

this end we are making our museum exhibits attractive, explicit, and sharply focused. We are organizing amateur groups in geology, astronomy, zoology, and botany, with the volunteer help of qualified adults. We are making many short natural-history movies to be shown free of charge in our auditorium—films which may also be shown on television to reach mass audiences.

The present officers of the Chicago Academy of Sciences, elected at the 101st annual meeting, which was held 16 Apr. 1958, are as follows: President, Leslie B. Arey, professor of anatomy, Northwestern University Medical School; secre-

tary, Richard A. Edgren, Division of Biological Research, G. D. Searle and Company; director, William J. Beecher.

WILLIAM J. BEECHER
*Chicago Academy of Sciences,
Chicago, Illinois*

Forthcoming Events

January

23-24. Reproductive Physiology and Protein Nutrition, 15th annual conf. on protein metabolism, New Brunswick, N.J. (J. H. Leatham, Rutgers Univ., New Brunswick, N.J.)

24-29. American Acad. of Orthopedic

Surgeons, Chicago, Ill. (C. L. Compere, 720 N. Michigan Ave., Chicago, Ill.)

26-29. American Meteorological Soc., New York, N.Y. (K. C. Spengler, AMS, 3 Joy St., Boston 8, Mass.)

26-29. American Soc. of Heating and Air Conditioning Engineers, 65th annual, Philadelphia, Pa. (W. M. Vidulich, ASHACE, 62 Worth St., New York 13.)

26-29. Institute of the Aeronautical Sciences, 27th annual, New York, N.Y. (IAS, 2 E. 64 St., New York 21.)

26-30. Writing and Publication in Industry, conf. and workshops, Brooklyn 1, N.Y. (T. L. Donahue, Writing and Publication Conf., Polytechnic Inst. of Brooklyn, 333 Jay St., Brooklyn 1.)

27-30. Society of Plastics Engineers, Inc., 15th annual tech. conf., New York, N.Y. (L. A. Bernhard, SPE, 65 Prospect St., Stamford, Conn.)

28-29. Nuclear Fuel Elements, 1st intern. symp., New York, N.Y. (H. H. Hausner, 1st intern. Symp. on Nuclear Fuel Elements, 730 Fifth Ave., New York 19.)

28-31. American Physical Soc., annual, New York, N.Y. (E. R. Fitzgerald, Dept. of Physics, Pennsylvania State Univ., University Park.)

29-31. Western Soc. for Clinical Research, 12th annual, Carmel-by-the-Sea, Calif. (W. N. Valentine, Office of the Secretary, Univ. of California Medical Center, Department of Medicine, Los Angeles 24.)

February

1-6. American Inst. of Electrical Engineers, winter general, New York, N.Y. (N. S. Hibshman, 33 W. 39 St., New York 18.)

2-6. American Soc. for Testing Materials (committee week), Pittsburgh, Pa. (ASTM, 1916 Race St., Philadelphia 3.)

3-5. Reinforced Plastics Conf., 14th, Chicago, Ill. (Society of Plastics Industry, Inc., 250 Park Ave., New York 17.)

6-7. American College of Radiology, Chicago, Ill. (W. C. Stronach, 20 N. Wacker Dr., Chicago 6.)

9-11. American Acad. of Allergy, Chicago, Ill. (B. Rose, Royal Victoria Hospital, Montreal, P.Q., Canada.)

9-11. Nature of Coal, symp., Bihar, India. (Director, Central Fuel Research Inst., P. O. Fuel Research Inst., Dhanbad District, Bihar.)

11-13. American Acad. of Occupational Medicine, Boston, Mass. (L. Blaney, 1608 Walnut St., Philadelphia, Pa.)

12-13. Solid State Circuits Conf., Philadelphia, Pa. (A. B. Stern, General Electric Co., Bldg. 3, Syracuse, N.Y.)

14. Short Range Navigation Aids, Montreal, Canada. (Intern. Civil Aviation Organization, Maison de l'aviation internationale, Montreal.)

