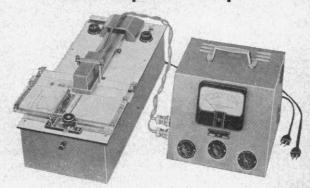
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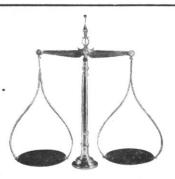
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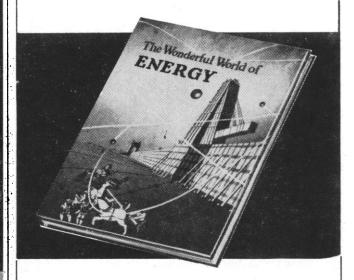
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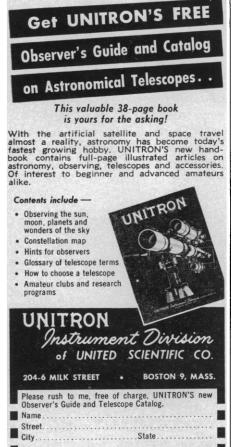
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AAAS Symposium Volume edited by Nathan S. Kline

6" x 9", clothbound, 175 pp., bibliographies, index, 1956 \$3.50 (\$3.00 for cash orders by AAAS members)

This volume consists of material presented at the first major conference on the remarkably successful use of new drugs such as chlorpromazine in the treatment of mental disease.

"The authors are competent and careful workers who have approached this problem with a scientific attitude... Throughout the volume runs the thread of caution... New vistas are being opened for the psychiatrist, the neurologist, the physiologist, the psychologist, the pharmacologist and the chemist." Foreword, Winfred Overholser.

"This volume is not a reference intended for use at the introductory student level. It can be reviewed with interest, however, by any serious member of the reading public." American Journal of Pharmaceutical Education, July 1956.

At all book stores or write

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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).

- FREEZE DRYER for biological tissues and other heat-sensitive materials uses a glass vacuum system divided into replaceable units connected by ball-and-socket joints. Vacuum is provided by a diffusion pump of 60 lit/min capacity at 1 µ, ba ked by a mechanical pump with free air capacity of 58/lit min. Specimens are frozen by a mixture of Dry Ice and trichloroethylene. Moisture is collected by a liquid-nitrogen cold finger. (Fisher Scientific Co., Dept. S734)
- X-RAY DIFFRACTOMETER designed for powder diffraction work can accommodate high- and low-temperature chambers, devices for preferred orientation and pole-figure studies, and focussing monochromators. Scintillation-, proportional-, flow-, or Geiger-counter units provide a choice of detectors for all conditions. Goniometer scanning is done in a vertical plane at any of five selectable speeds. X-ray tubes with four windows permit simultaneous use of four cameras. Useful diffraction range is from −38 to + 165 deg. (Philips Electronics Inc., Dept. S736)
- INDUCTANCE BRIDGE measures from 1 µhy to 100 hy with resolution of 0.01 percent. Direct-reading accuracy is achieved between 50 and 3000 cy/sec; a table of corrections permits measurement to 20 kcy/sec. The internal standard is a four-dial inductance of 0.05-percent accuracy. External standards of higher accuracy can be furnished. Accessories permit measurement of inductance with up to 2 amp of superimposed direct current and of capacitance from 10 pf to 1 µf with accuracy of 0.2 percent. (British Industries Corp., Dept. S742)
- OPTICAL TESTER is based on the method of Ronchi and Lenouvel in which the optical element to be tested is illuminated and viewed through a grating. The shadow lines or fringes produced provide information on the quality of the optical element. The tester, consisting of an illuminator and grating, may be hand held or clamped in position. (Ann Arbor Optical Co., Dept. S694)
- AUTOCOLLIMATOR is servo operated and provides automatic, direct indication of angular displacement. Range is ±1 min of arc with sensitivity 0.1 sec. Accuracy

is ±0.5 percent. Response time is 0.1 sec/sec of arc, and warm-up time is eliminated by use of transistor circuitry. Output may be read visually on a calibrated dial, one revolution of which indicates 10 sec of arc, or an electrical signal, proportional to dial rotation, may be obtained from a potentiometer on the dial shaft. When it is operated at 125 v, the potentiometer furnishes output of 800 mv/sec of arc. (Davidson Manufacturing Co., Dept. S744)

