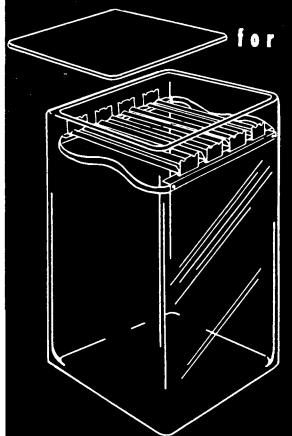


RECTANGULAR JARS for CHROMATOGRAPHY



MORE TROUGHS IN LESS
SPACE THAN IN ROUND JARS

- Size 12" by 12" by 24"
- Pyrex brand glass
- 4 Troughs 10 $\frac{1}{4}$ " long
- Simplified, adjustable trough suspension
- Glass or all-stainless-steel trough assemblies
- Other sizes available

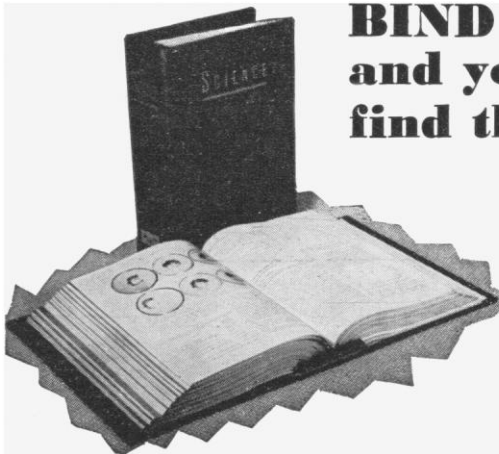
OTHER CHROMATOGRAPHY APPARATUS
MANUFACTURED BY RSCo

- Round jar units... 10" and 12" diameter
- No-rack units... jars 6" diameter, tubes 4" diameter, etc.
- Chromatography cabinets • Sprayer • Electrodesalter

Ask for Catalog 1356-A

RESEARCH SPECIALTIES CO.
2005 Hopkins Street • Berkeley 7, California

**BIND 'EM...
and you'll
find them!**

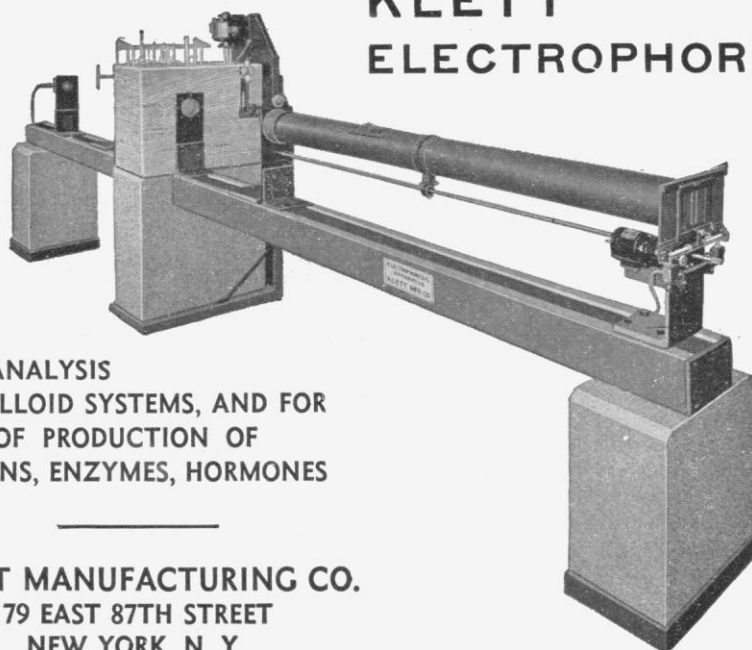


Keep your copies of **SCIENCE** always available for quick, easy reference in this attractive, practical binder. Simply snap the magazine in or out in a few seconds—no punching or mutilating. It opens **FLAT**—for easy reference and readability. Sturdily constructed—holds 26 issues.

This beautiful maroon buckram binder stamped in gold leaf will make a fine addition to your library. Only \$3.25 postpaid; add 50¢ for orders outside U.S.A. (Personal check or money order, please.) Name of owner, 75¢ extra; year of issue, 50¢ extra.

SCIENCE • 1515 Massachusetts Ave., NW,
Washington 5, D.C.

KLETT ELECTROPHORESIS



CUSTOM MADE

TOOL FOR THE ANALYSIS
OF COMPLEX COLLOID SYSTEMS, AND FOR
THE CONTROL OF PRODUCTION OF
PURIFIED PROTEINS, ENZYMES, HORMONES

KLETT MANUFACTURING CO.
179 EAST 87TH STREET
NEW YORK, N. Y.

