in this laboratory on fundamental questions pertinent to TAGA® and ELAN® developments.

Experience: Sciex sales of TAGA® 3000 and TAGA® 6000 MS/MS systems on an international basis include IBM, Xerox Corp, US Customs, National Research Council of Canada, Battelle (Edgewood Arsenal), Defense Research Establishment Valcartier, Defense Research Establishment Suffield, General Electric/New York State Environment, Ministry of Environment (Ontario), Ministry of Defense (UK), US Army Natick laboratories, and TRC Advanced Analytics.

Since the introduction of the ELAN® in March 1983, sales have been confirmed to the University of Alberta, National Research Council of Canada, XRAL Ltd, Geological Survey of Canada, Geological Survey of Ontario, Agriculture Canada, Ontario Ministry of the Environment, Eagle Pitcher Ltd (US), and the US Geological Survey (Denver).

The company has developed methods for real-time detection of explosives, illicit drugs, and CW agents in the parts-per-trillion range. In addition, Sciex has participated in special consulting studies including those dealing with pre-collected sampling systems in the field or workspace.

The company received the 1978 Canada Enterprise Award. In 1980, Sciex received an IR-100 Award for developing the TAGA® 3000 as one of the 100 most significant technical products in 1979.

Keywords: 4 = Chemistry; 6 = Computers; 7 = Electronics; 9 = Environment; 16 = Security & Safety; 20 = Miscellaneous; Mass Spectrometry = 4, 9, 16; Research & Development = 6, 7; Ion Physics = 9, 20; Ion Molecule Chemistry = 4; Contract Research = 4, 7, 9; Computer Design = 6; Fluid Dynamics = 20; Vacuum Technology = 20; Ultra-Trace Analysis = 4, 9, 20; Electronics Design = 7; Instruments = 4; Testing = 9; Mobile & Laboratory Based Analytical Services = 4, 9, 20; Product Characterization = 4; Quality Assurance = 20; Professional Services = 4, 6, 7, 9, 16, 20; Toxic Agent Detection = 9, 16; CW Agent Detection = 9, 16, 20; Explosives Detection = 16; Drugs Detection = 20; Trace Gas Detection = 9; Chemical Agent Detection = 9, 16, 20.

Revised: Dec 83

SCINTREX Ltd

Code: SCX

Address: 222 Snidercroft Road
Concord, Ontario, Canada L4K 1B5

Contact: Dr. H Seigel, President – (416) 669-2280

History: Scintrex Ltd began as Sharpe Instruments Ltd in 1947 and was incorporated as Scintrex Ltd, a public Canadian owned company, in 1967.

Scintrex Defense Products Division is a supplier to the US DOD of high sensitivity portable (Mark 22) magnetometers for explosive ordnance detection. In addition, it supplies area radiation monitors (AN-GDQ-3) for the determination and transmission of the level of nuclear radiation around strategic locations. Similar military-specification radiation monitors are

being developed for mobile applications (ship and aircraft installations). An explosives vapor detector (bomb sniffer) has been developed in conjunction with the National Research Council of Canada and will be available in 1984 for defense against acts of terrorism. The potential application of laser-based, active remote sensing methods to certain defense problems is now being investigated.

Capability: The Contract Instrumentation Division of Scintrex began developing monitoring instrumentation in 1974 for CANDU nuclear power plants. Since then, the company has manufactured tritium monitors, reactivity control logic cabinets, shut-off rod logic modules, high radiation hand-held monitors and logic panels for safety shut-down systems. CANDU reactor operators in Ontario, Quebec, New Brunswick, Korea, and Argentina use this equipment.

The Exploration and Analytical Equipment Division of Scintrex is a major part of its business. It includes the design, development and manufacture of geophysical and geochemical instruments for the mining industry, and analytical instruments for chemical laboratories. Over the years, geophysics has become the key exploration tool for discovering new mineral deposits. The steady depletion of surface ore bodies and consequent need to detect buried deposits have produced a growing dependence on geophysical methods. Scintrex is a leader in the design, development and manufacture of mining exploration equipment. Its products, services and skills have contributed directly to numerous major mineral discoveries in different parts of the world. Out of this experience, there is an expertise in developing portable analytical equipment for remote, on site chemical analyses.

The Systems Engineering Group of Scintrex is highly experienced in the installation of sensing systems in aircraft, helicopters and vehicles for mobile applications. Many magnetic, electromagnetic, radiometric and laser installations have been made, operated and serviced.

Average Work Force: Electronic Engineers – 14
Mechanical Engineers – 2
Chemists – 4
Geophysicists – 4
Physicists – 4
Technicians – 50
Machinists – 20
Sales, Office Staff & Others – 101

Gross Sales: 1979 – \$ 9.0M
1980 – \$11.2M
1981 – \$12.5M
1982 – \$14.8M
1983 – \$ 9.1M

Plant Size: 46,000 sq ft (additional 20,000 sq ft projected)

Experience: Scintrex has had experience with the US Army and Navy (contracted to build nuclear radiation monitoring systems and explosive ordnance detectors); Ontario Hydro (contracted to supply hand-held radiation dosimeters for nuclear power plants); and other CANDU reactor users (contracted to build a variety of radiation monitoring devices).

Keywords: 4 = Chemistry; 7 = Electronics; 8 = Energy; 9 = Environment; 14 = Protective Equipment; Radiation Monitoring Systems = 9, 14; Dosimeters = 9, 14; Tritium Monitors = 9, 14; Gamma Ray Monitors = 9, 14; Beta Ray Monitors = 9, 14; Geophysical Equipment = 8; Electromagnetics = 7, 8; Magnetic = 8; Gravity = 8; Geochemical Equipment = 8; Atomic Absorption Spectrophotometers = 4, 9; Ultraviolet Fluorescence Systems = 4, 9; Toxic Gas Detectors = 9; Hazardous Gas Detectors = 9; Remote Sensing = 9; Ordnance Detectors = 4, 9, 14; Trace Gas Detection = 9.

Revised: Dec 83