- OSCILLOGRAPH provides 36 channels of immediately visible photographic recording. Frequency range is from d-c to 3000 cy/sec. Chart paper is 12 in. wide; 8-in. peak-to-peak deflection is permitted in each channel. Traces are identified to permit overlap. Recording speeds range from 0.1 to 160 in./sec. Writing speed is up to 20,000 in./sec. Grid lines and timing lines are recorded optically, simultaneously with galvanometer traces. The daylight-loading paper carrier accommodates 200 ft of chart. (Minneapolis Honeywell, Dept. S745)
- COORDINATE CONVERTER converts polarcoordinate input to Cartesian-coordinate output. Conversion is achieved by a sinecosine potentiometer linked to a nullseeking servo. The potentiometer resolves the input into quadrature components according to angular position. Speed of potentiometer positioning is 360 deg/sec. Sensitivity is 0.5 mv/deg. (Mandrel Industries Inc., Dept. S748)
- OXIMETER requires blood samples of less than 1 ml. The instrument reading is displayed on a panel meter or may be used to drive a standard recorder directly. Ranges are 0 to 50, 50 to 100, and 0 to 100 percent oxygen saturation. (American Electronic Laboratories, Inc., Dept. S750)
- STATIC ELECTRICITY MEASURING IN-STRUMENT determines static potential on the basis of the ionization of air in the vicinity of the charge, by which a sample of the charge is conducted to the instrument. Range is 0 to 500 kv. Attachments make it possible to measure in inaccessible areas. The instrument is hand-held. (United States Radium Corporation, Dept. S751)
- AUTOCLAVE uses a single dial to control the sterilizing cycle, including filling, standby service, sterilizing, and venting. Internal pressure is variable from 7 to 27 lb/in.², corresponding to steam temperatures of 230 to 270°F. Safety features include pressure-safe door which cannot be opened until pressure is relieved, low-water cut-off, and relief valve. Dimensions are approximately 24 by 14 by 19 in. Capacity is 1017 in.³ (Wilmot Castle Co., Dept. S752)

- SAMPLE COOLER is designed for pressures up to 5000 lb/in.² (gage) and temperatures to 1200°F. The heat exchanger is of the shell-and-tubular-coil type. Material is stainless steel, heliarc-welded. The outer shell is 3½ in. in diameter by 11¼ in. long. (Technical Engineered Products Inc., Dept. S754)
- COLORIMETER balances automatically to measure color of transparent materials from 400 to 800 mµ. Reproducibility of reading is 0.25 percent. Sensitivity is one per million or less. Interference filters are used to select wavelength of illumination. Cylindrical cells 22 mm

in diameter or larger, and up to 15 cm long, can be accommodated. Output for a separate millivolt recorder is available. (Mission Instrument Co., Dept. S755)

■ BEAKERS of fluorocarbon resin are chemically inert at temperatures to 500°F, except to molten alkali metals, fluorine, and certain fluorine compounds. They are not affected by aqua regia, hydrofluoric acid, hot caustics, or organic solvents. Capacities are 250, 500, and 1000 ml. (Resistoflex Corporation, Dept. S757)

Joshua Stern

National Bureau of Standards



"*Chill-Chaser"*AUTOMATIC ELECTRIC IMMERSION HEATERS

Raise and Maintain Temperature within 1° F. ±

Chill-Chaser is a completely self-contained heating unit with a built-in thermostatic control. It requires no special wiring, or outside controls.

Chill-Chaser is designed for quick, easy, efficient and safe operation. It gives uninterrupted service over a long period of time and is insulated against electric shock. The 20" and 40" models have builtin around wire.

Thermostats are factory calibrated so that you can dial your required temperature range. It is important that you specify the operating range you require when ordering from the table below.