Equipment News

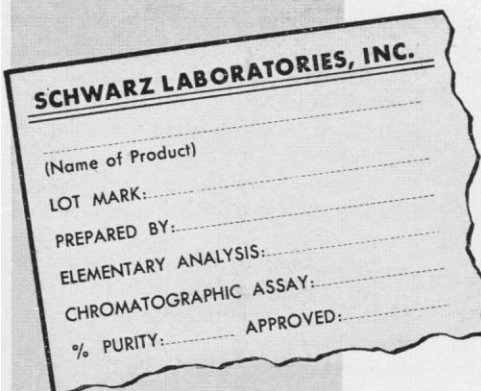
■ **ELECTRON DIFFRACTOGRAPH** can be used in structural studies for direct observation or photographic recording of electron diffraction patterns of surfaces and thin layers. The instrument utilizes a metal discharge tube with a cold cathode. A beam 10 μ in diameter is accelerated through a variable potential of 20 to 50 kv toward an anode diaphragm in a self-centering cone, which permits an optical line width of more than 100 μ . Specimen temperature, monitored by a thermocouple, can be increased to 1000° C. The observation chamber has three viewing ports, with a pivotable fluorescent screen. Two electromagnetic lenses of variable focal length make it possible to focus on the fluorescent screen for powder diagrams, on the sample for small-beam diffraction, and above the sample for shadow microscopy. Magnified images of the sample and of reflections can also be obtained. (Norden-Ketay Corp., Dept. Sci., Snow and Union Sts., Boston, Mass.)

■ **CATALOG** illustrates and describes items for determining moisture quantity in any granular, solid, liquid, or semiliquid material. Listed are moisture tellers, speed ovens, fan-cooled desiccators, and accessory items such as balances, weights, sample pans, and drying dishes. (Harry W. Dietert Co., Dept. Sci., Roselawn Ave., Detroit 4, Mich.)

■ **WATER CONDITIONER** that is designed to prevent formation of scale in boiler, air-conditioning, and other heat-transfer systems subjects flowing water to alternating magnetic fields. The unit consists of two sections, a dispersing cell and a homogenizing chamber; it contains no moving parts. Crystallization is retarded, and dissolved salts and minerals become amorphous powders that remain in suspension or settle out as drainable mud. (Pakard Manufacturing Co., Dept. Sci., 2220 W. Beaver St., Jacksonville 9, Fla.)

■ **ABSORPTION CELL REFERENCE TABLE** for use with Beckman spectrophotometers has been compiled by Will Corp. The table provides complete information on 40 absorption cells. In addition, cell compartments and assemblies designed for use with the cells described are illustrated. (Will Corp., Dept. Sci., Rochester 3, N.Y.)

■ **ELECTROGRAPH**, model 420 by Century, provides instantaneous oscillograms. Utilizing electrosensitive paper, with automatic sensitizing and dry developing and fixing, the instrument is capable of 24-trace recording by light beam to 100 cy/sec without amplification. (Century Electronics and Instruments, Inc., Dept. Sci., 1333 N. Utica St., Tulsa, Okla.)



Some **SCHWARZ** Fine Chemicals for Industry and Research

●
Purines and
Pyrimidines
Phosphorylated
Adenosine
Compounds
Cozymase
Nucleosides
and
Nucleotides
Nucleic Acids
and
Metallic
Nucleates
Sugar
Phosphates
Glutathione
Sulphydryl
Reagents
Sugars
Triphenyl
Tetrazolium
Chloride
Deoxynucleosides
Optically
Standardized
Amino Acids
Radioactive
Chemicals

How High Quality is Assured in **SCHWARZ** Biochemicals

High Specifications Are Established

A specification sheet delineates the quality of every chemical manufactured by Schwarz. These specifications are prepared in our Research Laboratories and are based on careful literature searches for the correct values.

Each Lot Must Meet These Specifications

Every lot of Schwarz compound is analyzed in our Control Laboratories before it leaves the production laboratory. Each assay must meet the specifications set forth. The assay slip must be approved by the head of our research group.

Complete Records Are Kept For Each Lot

A lot number appears on every shipment of fine chemicals made by Schwarz. A copy of the analysis of each lot is filed in our Order Department—so every purchaser instantly may be given data he may need.

Extensive Research Is Maintained

Schwarz research is intensively directed to the commercial production of cell substances. Schwarz Laboratories was the first and in many cases is the only manufacturer of a number of important biochemicals.

