Ortho announces the most powerful, precise, and versatile instrument for cell sorting and analysis ever available commercially: the Ortho Cytofluorograf™ System 50. It combines a rapid cell sorter (based on the electrostatic droplet deflection principle) with a flexible, wide-ranging analysis package in a single versatile unit.

Ortho System 50 for analysis.

Its dual-laser excitation system provides three modes of excitation. There are two single individual excitation sources for different purposes: a .8 milliwatt helium-neon laser for ultra-high-precision scatter measurements, and a 5-watt argon laser for fluorescence measurements.

There are four detectors: two are photomultiplier tubes for broad visible-range response, two are solid-state photo sensors for axial light loss and narrow forward-angle scatter. A photomultiplier tube provides for measuring wide-angle scatter.

12 measurement parameters.

The System 50 Cytofluorograf permits for the first time yielding of morphological information by a flow cytometric instrument. Because pulse height analysis, pulse area analysis, and pulse width analysis can be selected for every detector output, a total of 12 distinct measurement parameters is available with the System 50. Other features of the system include two bi-dimensional regions of interest, dual histogram multi-channel analyzer with cytogram mode, ultra-sensitive optics, and easy sample entry.

Complete details of System 50 are available in a new brochure from your Ortho representative or direct from Ortho Instruments.

Protocols No. 26: Determination of Purity of Yeast Cells

We would like to bring your attention to an interesting application note contributed by Dr. K. J. Hutter of the Frauenhofer Gesellschaft Institute for Aerobiology, West Germany, No. 26 in the Ortho Protocols series, which describes an-immunofluorescent method for differentiating wild strains of yeast cells in cultured yeast using the Cytofluorograf. This method makes available a rapid and precise assay of the degree of contamination.

For a copy of Protocols No. 26, write or call Ortho Instruments.
Asbestos as an important environmental carcinogen was defined through clinical and epidemiological investigations over the last four decades. In 1960, Dr. J. C. Wagner et al. (Diffuse, pleural mesothelioma and asbestos exposure in the North Western Cape Province. Br. J. Industr. Med., 17: 260–271, 1960) clearly defined asbestos as an environmental hazard.

Drs. Irving J. Selikoff and J. Churg of Mt. Sinai School of Medicine, with E. Cuyler Hammond of the American Cancer Society, in 1964 (Asbestos exposure and neoplasia. J. Am. Med. Assoc., 188: 22–26, 1964) clarified the occupational relationship to carcinoma as well as mesothelioma. It was soon reported that asbestos carcinogenesis extends beyond its occupational exposures and that asbestos has a synergistic action with tobacco smoking in evoking bronchogenic carcinoma (Selikoff et al. Asbestos exposure, smoking, and neoplasia. J. Am. Med. Assoc., 204: 106–112, 1968).

It is now recognized that asbestos is an important health hazard of the environment (see CA, 28: 87–99, 1978), requiring minimalization of exposure by inhalation and ingestion, and avoidance of tobacco smoking among those who have been exposed.

Pictured are (left to right): Drs. J. C. Wagner, I. J. Selikoff, and E. Cuyler Hammond, on a background of asbestos (chrysotile) fibers.