

## New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable. Neither Science nor the writer assumes responsibility for the accuracy of the information. A coupon for use in mailing inquiries concerning the items listed is included in the post card insert. Circle the department number of the items in which you are interested on this coupon.

■ **SHAFT ANGLE ENCODER** will store 10 bits of encoder data in a transistorized storage circuit on the fly at angular velocities up to 2 rev/sec and provide output in binary code and the complement. Accuracy is said to be  $\pm 1$  part in 1000. The encoder will operate under 100 grav steady-state acceleration and 8 grav vibration up to 1000 cy/sec. (Datex Corp., Dept. Sci860, 1307 S. Myrtle Ave., Monrovia, Calif.)

■ **PLASTIC COATING** may be stripped from metal, leaving no film residue. The material, cellulose acetate butyrate, is supplied as solid plastic blocks melting at 360°F. Objects are coated by dipping in the molten plastic. The coating is removed by slitting and peeling. It is suggested by the supplier as a protective coating or as a mask during electroplating or painting operations. (Fidelity Chemical Products Corp., Dept. Sci876, 470 Freylinghuysen Ave., Newark 12, N.J.)

■ **CORE BUFFER MEMORIES** are designed to synchronize two data systems operating at different speeds. Capacity is 144 characters of 4 or 8 bits per character. Load or unload is performed at a 100-kcy/sec rate. All bits of each character are loaded and unloaded in parallel; characters are loaded and unloaded in sequence. In the type BA units, data are transferred in blocks of up to 144 characters; in the type BQ, characters may be loaded and unloaded in any manner desired. (Telemeter Magnetics Inc., Dept. Sci885, P.O. Box 329, Culver City, Calif.)

■ **FOUR-WAY TOGGLE SWITCH** has 8-pole double-throw contacts. From the center position it is possible to actuate double-pole double-throw circuitry in each of four momentary positions spaced 90 deg apart. Operating force is 0.5 lb. Rating is 5 amp resistive, 3 amp inductive, at 30 volts d-c and 115 volts a-c. (Haydon Switch, Inc., Dept. Sci878, Waterbury 20, Conn.)

■ **NAVIGATION-AID TEST SET**, for testing and calibrating air-traffic-control transponders and airborne distance-measuring navigation systems, contains a crystal-controlled radio frequency signal generator, a peak-pulse-power comparator, and a wavemeter. Crystal-con-

trolled outputs are spaced 1 Mcy/sec in the ranges 960 to 1049 and 1130 to 1219 Mcy/sec. The power comparator indicates from 23 to 33 dbm  $\pm 1$ db. The wavemeter covers the range 1070 to 1110 Mcy/sec and is said to be accurate to  $\pm 0.5$  Mcy/sec. (Boonton Radio Corp., Dept. Sci871, Boonton, N.J.)

■ **DELAY LINE** provides three variable taps over a total delay of 1.5  $\mu$ sec. The taps can be individually adjusted over the delay range with resolution of 0.025  $\mu$ sec. Pulse rise time and attenuation for full delay are 0.27  $\mu$ sec and 2 db maximum, respectively. Impedance is 300 ohms. (ESC Corp., Dept. Sci873, 534 Bergen Blvd., Palisades Park, N.J.)

■ **DIFFERENTIAL VOLTMETER** consists of a stable 500-volt d-c reference supply, a voltage dividing network and five-dial Kelvin-Varley divider, a calibrated multi-range vacuum-tube voltmeter, and an a-c to d-c converter. The vacuum-tube voltmeter may be used either in the conventional manner or as a null detector for comparing an unknown voltage with the internally selected reference voltage. Accuracy of d-c voltage measurement is said to be  $\pm 0.05$  percent from 0.1 to 500 volts and  $\pm 0.1$  percent or  $\pm 50 \mu$ v from 0 to 0.1 volt. Accuracies for a-c are given as  $\pm 0.2$  percent from 0.5 to 500 volts with reduced accuracy from 0.05 to 0.5 volt. (John Fluke Mfg. Co., Dept. Sci877, P.O. Box 7161, Seattle 33, Wash.)

■ **COMMAND RECEIVER** is a completely transistorized, crystal-controlled, fixed-tuned receiver for operation over the 5 to 16 Mcy/sec range. An integral multi-tone decoder provides high immunity from interference. (LEL Inc., Dept. Sci872, 380 Oak St., Copiague, N.Y.)

■ **MONITOR-ALARM SYSTEM** is designed to verify the condition of 30 stations with accuracy of 1 part in  $10^8$ . Inputs are signals from transducers. Permissible values for each station are punched into a standard punched card inserted into the monitor. All 30 channels are examined in less than 0.3 sec. Audible, visible, and electrical-signal outputs are provided. The circuitry is entirely solid state. (Franklin Electronics Inc., Dept. Sci880, 5901 Noble Ave., Van Nuys, Calif.)

■ **ROTARY SEAL GLAND** for glass-rod stirrers is available in four sizes: standard taper 24/40 and 29/42 supplied for 6-mm shaft, and 34/45 and 45/50 in either 6- or 10-mm size. The seal is constructed of Teflon with inner and outer O-ring seals of Viton A. The seal is said to be vacuum tight to 8 mm-Hg, to operate at temperatures as high as

### Electrothermal<sup>®</sup> HEATING TAPES

Heat WHERE You Want It . . .  
WHEN You Want It!

Electrothermal Heating Tapes consist of one or more fabric bands of resistance wire, separated or bordered by bands of high-temperature-resisting glass fibre yarn. The width and length of the various tapes are carefully determined by the current-carrying capacity of the resistance wire. Temperature of 400° C and over can be reached inside a glass tube of 2 mm wall thickness.

The tape is simply wound around the body to be heated, and held in position by glass laces at both ends.

A suitable control device such as a "Power-stat" or variable auto-transformer should be used with the tapes.

THREE TYPES AVAILABLE—  
UNINSULATED—INSULATED  
ON ONE SIDE—INSULATED  
ON BOTH SIDES



Length in Ft.	Width in Inches	Watts at 115 V.	Amps.	Un- Insulated Cat. #S65080	Insulated 1 Side Cat. #S65090	Insulated Both Sides Cat. #S65100
3	1	100	1.6	\$ 9.75 ea.	\$11.40 ea.	\$11.90 ea.
4	1 1/2	250	3.0	12.25 "	15.00 "	18.75 "
5	3	450	4.6	16.75 "	20.25 "	26.50 "
6	3 1/2	500	5.2	19.25 "	23.00 "	29.50 "
2	1 1/2	36	0.5			4.25 "
4	1 1/2	72	1.0			6.70 "
6	1 1/2	108	1.5			9.00 "
8	1 1/2	144	2.0			13.90 "
2	1	72	1.0			6.90 "
4	1	144	2.0			12.50 "
6	1	216	2.5			14.40 "
8	1	288	3.0			17.25 "
2	2	120	1.5			9.70 "
4	2	240	3.0			15.00 "
6	2	360	4.0			20.00 "
8	2	480	5.0			30.00 "
2	3 1/2	210	2.5			13.90 "
4	3 1/2	420	4.2			21.00 "
6	3 1/2	630	7.5			29.50 "
8	3 1/2	840	10.0			45.00 "

(Average load  
of Heating  
Tapes is 2 1/2  
Watts/Sq. In.)

