

## 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  $3 \times 10^{-4}$  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  $\mu$ sec. 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  $\pm 0.1$  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.<sup>2</sup> 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  $\pm 1$  percent of full scale. (Fischer and Porter, Dept. S855)

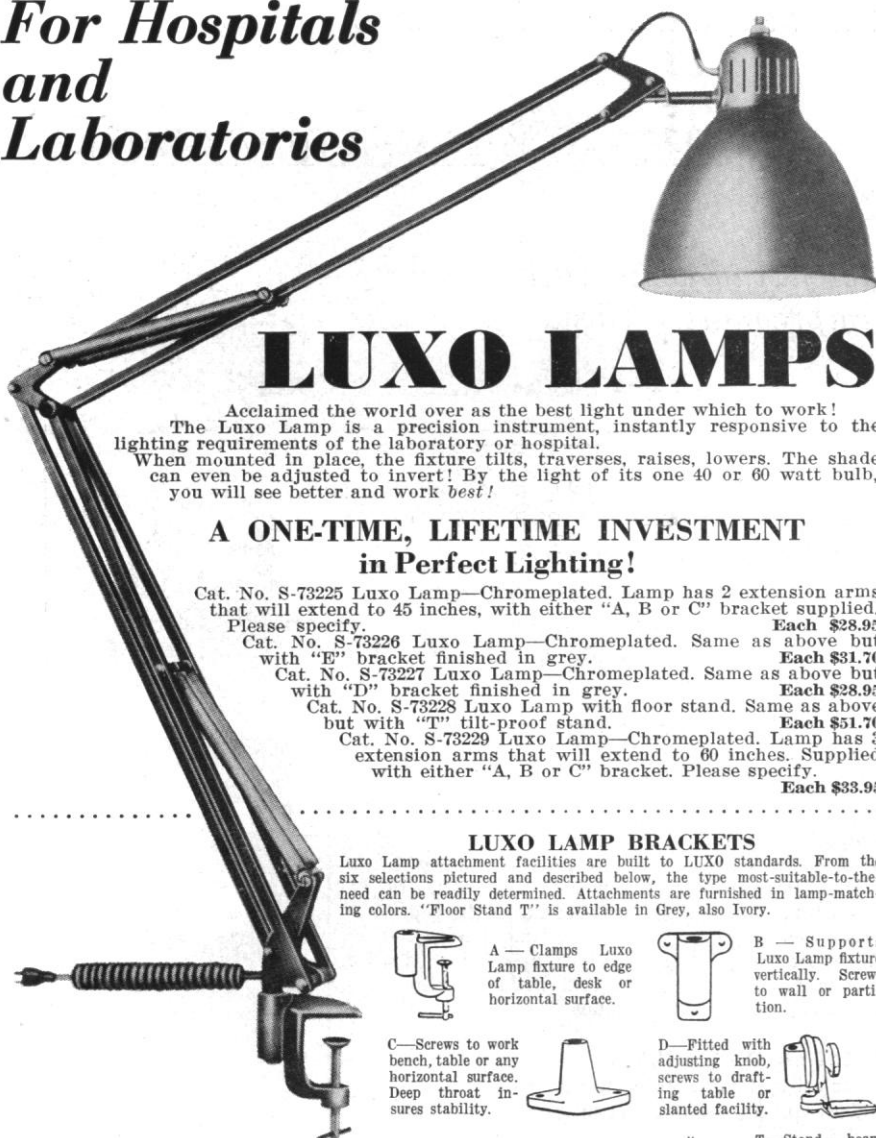
■ **INFRARED SAMPLE CELL** can be used with sample pressures of 200 lb/in.<sup>2</sup> (gage). The cell consists of a stainless-steel body with windows sealed with Kel-F O-rings. Window materials include KBr, NaCl, KF, and fused quartz. Cell lengths are 60 mm or variable from 5 to 10 mm. (Perkin-Elmer 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  $\frac{3}{8}$ ,  $\frac{1}{2}$ ,  $\frac{3}{4}$ , 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 non-linear 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

## For Hospitals and Laboratories



### LUXO LAMPS

Acclaimed the world over as the best light under which to work! The Luxo Lamp is a precision instrument, instantly responsive to the lighting requirements of the laboratory or hospital. When mounted in place, the fixture tilts, traverses, raises, lowers. The shade can even be adjusted to invert! By the light of its one 40 or 60 watt bulb, you will see better and work best!