15-19. American Inst. of Mining, Metallurgical, and Petroleum Engineers, annual, San Francisco, Calif. (E. O. Kirkendall, AIME, 29 W. 39 St., New York 18.)

16-19. Problems in Field Studies in Mental Disorders, intern. work conf., New York, N.Y. (J. Zubin, American Psychopathological Assoc., 722 W. 168 St., New York 32.)

(See issue of 19 December for comprehensive list)

A checklist of CB translations of 1958 Soviet scientific journals . . .

Biology and Medicine

- ✓ BULLETIN OF EXPERIMENTAL BIOLOGY AND MEDICINE (*Biulleten' Eksperimental'noi Biologii i Meditsiny*) 12 issues, \$20.00
- ✓ BIOCHEMISTRY (*Biokhimiia*) 6 issues, \$20.00
- ✓ PHARMACOLOGY AND TOXICOLOGY (*Farmakologiia i Toksikologiia*) 6 issues, \$25.00

Chemistry, Pure and Applied

- ✓ JOURNAL OF ANALYTICAL CHEMISTRY (*Zhurnal Analiticheskoi Khimii*) 6 issues, \$80.00
- ✓ JOURNAL OF GENERAL CHEMISTRY (*Zhurnal Obshchei Khimii*) 12 issues, \$90.00*
- ✓ BULLETIN OF THE ACADEMY OF SCIENCES, USSR, DIVISION OF CHEMICAL SCIENCE (*Izvestiia Akademii Nauk SSSR, Otdelenie Khimicheskikh Nauk*) 12 issues, \$45.00*
- ✓ PHYSICAL CHEMISTRY SECTION, PROCEEDINGS OF THE ACADEMY OF SCIENCES, USSR (*Doklady*) 6 issues, \$160.00
- ✓ JOURNAL OF APPLIED CHEMISTRY (*Zhurnal Prikladnoi Khimii*) 12 issues, \$60.00*
- ✓ CHEMISTRY SECTIONS, PROCEEDINGS OF THE ACADEMY OF SCIENCES, USSR (*Doklady*) 6 issues, \$25.00
- CHEMICAL TECHNOLOGY 6 issues, \$110.00
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Physics

- ✓ SOVIET JOURNAL OF ATOMIC ENERGY (*Atomnaia Energiia*) . . 12 issues, \$75.00
- ✓ COLLOID JOURNAL (*Kolloidnyi Zhurnal*) 6 issues, \$80.00

Miscellaneous

- ✓ GEOLOGICAL SCIENCES SECTIONS, PROCEEDINGS OF THE ACADEMY OF SCIENCES, USSR (*Doklady*) 6 issues, \$200.00
- ✓ CEMENT (*Tsement*) 6 issues, \$60.00
- ✓ METALLURGIST (*Metallurg*) 12 issues, \$95.00

A New Translation from Czechoslovak

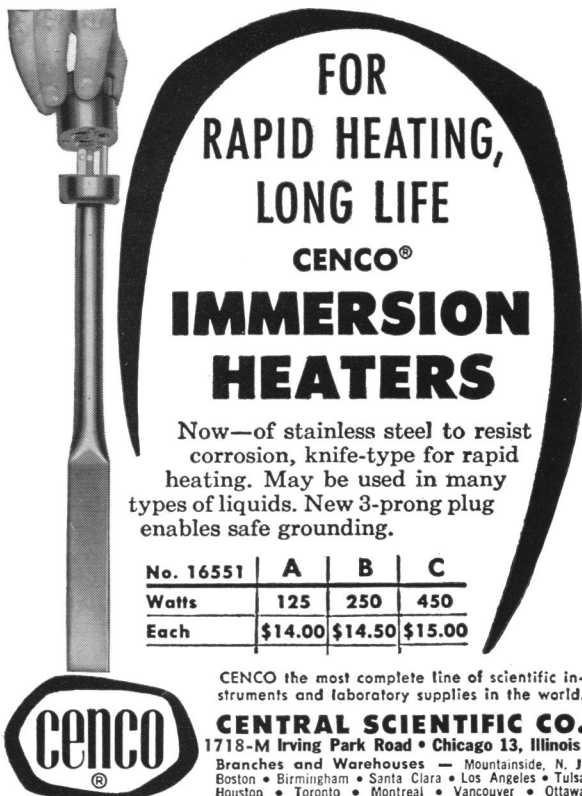
- ✓ THE CZECHOSLOVAK JOURNAL OF PHYSICS (Translation of Russian, German and French articles) . . 6 issues, \$50.00

