EQUIPMENT NEWS

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Science *does not assume responsibility for the accuracy of the information. All inquiries concerning items listed should be addressed to* Science, *Room 740, 11 W. 42 St., New York 36, N.Y. Include the name(s) of the manufacturer(s) and the department number(s).*

■ POWER SUPPLY furnishes 2 ma at 250 kv. Selenium rectification is used. The output voltage is continuously variable with ripple approximately 2.5 percent at maximum rated power. Internal impedance is 11 ohm. (Beta Electric Division, Sorensen and Co., Inc., Dept. S860)

■ BEAM SPLITTERS consist of clear, cast plastic films of optical quality and approximately 3×10^{-4} in. thick. The film is cemented under tension to metal frames which have been lapped optically flat. Two types of neutral reflective coating can be applied to adjust the ratio of reflected to transmitted light. Neither appreciable separation of the first- and second-surface reflections nor distortion by refraction is observed. (National Photocolor Corporation, Dept. S853)

■ MAGNETIC-CORE STORAGE UNIT stores 144 characters of eight bits each. Input and output time is 14 μsec. No transition time is required for switching from input to output. All control circuitry is mounted on plug-in, etched circuit boards removable from the front of the unit. (Telemeter Magnetics Inc., Dept. S854)

■ DISPLACEMENT TRANSDUCER provides output voltage proportional to position and linear within ±0.1 percent over a stroke of 10 ft. The device consists of a magnetic-core and tubular-coil assembly separated by a pressure wall. The wall will withstand 1200-lb/in.^{2} steam at 650°F. The coil assembly will withstand higher temperatures. The unit is specifically engineered for use in an environment of high-density atomic radiation. Output is 2 to 6 v/ft, depending on the excitation frequency. (G. L. Collins Corporation, Dept. S859)

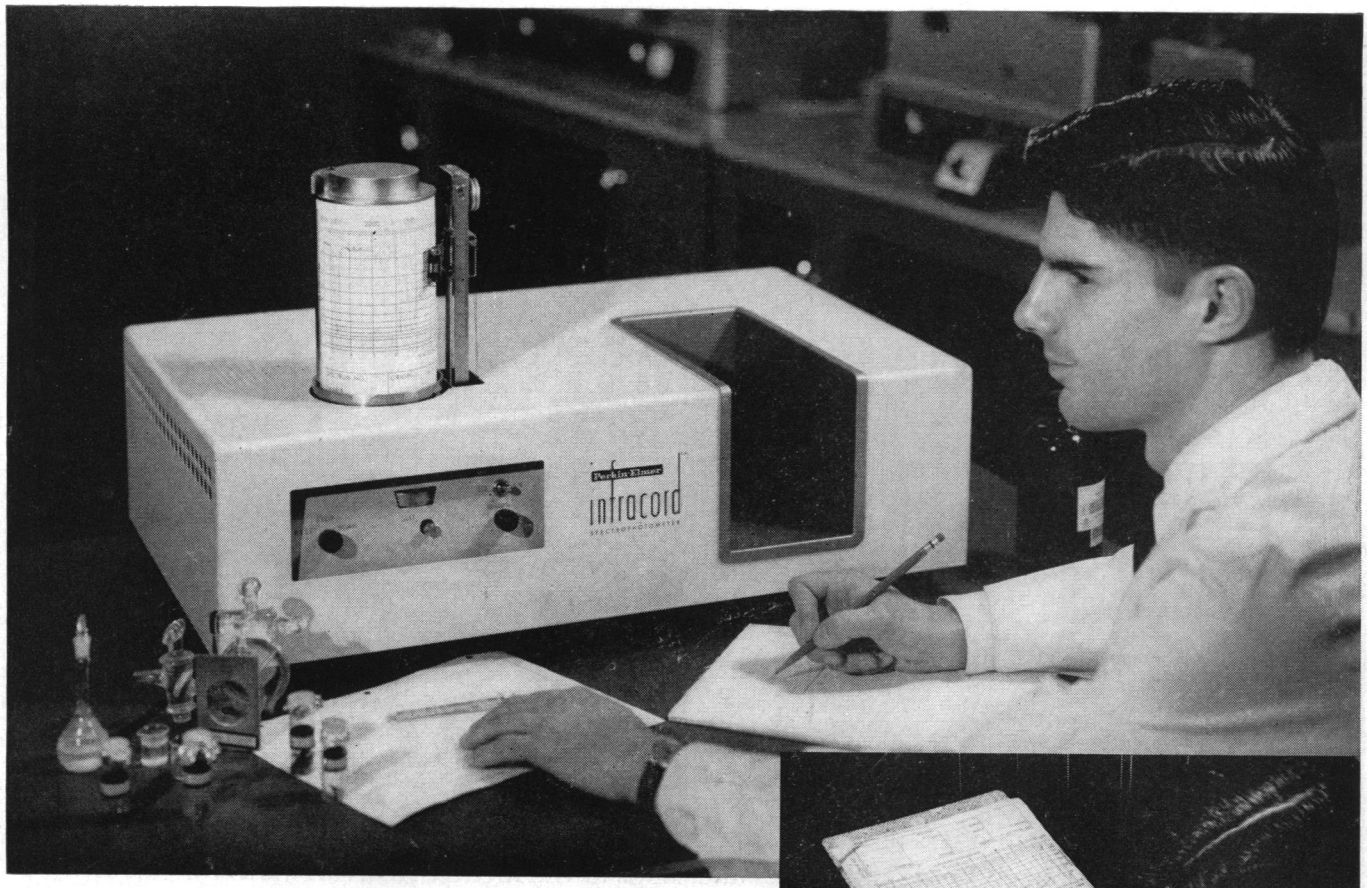
■ CHLORINE ANALYZER provides continuous measurement of free, combined, or total residual chlorine in water or sewage. The analyzer is essentially a double-light-beam filter photometer. Two standard ranges are 0 to 1 and 0 to 10 parts per million. Accuracy is ±1 percent of full scale. (Fischer and Porter, Dept. S855)