#### A ONE-TIME, LIFETIME INVESTMENT in Perfect Lighting!

- Cat. No. S-73225 Luxo Lamp—Chromeplated. Lamp has 2 extension arms that will extend to 45 inches, with either "A, B or C" bracket supplied. Please specify. **Each \$28.95**
- Cat. No. S-73226 Luxo Lamp—Chromeplated. Same as above but with "E" bracket finished in grey. **Each \$31.70**
- Cat. No. S-73227 Luxo Lamp—Chromeplated. Same as above but with "D" bracket finished in grey. **Each \$28.95**
- Cat. No. S-73228 Luxo Lamp with floor stand. Same as above but with "T" tilt-proof stand. **Each \$51.70**
- Cat. No. S-73229 Luxo Lamp—Chromeplated. Lamp has 3 extension arms that will extend to 60 inches. Supplied with either "A, B or C" bracket. Please specify. **Each \$33.95**

#### LUXO LAMP BRACKETS

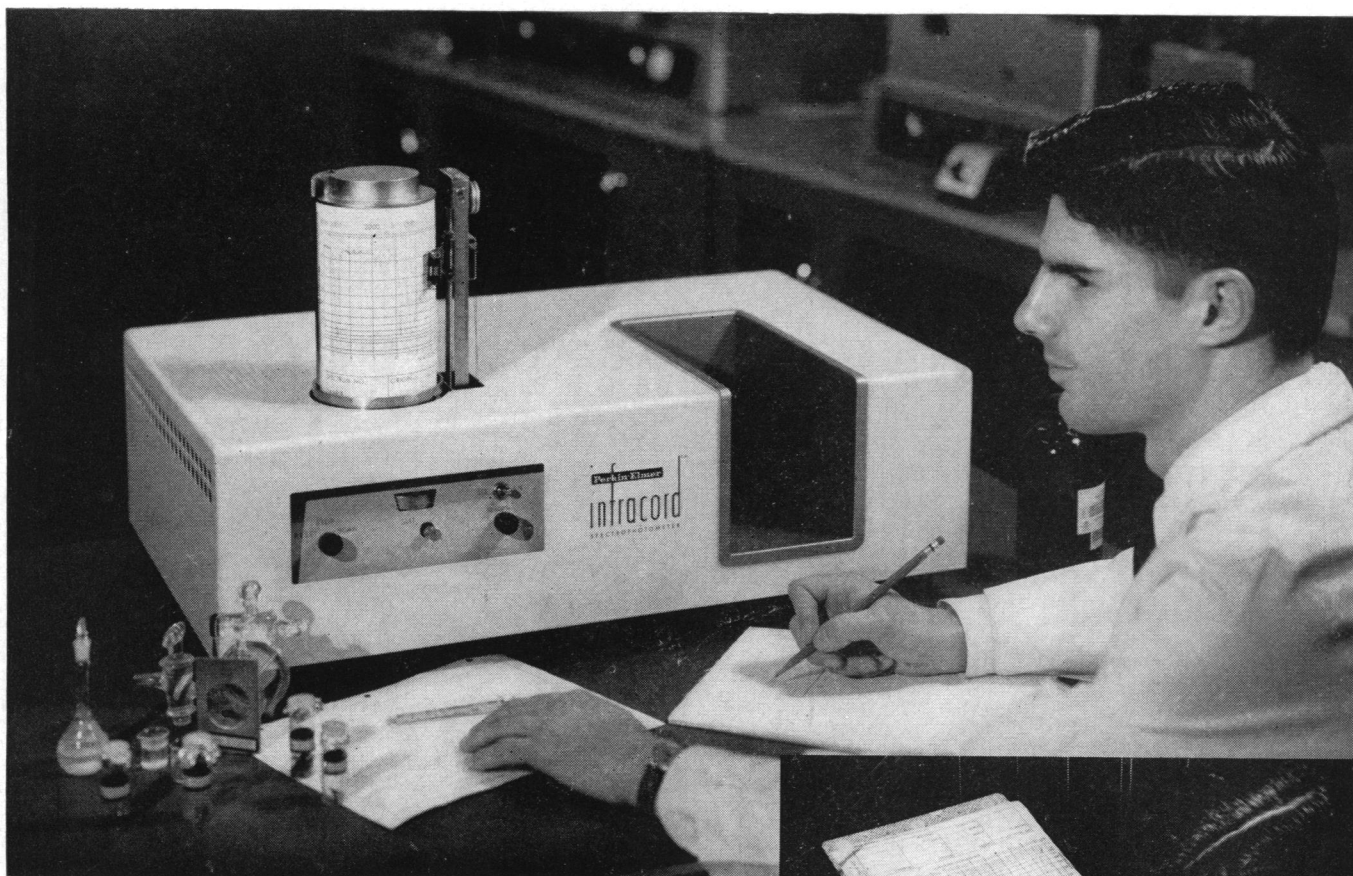
Luxo Lamp attachment facilities are built to LUXO standards. From the six selections pictured and described below, the type most-suitable-to-the-need can be readily determined. Attachments are furnished in lamp-matching colors. "Floor Stand T" is available in Grey, also Ivory.

- A — Clamps Luxo Lamp fixture to edge of table, desk or horizontal surface.
- B — Supports Luxo Lamp fixture vertically. Screws to wall or partition.
- C — Screws to work bench, table or any horizontal surface. Deep throat insures stability.
- D — Fitted with adjusting knob, screws to drafting table or slanted facility.
- E — Portable circular base for desk service or for use on any horizontal elevated surface.
- T — Stand, heavy base sets on ball-bearing casters. Center shaft is height adjustable, moves easily.