Dealers' Inquiries Invited



## STANDARD SCIENTIFIC

Supply Corp.

808 BROADWAY  
NEW YORK 3, N.Y.

LABORATORY  
APPARATUS  
REAGENTS  
AND  
CHEMICALS

Hot Cold  
Dry Humidified



MODEL 1280

## CONTROLLED ENVIRONMENTAL ROOMS

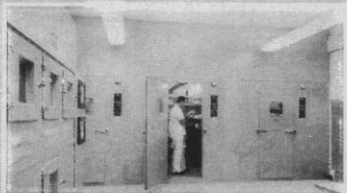
Hotpack prefabricated-portable rooms are being employed for a multitude of scientific uses by hospitals and universities and by companies such as Ciba Pharmaceutical, H. J. Heintz, Lever Bros. and Standard Oil, just to mention a few.

### standard environmental conditions

Heated Rooms above ambient to 125°C.  
Refrigerated Room below ambient to 0°C.  
Heated and Refrigerated Rooms from 0°C to 60°C.  
Humidified Rooms, Heated or Refrigerated 30% to 98% R.H.  
Humidified Rooms, Heated and Refrigerated 20% to 98% R.H.  
Humidified Rooms, with Dehumidification 10% to 98% R.H.  
Dehumidified Rooms, Heated or Refrigerated 5% to 20% R.H.  
Special sizes-shapes and conditions supplied on request.

- All rooms are predesigned, prefabricated, prewired and pretested at the factory . . . constructed in modular units for inexpensive future expansion or contraction.
- Rooms are fabricated in sections to permit easy assembly on location . . . no complex blueprints or labor problems . . . reduces costs, facilitates disassembly for moving.
- Standard rooms up to 60 sq. ft. of working space . . . larger units available with special doors and construction features.

Special sizes, shapes to your requirements.



For detailed room information write to:



HUMIDITY  
OVEN



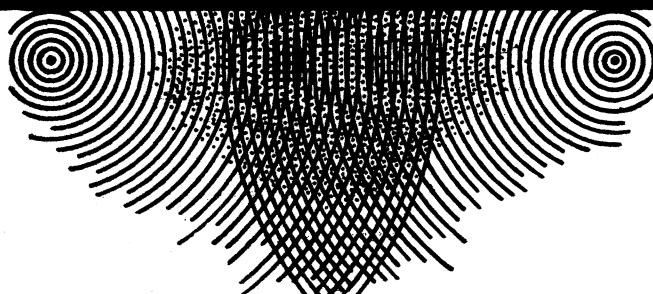
INCUBATOR



THE ELECTRIC HOTPACK CO., INC.  
5086 COTTMAN AVENUE • PHILA. 35, PA.

**NEW**

FIRST TIME IN UNITED STATES



## ULTRASONIC NEBULIZER



### A TWO FREQUENCY MULTIPURPOSE AUXILIARY APPARATUS FOR ELECTRON MICROSCOPY

If liquids of low viscosity or suspensions with particle sizes up to 1 micron are placed on an ultrasonic transmitter of high frequency (3 Mc/sec) they are nebulized instantly. The resulting fog can be collected by sedimentation on a diaphragm or grid for examination under an electron microscope.

The Schoeller apparatus was designed primarily for the preparation of dispersions which have a tendency to conglomerate during drying. Other applications for which the equipment may be used include the dispersion of fine solids in liquids for particle size determinations, composition studies on various sediments and the cleaning of small instruments or tools.

Write for catalog 991.

**BRINKMANN**  
INSTRUMENTS, INC.

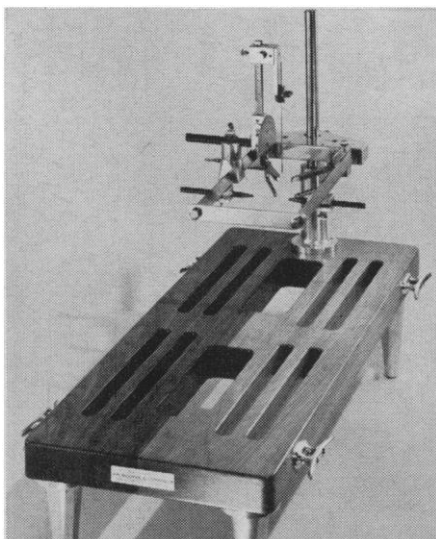
115 Cutter Mill Road, Great Neck, N.Y.

Philadelphia • Cleveland • Houston • Miami • Menlo Park, Cal.

**NOW—LEARN MORE  
ABOUT HOW VERSATILE**

# LAB-TRONICS STEREOTAXIC INSTRUMENTS

**Can assist you in teaching  
or research projects**



Lab-Tronics Stereotaxic Model 4C for work on Cats, Monkeys, Rats and small dogs.

Developed to meet actual specifications of authorities on animal research.

Manufactured by a precision instrument maker with years of experience in solving laboratory problems. Now Lab-Tronics instruments are available direct from the manufacturer.

Send for our brochure on Model No. 4C which explains in detail the instrument's:

- Versatility
- Accuracy
- Diversity of Accommodation
- Simplicity
- Stability

Write to:

**H. NEUMAN & CO.**

8136 Lawndale Avenue, Skokie, Illinois  
**PRECISION with a purpose**

-----  
Name \_\_\_\_\_  
Title \_\_\_\_\_  
Activity \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

200°C, and to be suitable for use with any materials except metallic sodium. (Arthur F. Smith, Inc., Dept. Sci881, 311 Alexander St., Rochester 4, N.Y.)

■ **HARDNESS TESTER** is a portable instrument that consists of a clamping device and an indenter head. Model M-I gives readings in the Rockwell-C scale with distance between anvil and penetrator 0 to 6.3 in. and 3.3 in. depth of throat. Model M-II provides 0 to 9.8 in. distance between anvil and penetrator and 5.1 in. depth of throat. Test loads are produced by springs. (American Chain and Cable Co., Dept. Sci874, Bridgeport, Conn.)

■ **ULTRASONIC GENERATOR** is rated at an output of 1000 watts average power and 2000 watts peak power at 38 to 42 kcy/sec. The generator will drive 192 in.<sup>2</sup> of barium-titanate crystal radiating surface. Operation is on 115-volt, 20-amp power. Weight is 225 lb. (National Ultrasonic Corp., Dept. Sci879, 111 Montgomery Ave., Irvington 11, N.J.)