Heating element is sturdily made of acid-resisting steel alloy. A steel hook is provided for hanging unit on the edge of a vessel. Plastic finger-grip handle always stays cool. For use on 115 volts 60 cycles, A.C. Supplied with 6' of rubber-covered electric cord and unbreakable plug.

Note: At a nominal charge of \$5.00, a pilot light can be furnished on the Chill-Chaser to indicate when heat is off or on.



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A	250	62°-132°F	н	850	75°-212°F	8"	12"	15/8"	22.00
В	250	62°-132°F	1	850	100°-212°F	10"	14"	15/8"	23.00
С	250	62°-126°F	J	850	115°-212°F	12"	16"	15/8"	25.00
D	250	62°-115°F	K	850	125°-212°F	15"	19"	15/8"	26.00
E	250	62°- 98°F	L	850	140°-212°F	20"	24"	15/8"	29.00
F	950	62°- 92°F	м	950	150°-212°F	40"	44"	15/8"	39.00



22 NOVEMBER 1957 1083

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

POSITIONS WANTED

Biochemist, Ph.D., age 35, experienced in tissue culture. Research or research and teaching position desired. Box 294, SCIENCE. 11/22

Medical Editor, Writer; training, experience in nutritional biochemistry; seeks association with clinical, research program. Box 298, SCI-X

Microbiologist, Ph.D., virology, cellular metabolism, genetics; biochemical, biophysical techniques; medical teaching and research experience; seeking more active position; can do. Box 295, SCIENCE. 11/29

Physiologist-Zoologist; Ph.D., 1953; 5 years of teaching experience (university and medical) in general and mammalian physiology; research, publications. Desires change in academic position. Box 296, SCIENCE.

Young Microbiologist is available for half-time opportunity in administration or teaching and half-time research; 5 years as assistant professor of biology, university medical school. Medical Bureau, Burneice Larson, Director, 900 North Michigan Avenue, Chicago.

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PINEAPPLE AGRONOMIST

PINEAPPLE AGRONOMIST

Applications are invited for a Pineapple Agronomist at a recently established experiment station on deep peat soil in Johore, Federation of Malaya. The agronomist will be required to take charge of the station and to plan, execute, and report experimentation in the cultivation of pineapples on deep peat soils recently cleared of forest. Candidates should have a degree in agriculture or the agricultural sciences and postgraduate training in crop agronomy and experimental methods. Experience in tropical crop experimentation will be an advantage. Salary at present exchange rates £3360 per annum; passage paid for appointee, wife, and children on first appointment and on final retirement. Leave with pay 45 days per year accumulatable up to 4 years. Provident Fund deductable at 5 percent per year—employer contributing for 1 to 10 years' service, 10 percent; 11 to 20 years' service, 15 percent; and 21 years plus service, 20 percent. House provided on station in Johore (approximately 50 miles from center of Singapore) at monthly rent of £8 15s; medical and hospitalization fund. Salary liable to income tax at present rates of approximately £360 per annum for married man with one child. For further details write: Chief Executive Officer, Malayan Pineapple Industry Board, Government Offices Building, Johore Bahru, Johore, Federation of Malaya.

Cacao Research Scientists. especially geneticists

Cacao Research Scientists, especially geneticists, entomologists, or pathologists, required by Inter-American Institute of Agricultural Sciences, Turrialba, Costa Rica, to work in Costa Rica or other Latin American countries. Research experience in the tropics, especially with tree crops, an advantage. The Institute is an international specialized agency of the Organisation of American States conducting research, training, and consultation services for Latin America. Salary according to qualifications and experience. Further details and application forms on request. Contact Gordon Havord, Head, Cacao Center, at above address.