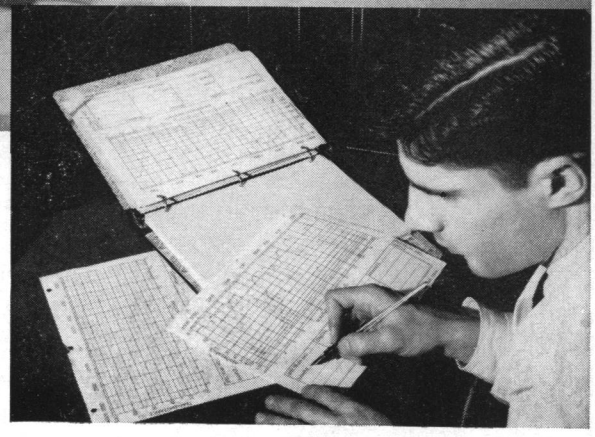
■ INFRARED SAMPLE CELL can be used with sample pressures of 200 lb/in.^{2} (gage). The cell consists of a stainless-steel body with windows sealed with Kel-F O-rings. Window materials include KBr, NaCl, KF, and fused quartz. Cell lengths are 60 mm or variable from 5 to 10 mm. (Perkin-Elmer Corp., Dept. S856)

■ CONDUCTIVITY CELL is a hollow glass cylinder containing two electrodes and an automatic temperature-compensating thermistor. The cell operates efficiently at temperatures to 400°F with temperature compensation, and to 1000°F without compensation. The platinum electrodes are mounted flush with the glass tube to permit high fluid velocities. Available sizes are ⅜, ½, ¾, and 1 in. in diameter. Connections are made with a four-prong Amphenol connector. (Robertshaw-Fulton Controls Co., Dept. S862)

■ OSCILLOGRAM READER accommodates film widths to 16 in. and roll diameters to 6 in. Any number of linear or nonlinear channels is handled with corrections made for linear or nonlinear scale factors and zero-line location. Drive speed is adjustable by means of a variable transformer. (Gerber Scientific Instrument Co., Dept. S863)

JOSHUA STERN
National Bureau of Standards





Low-Cost P-E Infracord Spectrophotometer*

PRESENTS ITS DATA AS YOU LIKE IT

The Perkin-Elmer Model 137 Infracord is a *double beam* spectrophotometer especially designed to give the bench chemist fast, accurate, easily interpreted data for his notebook. At a price of $3850, here's what the Infracord offers you:

SPEED — The Infracord 137 makes a *full spectrum scan in 12 minutes.* Manual scan — for fast, simple analyses — can be done *in one minute.* Return to start takes one second.

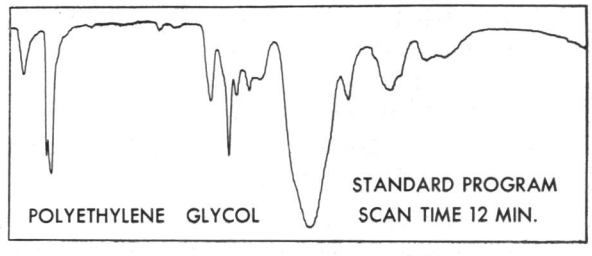
CONVENIENCE — The Infracord 137 features an easily accessible recording drum; removal is quick and simple. Spare drums may be loaded ahead of time, allowing the Infracord to be operated almost without a halt during rush periods.