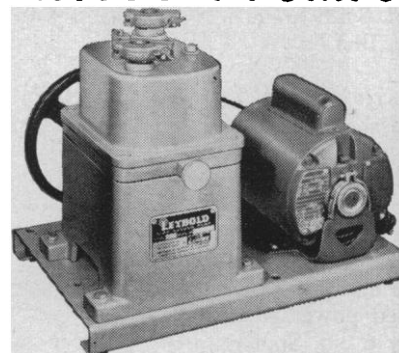
■ **ARC PROJECTOR** collects radiation from a blown-type arc by means of first surface reflectors and concentrates it at the reimaging point. A circular radiation pattern totals 374 watts with 80 percent uniformity of field or 668 watts with 60 percent uniformity. A continuous spectrum is provided from 0.25 to 5.1  $\mu$ , with spectral energy distribution said to be very close to the solar energy distribution above the earth's atmosphere. (Strong Electric Corp., Dept. Sci897, 396 City Park Ave., Toledo, Ohio)

■ **BLOOD PRESSURE RECORDER** to accompany the manufacturer's continuous systolic monitor provides a linear trace of blood pressure from 0 to 300 mm-Hg on paper 4 in. wide. (Biophysical Electronics Inc., Dept. Sci884, New Hope, Pa.)

■ **ACCELEROMETER**, model 408, is designed especially for measurement of small accelerations. Sensitivity is 100 mv/grav. Maximum acceleration is 10,000 grav. Frequency range is 1 cy/ to 3 kcy/sec with resonance frequency at 55 kcy/sec and amplitude linearity  $\pm 1$  percent. The transducer can be operated in noise fields as high as 160 db. Dimensions are  $\frac{3}{4}$  in. hexagonal by 0.45 in. high. Weight is 23.5 g. (Columbia Research Laboratories, Dept. Sci898, Woodlyne, Pa.)

■ **COINCIDENCE-ANTICOINCIDENCE ANALYZER** is a four-channel instrument designed for use with Geiger and scintillation detectors. Any number or combination of the four channels may be used in coincidence, and one of the channels may be used in anticoincidence

## LEYBOLD Gas Ballast VACUUM PUMPS



### World Famous Quality, Design and Dependability

The Leybold Gas ballast design actually prevents condensation of vapor in the pump. It prevents oil contamination from lowering ultimate pressures, cuts oil changes and pump maintenance.

Leybold Pumps can be operated with or without gas ballast, so that you get the advantages of both gas ballast and oil sealed rotary vane pumps.

**WRITE FOR NEW  
BULLETIN TODAY!**



**ARTHUR S. LaPINE and COMPANY**  
6001 South Knox Avenue, Chicago 29, Illinois  
**LABORATORY SUPPLIES AND REAGENTS**

**CLINAC**  
*Pipetter*

**BULB-LESS,  
VALVE-LESS  
SAFETY PIPETTER**

**SIMPLE  
SAFE  
RUGGED  
PRECISE**

Clinac® Patented PIPETTERS give you extremely accurate, completely automatic pipetting. They rid your lab of the danger of poisoning and infection by totally eliminating mouth pipetting.

Operation is amazingly simple, as you can see! Anyone in the lab can become an expert pipetter, safely, with less than a minute's practice.

- For right or left hand
- Two sizes, Standard and Micro

No. S341-80 Clinac "Standard" Pipetter, each...\$15.00  
No. S341-82 Clinac "Micro" Pipetter, each...12.50  
For micro pipettes and blood diluting pipettes

**LAPINE**

**ARTHUR S. LaPINE and COMPANY**  
6001 South Knox Ave. • Chicago 29, Illinois  
In the East: Tenso-Lab, Inc.  
Irvington-On-Hudson, New York • Phone LYric 1-8900



with any one or combination of the other three channels. Channel dead time is less than 10  $\mu$ sec. Input pulses may range from -50 to +100 volts. Output is -15 volts. (Radiation Instrument Development Laboratory, Inc., Dept. Sci893, 61 E. North Ave., Northlake, Ill.)

■ **CATHODE-RAY OSCILLOSCOPE** features a passband from d-c to 1000 Mc/sec, rise time of 0.35 nsec, linear sweeps to 2 nsec/cm, and sweep delay to 30 nsec. The unit includes a fixed signal delay line, a sweep-delay control, a pulse-rate generator, a standard amplitude and waveform generator, and regulated power supplies. Viewing area is 2 by 6 cm. Spot size is 0.004 in. at 15  $\mu$ a. A distributed-deflection cathode-ray tube with 24 kv accelerating potential is used. (Tektronix, Inc., Dept. Sci896, P.O. Box 500, Beaverton, Ore.)

■ **ANGULAR MOTION TRANSDUCER** converts motion to voltage over an angular range  $\pm 40$  deg with linearity said to be better than 0.025 percent. The force required to move the armature of the transducer is almost entirely the friction of its bearings, the reactive force being approximately 9 mg cm/deg. Scale factor is 0.57 volt (r.m.s.)/deg, and null voltage is less than 0.1 v. Operation is on 60 cy/sec excitation. (Brush Instruments, Dept. Sci899, 37 St. and Perkins, Cleveland 14, Ohio)

■ **RESPIRATION MEASURING INSTRUMENT** furnishes electrical outputs expressing both volume and flow. Maximum volume is 10 lit., and volume discrimination is  $\pm 2$  ml. Volume output is approximately 0.8 volt/lit., and flow output is approximately 0.1 volt/(lit. sec). Breathing resistance is said to be less than 1 mm-H<sub>2</sub>O. Pushbutton calibration is provided. (Custom Engineering and Development Co., Dept. Sci888, 2647 Locust St., St. Louis 3, Mo.)

■ **MULTIPLIER PHOTOTUBE**, type 7664, is a 2-in. diameter, 10-stage tube, sensitive in the ultraviolet and visible light regions. It employs a focusing electrode for adjusting to optimum photoelectron efficiency. Minimum luminous sensitivity is 50  $\mu$ a for white light types. Average sensitivity is 60  $\mu$ a. The envelope is made of fused silica to permit transmission of ultraviolet radiation down to 1800 A. (Allen B. Du Mont Laboratories, Dept. Sci875, Clifton, N.J.)

■ **INDICATOR**, for displacement measurement with linear differential transformers, is a null-balance-servo type with scale length of 50 in. Ranges are 0 to 0.01 in. and 0 to 0.1 in. Resolution is said to be 1 part in 9000. Linearity is



## Let's explore your need for a Bausch & Lomb Spectrograph!


**NUCLEAR SCIENCE**  
identifies rare earth elements (Europium, Gadolinium, etc.): distinguishes and measures the chemical twins Hf-Zr and Nb-Ta.



