

## New Products

The information reported here is obtained from manufacturers and from other sources considered to be reliable, and it reflects the claims of the manufacturer or other source. Neither Science nor the writer assumes responsibility for the accuracy of the information. A coupon for use in making inquiries concerning the items listed appears on page 286.

■ **VOLATILES TESTER** provides moisture or volatile-content readings with accuracy said to be  $\pm 0.05$  percent. Operation is semiautomatic. Ten-gram samples are weighed in special pans and, after any given drying period, moisture percentage may be read directly. (C. W. Brabender Instruments Inc., Dept. 942)

■ **TEAR TESTER** is designed to measure tearing strength of strongly directional materials that tend to tear at an angle. The tester holds the specimen rigidly throughout its entire length on both sides and directs the tearing force to produce a tear down the center line of the specimen. (Thwing-Albert Instrument Co., Dept. 943)

■ **VOLTAGE DIVIDER** for alternating current is claimed to provide linearity better than  $\pm 0.0001$  percent over a wide range of audio frequencies. Seven decades of division are provided by specially constructed toroidal transformers. (Electro Measurement Inc., Dept. 945)

■ **TAPE RECORDER** for airborne application weighs 24 oz. Tape widths are  $\frac{1}{2}$  and 1 in., and seven tape speeds from 0.25 to 15 in./sec are provided. Wow and flutter are less than 1 percent under static conditions. Environmental operating ranges are: acceleration, 200 g; temperature,  $-50^{\circ}$  to  $+200^{\circ}\text{F}$ ; relative humidity, 0 to 100 percent. (Leach Corp., Dept. 946)

■ **INDUCTANCE BRIDGE** measures inductance from 0.002  $\mu\text{h}$  to 100 mh. Resolution of approximately  $\pm 0.01$  percent and accuracy of the order of  $\pm 0.25$  percent are claimed. For excitation, an internal oscillator provides signals of several frequencies between 1 and 100 kcy/sec. Detector and null indicator are also self-contained. Series resistance can be measured in the range 0.01 to 10,000 ohm. External oscillators and detectors may be used. (Boonton Electronics Corp., Dept. 947)

■ **RESISTANCE-RATIO RECORDERS** are designed to measure pressure, flow, and other variables detected by three-terminal, potentiometer-type transducers having total resistance between 1000 and 10,000 ohm. The ratio circuit uses the transducer as one-half of a Wheatstone bridge circuit and the measuring slide-wire of the recorder as the other half. Standardization is not necessary because

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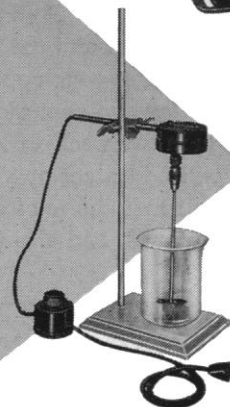
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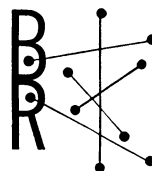


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Proceedings and Discussions at the  
Scientific Conferences of the  
**BRAIN RESEARCH FOUNDATION**  
January 25, 1958 • New York City  
March 31, 1958 • Chicago

### Part I—Amines in Relation to Brain Function and Behavior

Current Work on Ceruloplasmin in Mental Illness—Abood. The Effect of Ceruloplasmin in a Case of Schizophrenia—Heath. Mode of Action of Taraxein Follow-up Studies—Heath, Leach and Cohen. Mode of Action of Ergot Hallucinogens—Hoffer. Tryptophan Metabolism in Schizophrenics and in Controls—Zeller. A New Class of Psychotogenic Substances—Abood, Ostfeld and Biel. Excretion and Metabolism of Epinephrine and Norepinephrine in Man—Elmadjian. Acetylcholine and Behavior—Pfeiffer, Groth and Bain.

### Part II—ACTH Treatment of Hypsarhythmia

Introduction—Meduna. Treatment of Hypsarhythmia with ACTH—Sorel. Experience with ACTH Treatment of Hypsarhythmia—Stamps, E. Gibbs, F. A. Gibbs and Rosenthal. Treatment of Hypsarhythmia with ACTH and Cortisone—Low. Neurological Status of Patients with Hypsarhythmia—Kellaway. Neuropathologic Findings in Three Cases of Infantile Spasms—Poser. Discussion of Action of ACTH in Various Diseases—Dorfman. Comparison of the Present Syndrome with Cerebral Degenerative Disorders—Lichtenstein. Comparison of the Present Syndrome with Chronic Viral Encephalomyelitis—Garvin.

