



S. C. Miksta
Advisor



C. T. Atwood
Financial Advisor



J. C. Lamping, Jr.
Treasurer

Full Listing of Committees

Other Committee members hard at work on plans for this unprecedented combined Fall Meeting are: W. O. Quick of Chemtex Products, Inc., Vice Chairman and in charge of entertainment as well; W. J. McPherson of Wurster & Sanger, Registration Chairman; Earle Fritz of Swift Chemical Corp., Hotel Chairman; Antonette Trinchese of Central Soya Corp., Ladies Chairman; J. C. Lamping, Jr. of Hoffmann-La Roche, Inc., Treasurer; J. F. Hanrahan of Distillation Products Industries,

Technical Visits Chairman; S. T. Miksta of Krafco Corp., and C. T. Atwood of Lever Brothers, Inc., Advisors.

• New Products

ANALTECH, INC., Wilmington, Del., has announced the development of a low-cost Kent digital integrator, Chromalog 3, for chromatographic analysis. The Chromalog 3 features high count rate (40,000 per sec), automatic baseline correction with baseline correction delay, slope sensitivity variations of 16:1, up and down slope sensitivity to eliminate error on tailing peaks, optional log/linear recorder output and computer interface cards. The integrator is capable of printing three peaks per second and has a count capacity of 900,000 on any particular peak. Mode of operation is adjustable to manual, automatic or remote. Two ranges are provided, 100 millivolt and one volt.

A new Hitachi Perkin-Elmer compact, high voltage electron microscope with accelerating voltage to 200,000 Volts is now being offered by the Scientific Instruments Department of PERKIN-ELMER'S ULTEK DIVISION, Palo Alto, Calif. This new, high energy instrument, designated the model HU-200F, provides greatly increased electron penetration of thick specimens, low specimen damage, with resultant improved image definition for both metallurgical and biological materials. The instrument can resolve 4 Angstrom structures. The image quality and, therefore, resolution of the HU-200F are improved because the system minimizes aberration caused by energy loss of the electrons during specimen penetration. Strong excitation of the lens system further reduces axial field chromatic aberrations, optimizing image fidelity. In addition, the

investigation of specimens sensitive to chemical reaction, or heating from electron beam irradiation is permitted. And since thicker sections can be used, specimen preparation is simplified. All of these benefits are of considerable interest in metallurgical and biological investigations.

HITACHI PERKIN-ELMER, Palo Alto, Calif., has introduced a new, ultrahigh resolution electron microscope, the Model HU-12, which includes a unique imaging system, UltraZoom, among many important new features. This ingenious refinement permits continuous zooming over a wide magnification range while automatically adjusting both image focus and image brightness. The HU-12 is the first electron microscope to provide this capability which allows even inexperienced operators to obtain excellent, high resolution micrographs. With its ability to discern 2 Angstrom-sized structures, and a completely modern "user-oriented" control console, the HU-12 can take ultrahigh resolution micrographs conveniently and easily. In addition to the features indicated it also provides: guaranteed high resolution; comprehensive operating modes; fully automatic photography system; quick, positive lens alignment; automatic vacuum system with low contamination rate; multiposition specimen exchange mechanism; complete interlocking of vacuum and electronic controls; and attractive, human engineered control console.

A totally new high performance research infrared spectrophotometer has been developed by the PERKIN-ELMER CORPORATION, Norwalk, Conn. The Model 180 incorporates new optical, mechanical and electronic design that provides greater flexibility, precision and operator convenience than presently available in any other infrared spectrophotometer. It offers the user a number of new features. Abscissa and ordinate data are generated in digital form within the spectrophotometer, and may be interfaced out for digital recording on a variety of logging devices. An entirely new chopping system provides pre-sample chopping of the infrared energy beam. This eliminates the effects of sample reradiation and insures accurate quantitative measurements even on heated or cooled samples. It further reduces sample heating caused by the infrared source by a factor of four compared with single chopper optical null systems. Five operating modes combine all the wanted energy control parameters. A unique "memory bank" enables the user to store four sets of operating parameters for instant recall. The instrument also provides a rapid indexing system which allows the operator to set the wavenumber limits of the scan; a dual recorder system that may be used either as an X-Y or strip chart recorder; an unusually large sample compartment; and, a frequency marker system that assists in making precise frequency measurements and permits recording of research quality, analytical spectra (Coblentz Society Class II).

WORTHINGTON BIOCHEMICAL CORP., Freehold, N. J., has produced a group of seven radioactive enzymes. The enzymes are ribonuclease, pepsin, chymotrypsin, trypsin, lysozyme, deoxyribonuclease, and collagenase. These materials, currently the subject of considerable research in the life sciences, exhibit radioactivity at the relatively low level of 3 to 30 $\mu\text{c}/\text{mg}$. Included in the product group are four radioactive substrates, deoxyribonucleic acid, ribonucleic acid, soybean trypsin inhibitor, and alpha-casein. Analytical studies at Worthington, amino acid analysis used in conjunction with liquid scintillation counting, reveal that the individual amino acid molecules making up each enzyme are radioactive. Measurement of enzyme activity shows that the enzyme itself is intact. The result is a group of biochemicals which are internally labeled and which are enzymatically active. These provide a means for biochemical investigations utilizing labeled compounds without the complications introduced when iodination or other such "external" labels are used. The new labeled products are useful in tissue culture studies as well as in protein and nucleic acid sequence studies. They also are expected to have application in metabolic studies and in other aspects of molecular biology.