**HEALTH PHYSICS**  
checks urine and smears for parts-per-billion traces of Beryllium, Mercury, Lead, Silicon, Radium.



**TRANSPORTATION**  
protects safety, determines need for overhaul by spectro-analysis of diesel oil. Cuts the maintenance and oil bills.




Here are just a few of the hundreds of ways B&L Spectrographs are solving problems of analysis. There's a new Facilities Survey to help you evaluate the need for spectro-analytical methods in your own industrial, research or educational program. No obligation, of course; just mail the coupon. And you can fill your needs from today's most complete line of spectrographs:

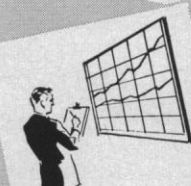
- DUAL GRATING
- DIRECT READING

- 1.5 METER
- X-RAY
- VACUUM

**AGRICULTURE** tests plant tissues to determine efficiency of fertilizers and pesticides.



**PUBLIC HEALTH** determines composition of dust particles in air.



**BAUSCH & LOMB**  
SINCE 1853

**BAUSCH & LOMB INCORPORATED**  
75911 Bausch St., Rochester 2, N. Y.

☐ Schedule free Facilities Survey for me.  
☐ Send me B&L Spectrograph Catalog D-277.


Name, Title .....

Firm or Institution .....

Address .....

City ..... Zone ..... State .....

**CRIMINOLOGY** gets evidence by spectro-analysis of automobile paint, body fluids, clothing.



$\pm 0.1$  percent of range for the indicator alone and stability is  $\pm 0.1$  percent of range. Response time from zero to full scale is 4.5 sec. (Shaevitz Engineering Co., Dept. Sci901, U.S. Route 130 and Schaevitz Blvd., Pennsauken, N.J.)

■ **PULSE GENERATOR** furnishes a pulse of 100 m $\mu$ sec duration and 20 m $\mu$ sec rise and fall times. Pulse output is 0 to 10 kv into open circuit and 0 to 5 kv into a 50-ohm load. Peak power output is 0.5 Mw. Pulse repetition frequency is 60 cy/sec, internally synchronized, or 0 to 60 cy/sec, externally driven. Output pulse delay is 300 m $\mu$ sec for 150 volts synchronized input and 140 m $\mu$ sec for 400 volts input. (Electro-Optical Instruments Inc., Dept Sci883, 2612 E. Foothill Blvd., Pasadena, Calif.)

■ **SHIELD ENCLOSURE** for measuring electrical characteristics of materials and small components is equipped with an adapter that fits the input of the manufacturer's electrometers. The enclosure adds only a sapphire insulator of the terminal in parallel with the sapphire insulator of the electrometer probe. (Applied Physics Corp., Dept. Sci895, 2724 S. Peck Rd., Monrovia, Calif.)

■ **MINIATURE SYRINGE** has a total capacity of 1  $\mu$ l subdivided into 100 parts. The plunger is a 0.006-in. tungsten wire that bottoms at the point of the 7-cm needle thus avoiding dead volume. Accuracy is said to be  $\pm 3$  percent. (Hamilton Company, Dept. Sci889, P.O. Box 307, Whittier 40, Calif.)

■ **COMMUNICATION-WIRE CONNECTOR** splices, insulates, and moisture seals two or three No. 19 to 26 AWG solid or 20 to 26 AWG stranded wires. Wires are inserted into the connector and secured by squeezing a button into the connector sleeve. This operation causes finger-like connector elements to strip insulation and grip the conductors. Factory installed silicone grease seals the joint against moisture. Pullout resistance is said to be 95 percent of wire breaking strength. (Minnesota Mining & Manufacturing Co., Dept. Sci902, 900 Bush Ave., St. Paul 6, Minn.)

■ **CENTRIFUGE**, a bench model, accommodates five interchangeable rotors for batch or continuous-flow separations. All the rotors may be spun at speeds up to 17,000 rev/min and centrifugal fields as great as 35,000 grav. Two of the rotors are 34-deg angle types with capacities  $8 \times 50$  ml and  $24 \times 15$  ml. Another is a zonal separation rotor with 80-deg angle and capacity  $16 \times 7$  ml. Two other continuous-flow rotors have bowl capacities of 300 and 800 ml. (Lourdes Instrument Corp., Dept. Sci-905, 53rd St. & First Ave., Brooklyn 32, N.Y.)

■ **PERFORATED-TAPE READER** operates either single character or continuous run from an external trigger source. It will accommodate 5-, 6-, 7-, or 8-hole, 1-in. paper Mylar tape and operates at the rate of 60 characters per second, self-stepping, or 50 per second, impulse stepping. (California Technical Industries, Dept. Sci882, 1421 Old County Rd., Belmont, Calif.)

■ **AUTOMATIC PIPETTE** operates by piston displacement of fluid fed into an enclosed cylinder. Each turn of a 360-deg rotatable stopcock dispenses a fixed volume of liquid. Pipettes are available in sizes from 1 to 50 ml at any desired fractional increment. Accuracy is said to be  $\pm 0.002$  ml for pipettes smaller than 10 ml and  $\pm 0.005$  ml for larger sizes. Filling and emptying occur simultaneously. (Schueler & Co., Dept. Sci-904, 75 Cliff St., New York 38, N.Y.)

■ **SYNTHETIC POLYPEPTIDES** of high molecular weight available from stock include polymers of the following L- $\alpha$ -amino acids: glutamic acid,  $\gamma$ -benzyl glutamate, lysine hydrobromide  $\epsilon$ -carbobenzoxyllysine, O-carbobenzoxyltyrosine, leucine, alanine, phenylalanine, and tyrosine. Also available on order are copolymers, special molecular weights, and polymers of amino acids having unnatural configurations. (Pilot Chemicals, Inc., Dept. Sci907, 36 Pleasant St., Watertown 72, Mass.)

JOSHUA STERN  
National Bureau of Standards,  
Washington, D.C.

Here's new safety in storing and dispensing laboratory liquids. Nalgene carboys are made of unbreakable polyethylene. (Ever see the slivers fly when a glass carboy was dropped?) It's proof against acids, caustics, corrosives. (What if that shattered glass carboy had been full of  $H_2SO_4$ ?)

Nalge's new spigot never drips. There's added safety, too, in the ease of carrying Nalgene carboys—as little as  $\frac{1}{10}$  the weight of glass. And they're so much lower in cost. In short, they satisfy just about every laboratory requirement you can think of—another step in Nalge's continuing program of product improvement through plastics research. Ask your laboratory supply dealer.

New catalog on the full line of Nalgene plastic laboratory ware now available. Write Dept. 1511.

TEFLON is a Reg. T. M. of E. I. duPont & Co., Inc.