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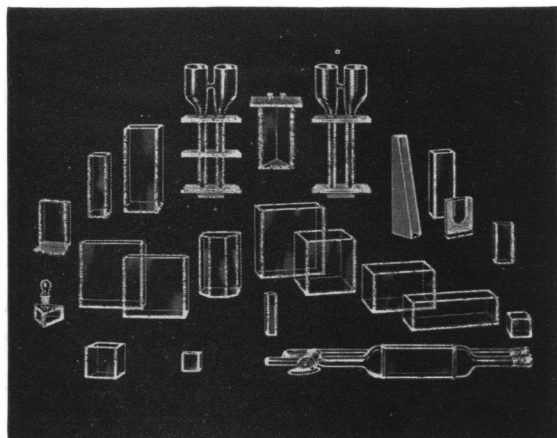
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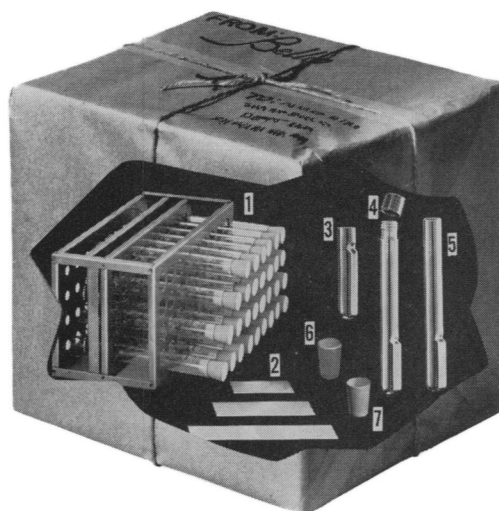
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Equipment

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■ **FUNCTION GENERATOR** employs conventional diode-breakpoint circuitry, but setup is accomplished by inserting a punched card into the front of the function generator and closing an actuating door over the card. Twenty segments are provided. The breakpoints are set with respect to the forcing function by means of plug-in resistor assemblies. The slope of the curve at a particular breakpoint is adjusted by the binary-coded information punched into the card. Repeatability of settings is ± 0.02 percent. (Mid Century Instrument Corp., Dept. 534)

■ **ELECTRONIC SWITCH** accepts four independent signals and sequentially converts them to a single input to an oscilloscope. Switching rate is 500 kcy/sec, permitting 2 μ sec per switch position. The unit consists of a free-running oscillator, an electronic counter, a diode gating matrix, and level-mixing cathode followers. (Newton Co., Dept. 544)

■ **PRESSURE TRANSDUCERS** of the diaphragm-variable reluctance type are offered with pressure ranges from 0 to 5 through 0 to 3000 lb/in.² and from ± 2 through ± 300 lb/in.². Sensitivity to shock and vibration is 0.001 to 0.03 percent/grav. Rise time is 75 to 150 μ sec. (Ultradyn Inc., Dept. 545)

■ **RECORDER AMPLIFIER** is designed to drive high-frequency galvanometers. The unit is a dual-channel, chopper-stabilized amplifier and is capable of delivering up to 200 ma at 0 to ± 10 v d-c or a-c (peak) in each channel. Gain is adjustable from 0.1 to 2.0 (Data Control Systems Inc., Dept. 546)