**STANDARD SCIENTIFIC**  
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LABORATORY  
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*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.

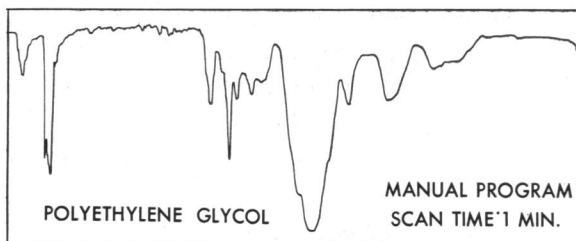
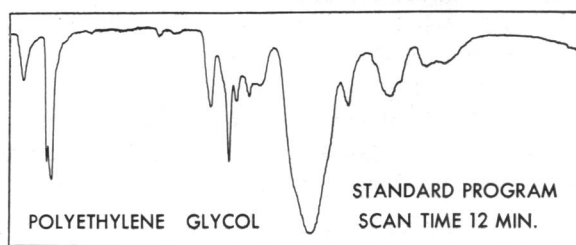
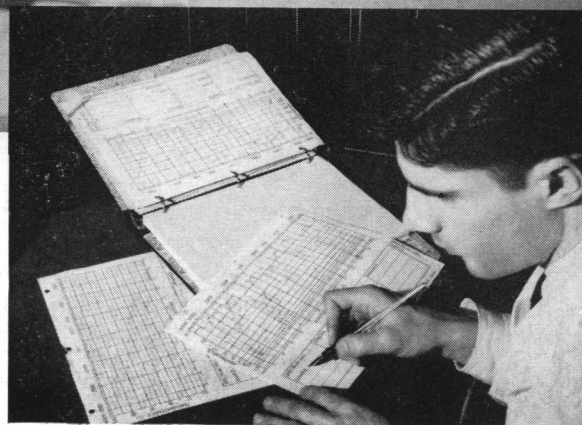
**EASE OF INTERPRETATION** — The Infracord 137 presents its data in the standard form used by the API and Patent Office, simplifying spectra comparison. The 8½ by 11" recording paper fits conveniently into notebooks, files, duplicating machines. The Infracord's sensitive recording mechanism accurately 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



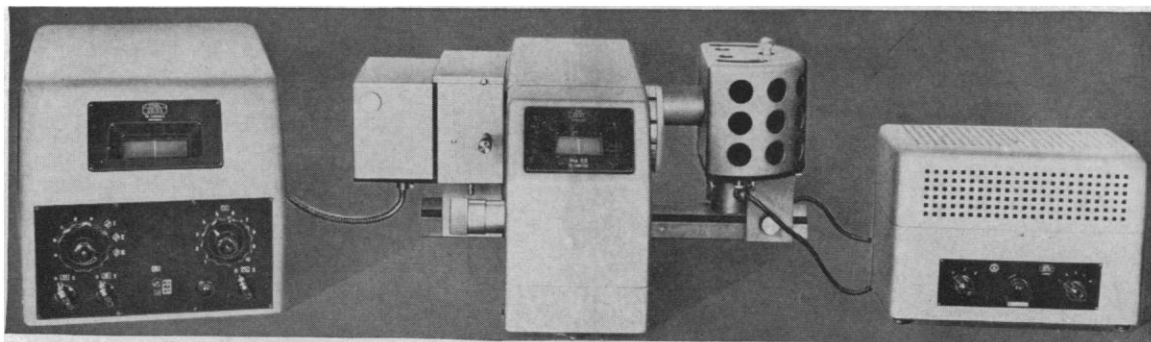
Spectra above illustrate ability of Infracord to provide fast answers when necessary. Lower spectrum was obtained in one minute by manual rotation of the drum. Note close correlation with standard 12 minute run.

MADE BY



IN WEST GERMANY

# SPECTROPHOTOMETER PMQ II

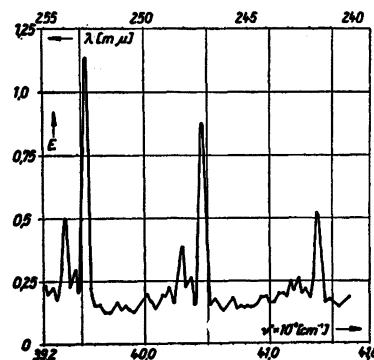


This new instrument offers universal applications for rapid, reliable and accurate photometric measurements of liquids, gases and solids at the highest resolving power of the spectrum.

The spectral region ranges from far-ultraviolet  $200 \text{ m}\mu$  to near-infrared  $1,000 \text{ m}\mu$  ( $2,500 \text{ m}\mu$  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  $0.2 \text{ m}\mu$  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  $\pm 0.05 \text{ m}\mu$  at  $250 \text{ m}\mu$ . The effective length of the projected micro wave length scale appears to be approximately 4 feet, and has a range of from  $200 \text{ m}\mu$  to  $2,500 \text{ m}\mu$ .

*Write for free, detailed specifications*



Extinction curve of benzene vapor

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