**THE NALGE CO., INC.** ROCHESTER 2, NEW YORK  
The Quality Standard of Plastic Laboratory Ware



# PERSONNEL PLACEMENT

**CLASSIFIED: Positions Wanted, 25¢ per word, minimum charge \$4. Use of Box Number counts as 10 additional words. Payment in advance is required.**

**COPY** for ads must reach **SCIENCE** 2 weeks before date of issue (Friday of every week).

**DISPLAY: Positions Open.** Rates listed below—no charge for Box Number. Rates net. No agency commission. No cash discount. **Minimum ad: 1 inch.** Ads over 1 inch will be billed to the nearest quarter inch. Frequency rate will apply to only repeat of same ad. No copy changes. Payment in advance is required except where satisfactory credit has been established.

Single insertion **\$40.00 per inch**  
4 times in 1 year **38.00 per inch**

For **PROOFS** on display ads, copy must reach **SCIENCE** 4 weeks before date of issue (Friday of every week).

Replies to blind ads should be addressed as follows:

Box (give number)  
Science  
1515 Massachusetts Ave., NW  
Washington 5, D.C.

## POSITIONS WANTED

**Ph.D.-Microbiologist-Biochemist.** Several years' experience in research, pilot plant and production. Desires challenging opportunity with small or large company. Box 205, **SCIENCE**. 11/11

**Microbiologist, Ph.D.,** experience teaching, hospital laboratory, research, tissue culture, medical mycology, serology. Desires teaching, research, and/or hospital laboratory. Box 210, **SCIENCE**. X

**Qualified Pharmacologist,** degrees in biochemistry and pharmacology; publications, patents. Strong scientific and administrative background. Presently director, pharmacological research. Would consider position in industry offering challenging and interesting future. Salary \$15,000-\$20,000. Box 207, **SCIENCE**. X

## POSITIONS OPEN

### GOVERNMENT OF NEW ZEALAND

**Vacancy for Biologist, Wildlife Branch, Department of Internal Affairs, Wellington**

Salary up to £1120 a year with initial maximum at any point according to qualifications and experience with possibility of further promotion to £1500 a year.

**Qualifications desired:** Biologist, Ph.D., M.Sc., or B.Sc. in wildlife management or zoology with experience in independent waterfowl research.

**Duties:** To carry out life history studies of mallard and native grey duck populations or such other projects as may be assigned.

Further information may be obtained by writing air mail to the Wild Life Branch, Department of Internal Affairs, Wellington, New Zealand.

Applications close on **23 December 1960** and should be addressed to the New Zealand Embassy, 19 Observatory Circle, NW, Washington 8, D.C. X

**Botanist technician** with thorough knowledge of plant microtechnique methods for preparation of slides and to qualify as assistant laboratory director. Experience in large-scale slide preparation essential. Starting annual salary \$7000 to \$8500, depending upon training and experience. Generous employee benefits include company-paid life insurance and retirement pension. All applicants held confidential. Write to President, General Biological Supply House (Turttox Products), 8200 South Hoyne Avenue, Chicago 20, Illinois. 12/9

**POSTDOCTORAL TRAINEESHIPS in ENZYME CHEMISTRY** are available for 1961-62 at the University of Wisconsin, Institute for Enzyme Research in Madison. Applications may be submitted at any time and are invited from candidates who have completed or will shortly complete the requirements for either the Ph.D. or M.D. degree and who are U.S. citizens. The period of traineeship is 12 months (including 1 month's vacation) and may be renewed for additional years. Stipends are \$6000 per year and, in most cases, partially tax-exempt. A travel allowance is provided the trainee from his present institution (if within continental U.S.) to Madison. Senior traineeships are available to persons who by virtue of previous postdoctoral training and/or experience have demonstrated outstanding ability. Application forms and information may be obtained by writing to Dr. David E. Green, Program Director. X

## POSITIONS OPEN

### ASSISTANT TOXICOLOGIST

For research in analytical toxicology. Some routine medicolegal toxicology. Prefer Ph.D. in toxicology or pharmacology. Salary \$8500 to \$10,000 depending on qualifications.

Write Chief Medical Examiner, 700 Fleet Street, Baltimore 2, Md. X

### BACTERIOLOGIST

B.S. or M.S. Young man needed to assist in virus research program with leading midwestern pharmaceutical firm. Attractive salary, benefit program. Send complete résumé to

Box 202, **SCIENCE**

### DIRECTOR OF PUBLICATIONS AND PUBLIC RELATIONS

To direct activities of a large scientific publications and public relations program at a leading medical research center. Editing and writing skill required. Must have personal qualities to succeed in public relations. Unusual opportunity. Salary open. Reply to

Box 208, **SCIENCE**

### DROSOPHILA TECHNICIAN

Must be experienced. Knowledge of Drosophila genetics and terminology essential. Knowledge of histological and salivary gland techniques helpful but not essential. Location is Chapel Hill, North Carolina. Salary open, commensurate with experience and ability.

Box 201, **SCIENCE**

Applications are invited for the post of **VISITING PROFESSOR OF OCEANOGRAPHY** at the University of Cape Town.

The salary is £2500 per annum. A special traveling allowance will be paid in terms set forth in the memorandum referred to below.

The post is vacant from 1 July 1961, and in the first instance the appointment will be for 1 year. Towards the end of this period the University Council may either re-advertise or invite the successful applicant to continue for a further period of up to 2 years and thereafter may consider making the appointment permanent.

Applications should state age, qualifications, publications, and research work completed or in progress and give the names of two referees whom the University may consult. Two copies of the application and testimonials should reach the Secretary, Association of Universities of the British Commonwealth, 36 Gordon Square, London, W.C.1 not later than **30 November 1960**. An additional copy should be sent direct by air-mail to the Registrar, University of Cape Town, Private Bag, Rondebosch, Cape Town, South Africa, to reach him by the same date.

It is essential that the program of research which the applicant proposes to undertake while at Cape Town should accompany his application. Details of research facilities in marine science and the duties of the visiting professor are set out in a memorandum obtainable on application.

The University reserves the right to appoint a person other than one of the applicants or to make no appointment. X

## POSITIONS OPEN

### RESEARCH SCIENTIST

required for

Food and Drug Directorate  
Department of National Health and Welfare  
**Ottawa**

Up to \$9,800

Challenging opportunity to undertake research in Pharmacology, Physiology and Toxicology and to work with the latest facilities in an environment which encourages research.

For details and application forms, write to:

**CIVIL SERVICE COMMISSION  
OTTAWA, ONTARIO**

Please ask for Information Circular 60-2152

### RESEARCH MYCOLOGIST

Major East Coast food company requires a research mycologist for its Basic Research Department. Individual should have knowledge of yeast and mold taxonomy with grounding in biochemistry and microbial physiology. Interest in the enzymes of yeast and molds desirable. This is a permanent industrial position with good starting salary, benefits and future prospects.