The Foreword by Dr. Frederick A. Gibbs, Secretary of the Brain Research Foundation, is alone worth the price of the book.

189 PAGES ILLUSTRATIONS NEW, 1959 \$4.75

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In Canada: 4865 Western Avenue, Montreal 6, P.Q.

# APPLICATION FOR HOTEL RESERVATIONS

## 126th AAAS MEETING

Chicago, 26-31 December 1959

The four hotels for the AAAS Chicago meeting have established special low rates and have reserved large blocks of rooms at each level within the price ranges quoted. Thus everyone making room reservations for the AAAS meeting is assured substantial savings. Further, all confirmations will state the room rate assigned.

The list of hotels and their rates and the reservation coupon below are for your convenience in making your hotel reservation in Chicago. Please send your application, *not* to any hotel directly, but to the AAAS Housing Bureau in Chicago and thereby avoid delay and confusion. The experienced Housing Bureau will make assignments promptly; a confirmation will be sent you in two weeks or less.

If desired, the hotels will add a cot at \$3.00 per night—except that all children under 12 are free. Mail your application *now* to secure your first choice of desired accommodations. All requests for reservations must give a definite date and estimated hour of arrival, and also probable date of departure.

### AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

For a list of the headquarters of each participating society and section, see page 228, *Science*, 24 July.

#### Rates for Rooms with Bath

Hotel	Single	Double Bed	Twin Bed	Suite
Morrison	\$6.50– 9.00	\$9.00–13.00	\$11.00–15.00	\$30.00 and up
Hamilton	6.50– 9.50	9.00–13.00	11.00–15.00	25.00 and up
La Salle	8.00–10.00	10.50–13.00	12.50–15.50	35.50 and up
Sherman	7.45–12.45	11.45–16.45	14.45–19.50	28.50 and up

#### ----- THIS IS YOUR HOUSING RESERVATION COUPON -----

AAAS Housing Bureau

Suite 900

134 North La Salle Street

Chicago 2, Ill.

Date of Application .....

Please reserve the following accommodations for the 126th Meeting of the AAAS in Chicago, 26–31 Dec., 1959:

#### TYPE OF ACCOMMODATION DESIRED

Single Room ..... Desired Rate ..... Maximum Rate .....  
Double-Bedded Room ..... Desired Rate ..... Maximum Rate ..... Number in party .....  
Twin-Bedded Room ..... Desired Rate ..... Maximum Rate .....  
Suite ..... Desired Rate ..... Maximum Rate ..... Sharing this room will be:  
(Attach list if this space is insufficient. The name and address of each person, including yourself, must be listed.)

First Choice Hotel ..... Second Choice Hotel ..... Third Choice Hotel .....

DATE OF ARRIVAL ..... DEPARTURE DATE .....  
(These must be indicated—add approximate hour, a.m. or p.m.)

NAME .....  
(Individual requesting reservation) (Please print or type)

ADDRESS .....  
(Street) (City and Zone) (State)

*Mail this now to the Housing Bureau. Rooms will be assigned and confirmed in order of receipt of reservation.*

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## CORROSION OF CHEMICAL APPARATUS

By G. L. Shvartz and M. M. Kristal

### Translated from the Russian

This recent monograph is a result of investigations carried out by the authors at the *Scientific Research Institute of Chemical Machines* and the *Moscow Institute of Chemical Machines*. Contents include the following:

Valuable data concerning the theory of intercrystalline and stress corrosion of various metals and alloys used in chemical machine construction. Fundamental causes of corrosion, then specific cases of equipment destruction are cited, and finally methods of metal protection against corrosion cracking are discussed.

This book has universal usage throughout the chemical industry.

1959. Cloth. 260 pp. illus. \$7.50

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the same battery supplies both sides of the bridge. Round- or strip-chart models are available. Accuracy is stated to be  $\pm 0.3$  percent of full scale. Span step response time is nominally 5 sec. (Leeds & Northrup Co., Dept. 950)

■ **MECHANICAL COUNTER** can operate continuously at 6000 rev/min. Direct-gearing of the second wheel reduces wear usually resulting from transfer-pinion methods. A means of providing instantaneous corrected direct reading when the second-wheel member is not fully within the window is featured. (Veeder-Root Inc., Dept. 948)

■ **GAS FLOW COUNTING SYSTEM** permits shielded window and windowless counting by interchange of detector chambers. The counters operate in the Geiger or proportional regions and are suitable for detection of alpha and weak beta particles such as are emitted by  $C^{14}$ ,  $S^{35}$ ,  $Ca^{45}$ , and  $H^3$ . (Atomic Accessories, Inc., Dept. 949)