All Operations Are Guided By Long Experience

Schwarz Laboratories has a long record of accomplishment and leadership in manufacturing biochemical intermediates. It is the oldest and largest manufacturer in the world of nucleic acid and its related derivatives. You can rely on Schwarz.

SCHWARZ LABORATORIES, INC.

230 Washington Avenue

Mount Vernon, New York

SL 351

■ **DOUBLE-CRYSTAL X-RAY DIFFRACTOMETER** incorporates a perfect crystal that functions as an analyzer for any test crystal being investigated. Maximum resolution is obtained by reflecting the x-ray beam into the collimator from this crystal. Slit systems at the collimator ends screen out the alpha-2 component. Film from the photographic unit functions as a guide for the Geiger counter in disclosing substructural details of the sample. (New Brunswick Scientific Co., Dept. Sci., P.O. Box 606, New Brunswick, N.J.)

■ **RECTILINEAR RECORDING MILLIAMMETER** presents signals in their rectilinear appearance. Rectilinear writing is made possible by a pantographic linkage, which includes a gimbal mounting for the pen and a freely moving frame with counterbalancing weights that insure uniform pen pressure throughout the deflection. (Texas Instruments, Inc., Dept. Sci., 6000 Lemmon Ave., Dallas 9, Tex.)

■ **INCUBATOR** provides for external control of temperatures from 5° to 50°C. A dial thermometer on the door registers inside temperature. The unit will accommodate 120 bottles of 190-ml size or 105 bottles of 300-ml size. (Central Scientific Co., Dept. Sci., 1700 Irving Park Rd., Chicago, Ill.)

■ **AUTOMATIC BALANCE** employs only two knife edges instead of the conventional three. On-the-job sensitivity corrections can be made by knob adjustment. The balance utilizes the substitution method of weighing and provides for readings on a projected scale from 0.1 mg to 200 g. (American Balance Corp., Dept. Sci., 48 Potter Ave., New Rochelle, N.Y.)

■ **MONOCHROMATIC CONDENSER** provides efficient illumination for ultraviolet microscopy and photomicroscopy. Attached to a 500-mm monochromator, the lens system permits the ultraviolet light source to be moved 10.25 in. from the photomicrographic equipment. The condenser illuminates the complete field of view of the microscopic image. (Bausch and Lomb Optical Co., Dept. Sci., 635 St. Paul St., Rochester, N.Y.)

■ **ULTRASONIC TRANSDUCER** for cleaning, plating, and other physical and chemical processes is sealed, metal-jacketed, and thermostatically protected. Its resonant frequency of 20 kcy/sec provides maximum cavitation energy above the range of human perception. It is powered by a generator that is continually variable in frequency from 10 kcy to 1200 kcy and has an output of 400 w. (General Ultrasonics Co., Dept. Sci., 1240 Main St., Hartford, Conn.)

■ **TWO NEW PLASTICIZERS** have been introduced by Rubber Corporation of America. One of these is a blend of diisodecyl phthalate and diisodecyl adipate that functions as a low-temperature plasticizer for polyvinyl chloride. It exhibits low volatility and high heat stability. The other product, called DIDP-10, has been formulated for wire coating application and like purposes. It is designed to improve low-temperature brittle points in polyvinyl chloride compounds while maintaining the low volatility that is characteristic of higher phthalate esters. (Rubber Corp. of America, Dept. Sci., Hicksville, N.Y.)

■ **ANESTHOGRAPH** measures the depth of anesthesia of patients who are undergoing surgery. The instrument, which incorporates an electroencephalograph and an electrocardiograph, simultaneously records brain-wave patterns and heart-action tracings. (Edin Co., Inc., Dept. Sci., 207 Main St., Worcester, Mass.)

■ **LABORATORY FURNITURE** is cataloged and illustrated in a new Duralab publication. Specifications are given for center, wall, and titration tables; fume hoods; storage cases; distillation racks; and other equipment. (Duralab Equipment Corp., Dept. Sci., 979 Linwood St., Brooklyn 8, N.Y.)

Reco

A completely self-contained gas analysis unit, priced within reach of all analytical laboratories. Completely automatic. Send for your copy of descriptive brochure.



Distillograph

FOR VAPOR PHASE CHROMATOGRAPHY

- A partition-elution apparatus
- Efficiency of approximately 2000 theoretical plates
- Each purified component can be recovered quantitatively
- Operates on 2 to 200 milligrams of material
- Covers boiling point range from 0 to 350° Centigrade

Catalog RE 13 describes the COMPLETE LINE OF RECO CHROMATOGRAPHIC equipment. Send for your copy today.

RESEARCH EQUIPMENT CORPORATION

1135 Third Street, Oakland, California