Box 203, **SCIENCE**

### SENIOR PHARMACEUTICAL CHEMIST

Expanding research program requires a PhD in Pharmaceutical Chemistry. Will do independent research and head a small research and development group. Requires 2 to 5 years postdoctoral experience in pharmaceutical industry. Send resume and salary requirements to:

**R. G. JAMISON**  
Personnel Manager

**THE NATIONAL DRUG CO.**  
4663 Stenton Ave.  
Phila. 44, Penna.

### TECHNICAL SALESMAN

For expanding West Coast manufacturer of clinical and analytical instruments. Distribution through major dealer organizations. To Travel primarily east coast and midwest.

Salary + Stock option incentive

**MECHROLAB, INC.**  
1062 Linda Vista Ave.  
Mountain View, California

## PHARMACOLOGISTS TWO EXCELLENT OPPORTUNITIES

### Expanding Cardiovascular Program

**PHD** pharmacologist or **MD** with extensive experience in various fields of cardiovascular evaluation of new drugs.

**BS** or **MS** with two to three years cardiovascular experience and extensive animal work. Assist in screening program.

Salaries commensurate with experience  
All resumes kept in strict confidence

Respond to:

**TECHNICAL RECRUITER**

**WARNER-LAMBERT RESEARCH INSTITUTE**

**MORRIS PLAINS, NEW JERSEY**

## POSITIONS OPEN

### NUTRITIONAL BIOCHEMIST

To participate in research in basic nutritional programs and in projects leading to the development of nutritional products for pediatric and other special needs.

Requires Ph.D. in nutritional biochemistry, with or without further experience.

Liberal employee benefits, pleasant community, and relocation allowances.

Please send résumé and salary requirements to

Manager, Technical Employment  
Mead Johnson & Company  
Evansville 21, Indiana

# PHARMACEUTICAL DEVELOPMENT CHEMIST

IF YOU ARE A . . .

- PhD with three or more years in drug development field and have a . . .
- Knowledge of pharmaceutical dosage forms plus a . . .
- High degree of creativity, originality and initiative.

The  
Warner-Lambert  
Research Institute

OFFERS YOU . . .

- Virtually limitless opportunities for personal growth and development and . . .
- The chance to carry your original ideas through to a marketable product—

Send Resume to:

TECHNICAL RECRUITER

**WARNER-LAMBERT  
RESEARCH INSTITUTE  
MORRIS PLAINS,  
NEW JERSEY**

## FELLOWSHIPS



DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH invites applications from young British honours graduates in science and technology at present in North America for postdoctoral **NATO SCIENCE FELLOWSHIPS** tenable in **UNIVERSITIES, COLLEGES AND OTHER APPROVED LABORATORIES IN THE UNITED KINGDOM**. Further details may be obtained from U.K.S.M., 1907 K Street, N.W., Washington 6, D.C., to whom all applications should be sent by *1st January 1961*.

## The Market Place

BOOKS • SERVICES • SUPPLIES • EQUIPMENT

### BOOKS AND MAGAZINES

#### Your sets and files of scientific journals

are needed by our library and institutional customers. Please send us lists and description of periodical files you are willing to sell at high market prices. Write Dept. A3S, CANNER'S, Inc., Boston 20, Massachusetts

Proceedings of a conference by  
NAS-NRC Committee on Photobiology

### PHOTOPERIODISM AND RELATED PHENOMENA IN PLANTS AND ANIMALS

922 pp., 256 illus., 1959 \$14.75  
\$12.50 cash orders from AAAS members

### AAAS

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

## PROFESSIONAL SERVICES



### LABORATORY SERVICES

for the  
**FOOD and DRUG INDUSTRIES**  
Drug Evaluation, Food Additive Studies  
Chemical and Biological Assays,  
Clinical Studies, Research

**LaWall & Harrison**  
Div. S. 1921 Walnut St., Philadelphia 3, Pa. LO 3-4322

## SUPPLIES AND EQUIPMENT

1919 - 1960  
**LaMotte Chemical**  
Chestertown, Maryland, U.S.A.  
Specialists in

Colorimetric Techniques  
Reagents-Standards-Comparators  
Send for Illustrated  
Controls Handbook Dept. H

### Miniature, All-Purpose CALCULATOR

A precision instrument that will do all the calculations of larger expensive desk models. Weighs only 8 oz. Fits Hand. Fast, accurate, sturdy. . . completely portable. Ideal for all on-the-spot calculating. Fully guaranteed. Write for Free literature, prices, name of nearest dealer.  
**THE CURTA COMPANY** Dept. S12  
14435 Cohasset St. Van Nuys, Calif.



## SUPPLIES AND EQUIPMENT

### YOU NEED THIS FREE CATALOG FOR YOUR FILES

Serums, antiserums and bloods of all kinds for technicians and tissue culture laboratories. No salesman will call.

**COLORADO SERUM CO.**  
4950 York St. • MAIN 3-5373 • Denver 16, Colo.

### ALBINO RATS

The ultimate in Uniform, Healthy, Experimental rats  
—Produced by those best qualified—

### VETERINARIANS

For price list and descriptive brochure—phone or write

### Badger Research Corporation

AL 6-6064 P. O. Box 527, Madison 1, Wis.

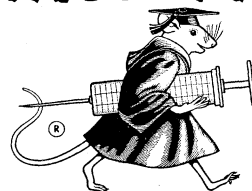


### "Thermophil" SURFACE THERMOMETERS

Thermistor resistance sensors. By ranges,  $-148^{\circ}$  to  $+554^{\circ}\text{F}$ ;  $-100^{\circ}$  to  $290^{\circ}\text{C}$ . . . Accuracies to  $\pm 0.1^{\circ}\text{C}$ . . . 100 probe designs. . . AC or Battery. *Bulletins Upon Request*

**Atkins Technical Inc.** Superior  
1276 W. Third St. • Cleveland 13, Ohio 1-1332

## SWISS MICE



Send for  
booklet

### TACONIC FARMS

GERMANTOWN NEW YORK

### MELATONIN (N-Acetyl-5-methoxytryptamine) 5-METHOXYTRYPTAMINE

*Data Sheets on Request.*

### REGIS Chemical Company

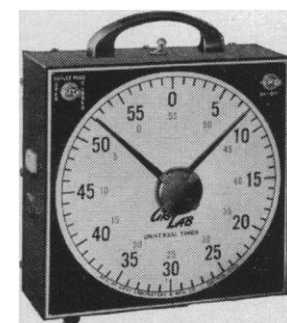
1219 N. Wells Street Chicago 10, Illinois