■ **ROTATING CYLINDER VISCOMETER** is designed for measurements at extremely low shear stresses. The instrument uses the Couette principle with electrostatic restoring torque. A coaxial inner float contained within the rotating cylinder carries on its shaft a set of vanes that pass through a set of fixed plates forming a capacitor. Shear-stress range is 0.002 to 1.6 dyne/cm<sup>2</sup>. Shear-rate range is 0.2 to 50 per second in 15 steps. Viscosity range at lowest shear rate is 800 centipoise. Temperature is maintained constant within  $\pm 0.5^\circ C$ . Output is a digital display. Accuracy of  $\pm 0.5$  percent of viscosity is claimed. (Polarad Electronics Corp., Dept. 951)

■ **SILICON SOLAR CELLS** are offered for use as secondary standards for calibration of artificial light sources in terms of solar radiation. Cells are selected to have conversion efficiencies of at least 9 percent. A calibration curve, showing efficiency at certain radiation intensities and specified temperature conditions, accompanies the cell. Thermocouple leads are provided for measurement of cell temperature. Coated optical-glass windows and shock-resistant temperature mounting protect the cell. (International Rectifier Corp., Dept. 952)

■ **ANTENNA** for 8500 to 9600 Mcy/sec features motor-driven remote control of polarization. Stop positions, spaced every 45 deg, are selected by a switch connected to the unit with a five-wire cable. Parabola diameter is 8.5 in., and beam width is 10 deg. Nominal power handling capacity is 50 kw. (California Technical Industries, Dept. 953)

JOSHUA STERN

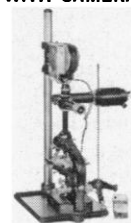
National Bureau of Standards,  
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## RESEARCH OPPORTUNITY

# Biochemist

If you are interested in conducting fundamental research as well as investigating, developing and evaluating new products, send your resume, including present and expected salary, in confidence to Mr. N. R. Olsen.

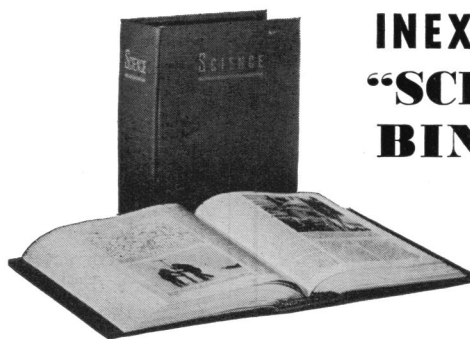
Gillette, a world-wide leader in consumer products, is expanding its Research and Development activities, and is seeking a chemist with an advanced degree and thorough knowledge of skin and hair chemistry.

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**SCIENCE** • 1515 Massachusetts Ave., NW,  
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## 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. **Positions Open**, \$33 per inch or fraction thereof. No charge for box number.

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

**DISPLAY:** Rates listed below—no charge for box number. Monthly invoices will be sent on a charge account basis—provided that satisfactory credit is established.

Single insertion	\$33.00 per inch
4 times in 1 year	30.00 per inch
7 times in 1 year	28.00 per inch
13 times in 1 year	27.00 per inch
26 times in 1 year	26.00 per inch
52 times in 1 year	25.00 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

Clinical Chemist (female); 10 years' experience, M.S. Seeks Ph.D. plus opportunity to earn maintenance simultaneously. Box 184, **SCIENCE**. 8/7

Geneticist, Ph.D., minor physiology of reproduction, undergraduate training in animal husbandry. Desire teaching position. Frank Rice, Box 810, Miles City, Mont. 7/24, 31

### POSITIONS WANTED

Physiologist Ph.D., 8 years' experience toxicology-pharmacology in pharmaceuticals. Publications. Desires research-industry or academic. Box 185, **SCIENCE**. X

Virologist. Ph.D. Competent in virology, tissue culture, and phages. Broad experience in medical bacteriology, mycology. Desires research position. Box 138, **SCIENCE**. 7/24, 31

### POSITIONS OPEN

#### BIOCHEMIST DEPARTMENT HEAD

Ph.D. or equivalent desired with broad interests in ENZYMOLOGY, METABOLISM and its disorders. Very attractive position in research division of progressive and expanding pharmaceutical firm. Please give detailed résumé of education and experience.