POSITIONS OPEN

(a) Chemists; B.S., M.S. experienced micromethods, clinical chemistry for pediatric microbiochemistry laboratory; teaching hospital for important western university medical school; biochemistry laboratory; teaching hospital for important western university medical school; duties include research, patient service. (b) Bacteriologist; M.S. or Ph.D. to direct department, very large general hospital; \$7500-\$8400; Midwest. (c) Chemist; college graduate, experienced clinical chemistry; also supervise general laboratory, 150-bed general hospital; to \$7000; rural New England. (d) Pharmacology-Physiology Instructor; young Ph.D. interested affiliating outstanding eastern medical school; to \$5500. (e) Microbiologist; Ph.D. specialized virology and/or experimental immunology; university medical school faculty; to \$6500; Southeast. Woodward Medical Bureau, Ann Woodward, Director, 185 N. Wabash, Chicago.

Electron Microscopist. An electron microscopist is needed at the biological laboratories of Harvard University, Cambridge 38, Mass., to collaborate in research with members of the department. Salary to depend upon experience and other qualifications. Inquiries should be addressed to the Chairman, Electron Microscope Committee, at the above address.

11/29; 12/6, 13

Free-Lance Writer. Experienced. Strong background in medical or ancillary sciences. Will need facilities of medical library. Must be able to write upon assignment and meet deadlines. Medical Arts Publishing Foundation. 1603 Oakdale Street, Houston 4, Texas. 11/22, 29; 12/6

(a) Head, Department of Biological Sciences; duties involve supervision and scientific leader-(a) Head, Department of Biological Sciences; duties involve supervision and scientific leadership of established group of professional and supporting personnel; should be specialist in one of biological sciences, Ph.D. or M.D.; considerable industrial experience required; one of leading research companies; outstanding opportunity. (b) Biochemist, B.S. degree, with training or experience in protein and enzymes; duties consist of supervising biochemical manufacturing and research; East; \$8000. (c) Clinical Psychologist; important guidance clinic; \$7000-\$9300; South. (d) Clinical Physiologist trained in immunology or chemistry; head department, medical school and teaching hospital; West. S11-4 Medical Bureau, Burneice Larson, Director, 900 North Michigan Avenue, Chicago.

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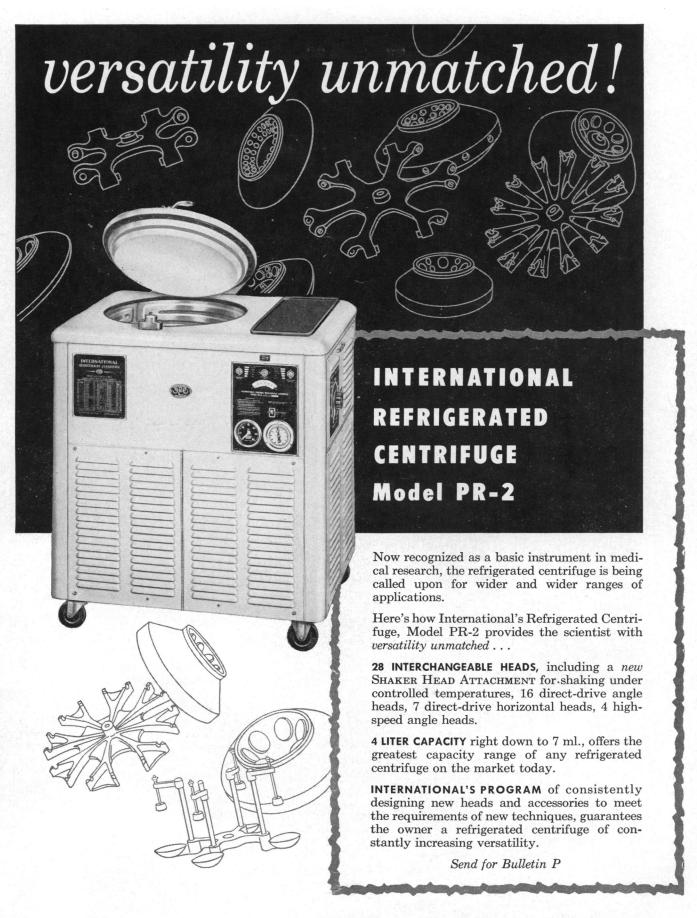
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