### • HYPOPHYSECTOMIZED RATS

Shipped to all points via Air Express

For further information write

**HORMONE ASSAY LABORATORIES, Inc.**  
8159 South Spaulding Ave., Chicago 29, Ill.



### ELECTRIC

## LAB TIMER

Giant 8" Dial

**GRA LAB INTERVAL TIMER** Automatic signalling and switching over unusually wide range of 3600 possible settings.

**GRA LAB MICRO TIMER** 1/10 sec. or 1/1000 min. stop clock. Remote start stop control. Write for catalog.

**DIMCO-GRAY COMPANY**  
214 E. SIXTH ST., DAYTON 2, OHIO

SCIENCE, VOL. 132



GET READY FOR THE SPACE and SCIENCE ERA! SEE SATELLITES, MOON ROCKETS



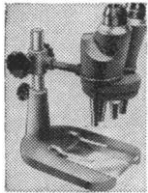
# AMAZING SCIENCE BUYS

for FUN, STUDY or PROFIT



## American Made — Terrific Buy!

### Over 50% Saving STEREO MICROSCOPE



Years in development. Precision American made. Used for checking, inspecting, small assembly work. Up to 3" working distance. Clear, sharp, erect image. Wide, 3 dimensional field. 2 sets of objectives on rotating turret. 23X and 40X. 10 Days Free Trial.

Stock No. 85,056-W .....\$99.50  
f.o.b. Barrington, N.J.

Low Power Supplementary Lens Attachment for above Stereo—provides 15X down to 6X with clear, extra large 1 1/2" field at 6X.

Stock No. 30,276-W .....\$7.50



Photographers! This is an actual photograph of the moon taken through our Astronomical Telescope by a 17-year student.

## See the Stars, Moon, Planets Close Up!

### 3" ASTRONOMICAL REFLECTING TELESCOPE

60 to 180 Power. An unusual Buy! Famous Mt. Palomar Type

You'll see the Rings of Saturn, the fascinating planet Mars, huge craters on the Moon, Star Clusters, Moons of Jupiter in detail. Galaxies! Equatorial mount with lock on both axes. Aluminized and over-coated 3" diameter high-speed f/10 mirror. Telescope comes equipped with a 60X eyepiece and a mounted Barlow Lens, giving you 60 to 180 power. An Optical Finder Telescope, always so essential, is also included. Sturdy, hardwood, portable tripod—FREE with Scope—Valuable STAR CHART plus 272 page "HANDBOOK OF HEAVENS" plus "HOW TO USE YOUR TELESCOPE" BOOK.

Stock No. 85,050-W .....\$29.95 Postpaid

4 1/4" Reflecting Telescope—up to 255 Power, all-metal pedestal mount. Stock No. 85,105-W .....\$79.50 F.O.B. Barrington, N.J.

## 50-150-300 POWER MICROSCOPE



Amazing Value—Equal of a \$75.00 instrument! 3 Achromatic Objective Lenses on Revolving Turret! Imported! The color-corrected, cemented achromatic lenses in the objectives give you far superior results to the single lenses found in the microscopes selling in this range. Results are worth the difference! Fine rack and pinion focusing.

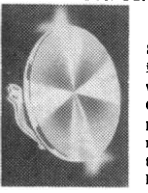
Stock No. 70,008-W .....\$14.95 Pstpd.

### MOUNTED 500 POWER OBJECTIVE

Threaded for easy attachment on above microscope. Achromatic lenses for fine viewing. 3 mm. focal length.

Stock No. 30,197-W .....\$5.00 Pstpd.

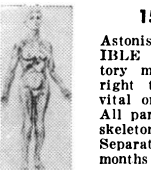
## OFFSPRING OF SCIENCE . . . REALLY BEAUTIFUL! CIRCULAR DIFFRACTION-GRATING JEWELRY



Shimmering rainbows of gemlike color in jewelry of exquisite beauty—made with CIRCULAR DIFFRACTION-GRATING REPLICA. Just as a prism breaks up light into its full range of individual colors, so does the diffraction grating. Promises to become a rage in current fashion.

Stock No. 30,349-W Earrings .....\$2.75 Pstpd.  
Stock No. 30,350-W Cuff Links .....\$2.75 Pstpd.  
Stock No. 30,372-W Pendant .....\$2.75 Pstpd.  
Stock No. 30,390-W Tie-Clasp .....\$2.75 Pstpd.

## 15 1/2" VISIBLE WOMAN KIT



Astonishing counterpart of the famous VISIBLE MAN. Authentic, exact-scale, laboratory model of female figure lets you look right through transparent "skin"—examine vital organs, glands, nerves, veins, arteries. All parts removable, replaceable. Articulated skeleton permits inspection of 206 bones. Separate group of internal parts shows 7-months pregnancy. Ideal for students, doctors, nurses, hobbyists. Compares favorably with expensive medical school models. Complete with base. Authoritative 12-page Book, INTRODUCTION TO ANATOMY, included.

Stock No. 70,283-W .....\$4.98 Postpaid  
Stock No. 70,228-W Visible Man Kit.....\$4.98 Postpaid

## WAR SURPLUS ELECTRIC GENERATOR



Brand new Signal Corps Electric Generator for scientific experiments, electrical uses, demonstrations. Generates up to 90 volts by turning crank. Use in high impedance relays. Charge ground and bring up night crawlers for bait or study. 2

Alnico Magnets alone worth original price. Wt. 2 lbs. Cost to Govt. \$15.  
Stock No. 50,225-W .....\$4.95 Postpaid

## SCIENTIFIC ENCYCLOPEDIA

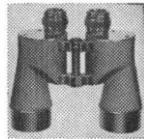
Over 1800 pages! 1400 illustrations—over 2,000,000 words—100,000 definitions—11,000 separate articles. If you're science-minded—you'll drool over it! Wealth of useful information on Science, Math, Engineering, Chemistry, Physics, etc. 8 1/2 lbs.—size 9" x 11".

Stock No. 9287-W .....\$29.75 Postpaid

## War Surplus American-Made 7x50 Binoculars

Big savings! Brand new! Crystal clear viewing—7 power. Every optical element is coated. An excellent night glass—the size recommended for satellite viewing. Individual eye focus. Exit pupil 7mm. Approx. field at 1,000 yds. is 376 ft. Carrying case included. American 7 x 50's normally cost \$195. Our war surplus price saves you real money.

Stock No. 1533-W .....Only \$55.00 Postpd.  
(Tax included)



## Terrific Buy! American Made! OPAQUE PROJECTOR

Projects illustrations up to 3" x 3 1/2" and enlarges them. No film or negatives needed. Projects charts, diagrams, pictures, photos, lettering in full color or black-and-white. Operates on 115 volt, A.C. current. 6-ft. extension cord and plug included. Operates on 60 watt bulb, not included. Size 12" x 8" x 4 1/2" wide. Weight 1 lb., 2 oz. Plastic case with built-in handle.