**ETHICON, INC.**  
Route 22 Somerville, New Jersey

Biologist, Morphologist, Histologist or Micro-anatomist with Ph.D. To be part of therapeutic research team (Brooklyn, N.Y.). Experience in tissue and cell reading evaluation. Resident of New York City or vicinity preferable. Write fully. Box 186, **SCIENCE**. X

Chief Chemist—Colorado State Department of Public Health. Beginning salary \$528 per month. Requirements: Bachelor's degree in chemistry and 3 years of responsible experience in analytical chemistry, 2 years of which must have been in public health or related chemistry. Apply to Dalton Roberts, Chief, Administrative Services, Colorado State Department of Public Health, State Office Building, Room 420, Denver 2, Colorado. X

### POSITIONS OPEN

Biophysicist, Senior. Civil Service appointment in New York State Health Department, Division of Laboratories and Research. To conduct irradiation experiments on animals, bacteria, and viruses using both x-ray and nuclear radiation; calibrate instruments using x-ray and isotope sources. Requirements: bachelor's degree in physics, with 30 hours of science of which 18 hours must be in physics, plus 2 years' experience; or a master's degree and 1 year of experience. Apply to W. W. Sanderson, Division of Laboratories and Research, New York State Health Department, New Scotland Ave., Albany 1, N.Y. X

### HISTOCHEMIST

An expanding midwestern pharmaceutical company has an opportunity for a M.S. histochemist or equivalent in histopathological laboratory of department of pathology. Work involves supervision of laboratory technicians and responsibility of teaching them new techniques. There is opportunity for individual development in histochemical techniques and photomicrographic instrumentation. Please send complete résumé to:

Technical Employment Coordinator  
**The Upjohn Company**  
Kalamazoo, Michigan

Microbiologist-Biochemist. Ph.D. for basic studies in macromolecular synthesis (DNA, RNA, protein). Large research institute. Active research group research associateship. Box 174, **SCIENCE**. 7/24, 31; 8/7

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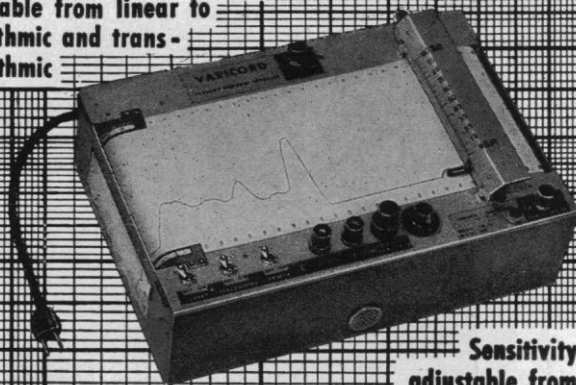
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VARIABLE-RESPONSE RECORDER**  
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Designed specifically to be used with scanning densitometers for correctly-compensated quantitative evaluation of electrophoretic patterns on filter paper

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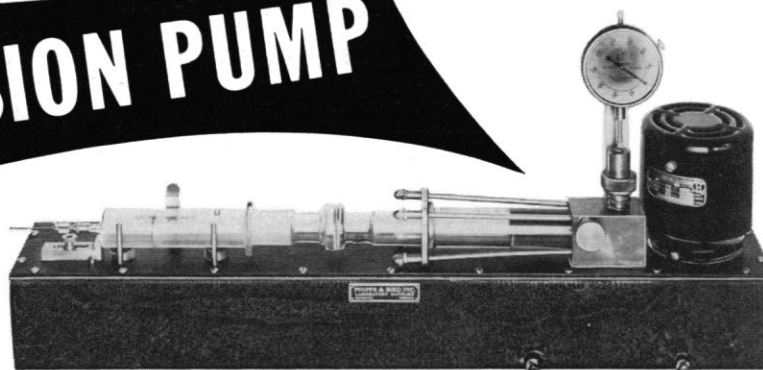
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This pump is used for metering accurately and continuously small quantities of liquid which do not react with glass. It consists of three units; a motor-driven, hydraulic, adjustable metering pump; a hydraulic operated driving plunger, and delivery syringe. This rate of liquid delivery is easily adjusted. A reference dial indicating gauge shows the setting of the pre-determined rate of delivery. Its readings may be translated, approximately by the graph furnished, into volume delivered per minute. The rate can be accurately read to a hundredth of a cc. per minute. In addition,