■ **SCINTILLATION WELL COUNTER** provides 2 in. of lead shielding in a sectionalized unit 7 in. in diameter by 12 $\frac{1}{4}$ in. high. The scintillation probe is equipped with a 2- by 2-in. NaI crystal and has a well for samples 1 in. in diameter. Removal of the shield plug elevates the probe unit to the top of the shield for sample changing. (Nuclear-Electronics Corp., Dept. 548)

■ **RADIATION DETECTOR** combines a gamma radiation detector with a transistorized radio for civil defense applications. Range of detection is background to 100 r/hr. An ionization chamber is used as the detector. Power is provided by a mercury battery. Indication is provided by a logarithmic-scale meter. (Riggs Nuclearonics Corp., Dept. 552)

■ **FLOWMETERS** of turbine type measure gas flow from 0.03 to 30,000 ft³/min. Each model of the series measures over a 10-to-1 range. Accuracy is ± 0.5 percent of reading. The smaller meters in the series use magnets imbedded in the spinning rotor to induce pulses in an external pick-up coil. Larger sizes use reluctance-type pick-ups. In either type the output drives totalizers, counters, rate indicators, recorders, and control devices. (Potter Aeronautical Corp., Dept. 554)

■ **CHROMATOGRAPH CONVERSION KIT** permits existing chromatographic instruments to be used in catalytic-combustion detection. The kit consists of a detector assembly, a bridge circuit, and a power supply. The detector assembly contains two catalytic combustion cells, one a reference cell. The cell block is made of stainless steel. All ports are $\frac{1}{8}$ -in. pipe tap. Output from the bridge is suitable for input to standard potentiometer-type recorders with 5- to 10-mm range and 1- to 2.5-sec full-scale speed. (Davis Emergency Equipment Co. and Greenbrier Instruments, Dept. 560)

■ **PHOTOMETER** is direct reading in density from 0 to 4. Accuracy is ± 0.02 density units over the entire range. The multiplier-phototube probe of the instrument is designed for use as a hand-held detector. Two attachments, a reflection head and a transmission attachment, are available. (Macbeth Corporation, Dept. 551)

■ **CONTROLLED-AIR SOURCE** provides air flows from 1 to 18 ft³/min over a range of pressures from near vacuum to 20 lb/in.². Wet-bulb temperatures ranging from 0° to 100°F and dry-bulb temperatures from 0° to 150° are controlled to $\pm 1^\circ$ F. Operation is on 115 v a-c. (Mira Corporation, Dept. 553)

■ **ENVIRONMENTAL TEST CHAMBER** permits testing in the temperature range -100° to +800°F. Temperature control is accurate within $\pm 2^\circ$ F. Interior working dimensions are 18 by 18 by 18 in. Insulation is 7-in. thick Fiberglas. A multipane window is optional. (Associated Testing Laboratories, Dept. 556)

■ **FLAW DETECTOR** locates defects in conductive materials. The instrument consists of an indicating unit, and an inspection probe. The latter is part of an anti-resonant bridge. As the probe passes over a crack or metallurgical difference, an unbalance occurs which is indicated by deflection of a meter. Compensation is provided to permit testing of semirough surfaces so that oxide layers or pits up to a thickness of 0.02 in. will not affect accuracy. (Magnaflux Corporation, Dept. 558)

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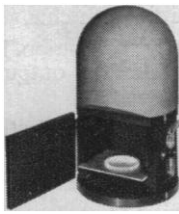
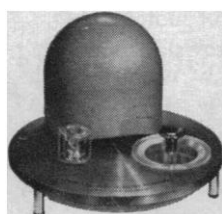
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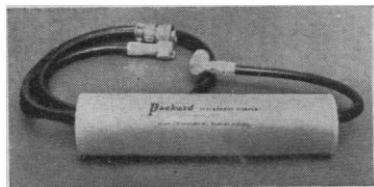


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