Stock No. 70,199-W .....\$7.95 Postpaid

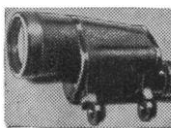


## ANALOG COMPUTER KIT



Ideal introduction to the increasingly important electronic computer field. For bright students, or anyone interested in this new science. Demonstrates basic analog computing principles—can be used for multiplication, division, powers, roots, log operations, trig problems, physics formulas and magnetism problems. Easily assembled with screwdriver and pliers. Operates on 2 flashlight batteries. Electric meter and 3 potentiometers are mounted on die-cut box. Answer is indicated on dial. Computer is 20" long, 9" wide, 2" deep.

Stock No. 70,341-W .....\$14.95 Postpaid



## Take Telephoto

Shots Thru

7 x 50

## MONOCULAR

This is fine quality. American made instrument—war surplus! Actually U.S. Govt. 7 x 50 Binocular. Used for general observation both day and night and to take fascinating telephoto shots with your camera. Brand new. \$95 value. Due to Japanese competition we close these out at a bargain price. Directions and mounting hints included.

Stock No. 50,003-W .....\$15.00 Postpaid



## LIFE SIZE HUMAN SKULL

Invaluable educational aid! Fascinating conversation piece! Skull is anatomically correct—made of natural bone color, bone hard, lifetime plastic. Parts snap together—take apart. Spring-action lower jaw. Removable skull cap for examination of skull cavity, nasal passages, etc. Ideal for scientists, doctors, dentists, teachers. Chart included.

Stock No. 70,294-W .....\$4.95 Postpaid

## NEW! SCIENCE FAIR PROJECT KITS

Carefully planned to give any boy or girl the fun and excitement of discovering science facts. Can lead to awards or scholarships!

For Junior High School and beyond: MOLECULE AND CRYSTAL MODELS KIT—Rods and balls to make atomic models, plus directions.

Stock No. 30,413-W .....\$2.50 Postpaid

### NUMBER SYSTEMS ABACUS

Makes a dramatic exhibit demonstrating number systems other than the decimal system.

Stock No. 70,334-W .....\$4.25 Postpaid

SOIL TESTING KIT—Basis for many fascinating experiments regarding growth of plants, etc.

Stock No. 60,118-W .....\$2.00 Postpaid

TOPOLOGY—All the ingredients for a project on 4-color map problems, Moebius strips, etc.

Stock No. 70,353-W .....\$6.00 Postpaid

CRYSTAL GROWING KIT—Grow breathtaking display of large crystals with this set.

Stock No. 70,336-W .....\$9.50 Postpaid

For Ages 8 thru Jr. High School: MAGNETISM KIT—Based on magnetism demonstrations developed by UNESCO.

Stock No. 70,325-W .....\$3.75 Postpaid

COLORS THROUGH POLARIZATION—Show the beautiful color effects produced by passing polarized light through transparent objects.

Stock No. 70,350-W .....\$2.00 Postpaid

OPTICAL ILLUSION KIT—Diagrams, lenses, mirrors, etc., for producing many amazing optical illusions.

Stock No. 70,352-W .....\$3.00 Postpaid

## MATH TREASURE CHESTS

Expertly selected collections of mathematical tools, games, gadgets, and other items! Exciting fun! Improves your math understanding . . . your grades in school!

Stock No. 70,327-W (for ages 5 to 8) .....\$10.00 Pstpd.

Stock No. 70,328-W (for ages 8 to 12) .....\$10.00 Pstpd.

Stock No. 70,329-W (for ages 12 up) .....\$10.00 Pstpd.

## SCIENCE TREASURE CHESTS

For Boys—Girls—Adults!

Excellent "Science Fair" Material!



Science Treasure Chest — Extra-powerful magnets, polarizing filters, compass, one-way-mirror film, prism, diffraction grating, and lots of other items for hundreds of thrilling experiments, plus a Ten-Lens Kit for making telescopes, microscopes, etc. Full instructions included.

Stock No. 70,342-W .....\$5.00 Postpaid

Science Treasure Chest DeLuxe—Everything in Chest above plus exciting additional items for more advanced experiments including crystal-growing kit, electric motor, molecular model set, first-surface mirrors, and lots more.

Stock No. 70,343-W .....\$10.00 Postpaid

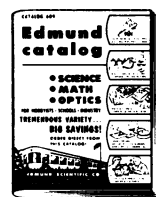
## FREE CATALOG!

Optics for the Science Class! Optics for the Space Era!

144 PAGES! OVER 1000 OPTICAL BUYS!

Huge selection of lenses, prisms, war surplus optical instruments, parts and accessories. Telescopes, microscopes, binoculars, infrared sniperscope, etc. Low-cost Science and Math Learning and Teaching aids.

Request Catalog W.



ORDER BY STOCK NUMBER . . . SEND CHECK OR MONEY ORDER . . . SATISFACTION GUARANTEED!

# EDMUND SCIENTIFIC CO. BARRINGTON, NEW JERSEY



# Thomas

**GIVES YOU  
SUPERIOR  
SERVICE  
BECAUSE . . .**



MAIN BUILDING



SECTION OF SHOWROOM

***You deal with headquarters***

Facilities housed in 165,000 sq. ft. of space.  
Competent technological staff on call.  
Orders filled promptly from vast warehouse.

***You draw on large stocks***

Three to six months supplies of the items listed in our catalog—mostly prepackaged—in our stock for immediate shipment.  
Widest assortments of Corning, Kimble and Coors items available from any single source.

***You select from encyclopedic catalog***

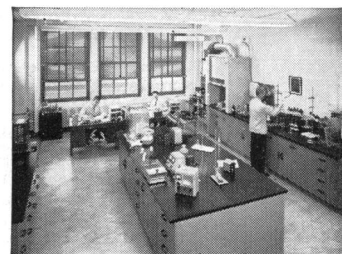
With factual, detailed descriptions—standard reference source throughout the free world.

***You save time and money***

Extensive pneumatic tube systems and conveyors speed delivery of orders.  
More than 93% of orders shipped within two working days.  
Accurate invoices and packing lists.  
Substantial packing keeps breakage to less than 1/20th of 1%.  
One-price policy insures lowest prices to all buyers—advance quotations unnecessary.

***You are assured of satisfaction***

Stocks carefully selected and continually inspected for quality and performance.  
Prompt refund for any item found to be unacceptable for any reason.



SECTION OF RESEARCH  
AND DEVELOPMENT



INVENTORY CONTROL



SECTION OF SERVICE DEPARTMENT



SHIPPING CENTER



SECTION OF BIN STOCK



ORDER FILLING CENTER



**ARTHUR H. THOMAS COMPANY**

*More and more laboratories rely on Thomas / Laboratory Apparatus and Reagents*

VINE ST. AT 3RD • PHILADELPHIA 5, PA.