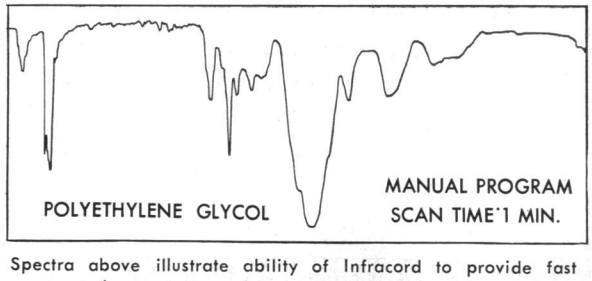
EASE OF INTERPRETATION — The Infracord 137 presents its data in the standard form used by the API and Patent Office, simplifying spectra comparison. The 8½ by 11″ recording paper fits conveniently into notebooks, files, duplicating machines. The Infracord's sensitive recording mechanism accurately transcribes all the data obtainable from the instrument's fine double beam optics.

For further information on how the P-E Infracord 137 can help *your* analytical program, write us at 910 Main Ave., Norwalk, Conn.

* T.M.

INSTRUMENT DIVISION
Perkin-Elmer *Corporation*
NORWALK, CONNECTICUT

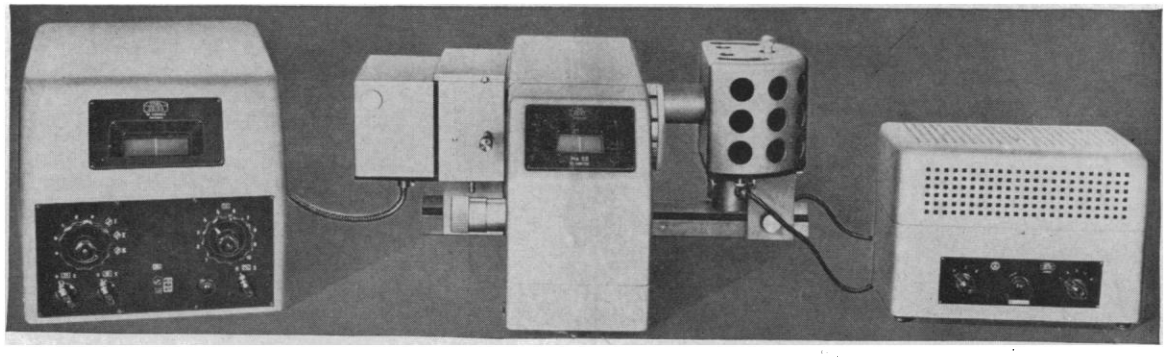




Spectra above illustrate ability of Infracord to provide fast answers when necessary. Lower spectrum was obtained in one minute by manual rotation of the drum. Note close correlation with standard 12 minute run.

MADE BY CARL ZEISS IN WEST GERMANY

SPECTROPHOTOMETER PMQ II

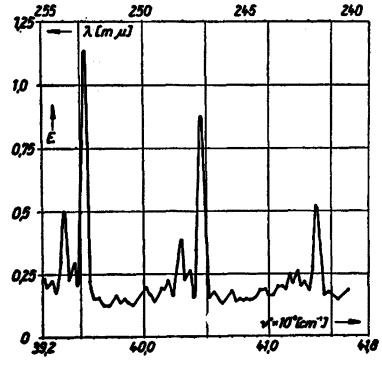


This new instrument offers universal applications for rapid, reliable and accurate photometric measurements of liquids, gases and solids at the highest resolving power of the spectrum.

The spectral region ranges from far-ultraviolet 200 mμ to near-infrared 1,000 mμ (2,500 mμ by using a lead sulphide cell). The instrument operates directly on 110-volt A.C. By means of a combined magnetic and electronic voltage stabilizer, fluctuations of + 10% to − 15% can be compensated. The transmission and extinction scales are projected on a ground glass window. The effective length of the scales appears to be approximately 16 inches.

The adjustment of the slit and that of the wave-length is guaranteed to be free of lost-motion. The slit width can be set within 0.2 mμ absolute. As a consequence of the friction-free design, no lost-motion is evident when setting the wave-length. For instance, the combined error of setting and reading the wave-length is guaranteed to be no greater than ± 0.05 mμ at 250 mμ. The effective length of the projected micro wave length scale appears to be approximately 4 feet, and has a range of from 200 mμ to 2,500 mμ.

Write for free, detailed specifications



Extinction curve of benzine vapor

CARL ZEISS, INC., 485 Fifth Avenue, New York 17, N. Y.

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