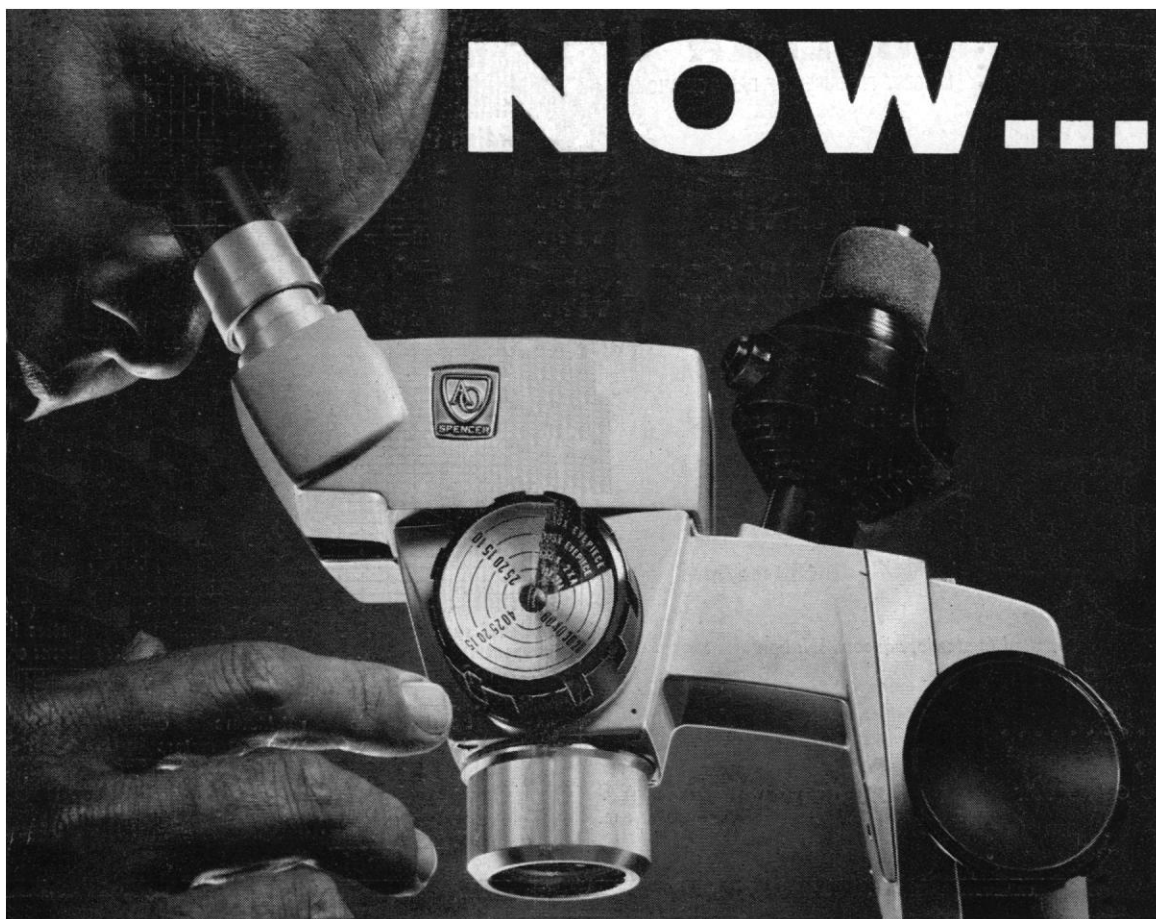
the rate of flow may be adjusted continuously from .01 cc. to a maximum of 2.5 cc. per minute. And this rate may be changed, if desired, without stopping the pump. Complete with 50 cc. standard glass syringe for operation on 115 V. 60 C., A.C. only.

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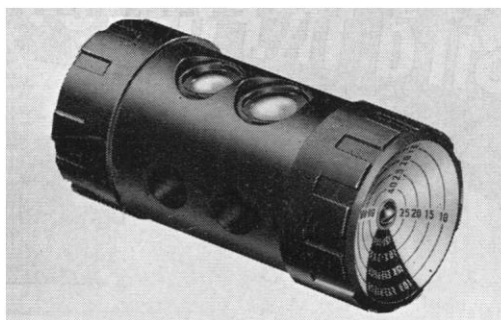
► Only the time tested, performance proven AO CYCLOPTIC Stereoscopic Microscope offers the convenient Magni-Changer. You simply "dial-in" desired magnifications. Magni-Changer is located just inches from focusing knob...convenient to your hands...no fumbling...no need to lift your eyes from eyepieces.

### Now you can choose from two Magni-Changer Models

**Magni-Changer "K"** New Magni-Changer "K" offers 3 different magnifications for each eyepiece/objective combination...resultant magnification range of 5X to 60X...and at \$73.00 less than comparable Magni-Changer "M" Models.

**Magni-Changer "M"** If your work demands a greater magnification range you can select a Magni-Changer "M" CYCLOPTIC...provides 5 different magnifications for each eyepiece/objective combination through a wider resultant magnification range of 3.5X to 80X.

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