Athens, Greece. (Intern. Organizations Staff, Bureau of Intern. Commerce, U.S. Dept. of Commerce, Washington, D.C.)

Dept. of Commerce, Washington, D.C.) 28–30. Hypnosis and Psychosomatic Medicine, intern. congr., Paris, France. (H. C. Harding, 2050 NW Lovejoy, Portland 9, Ore.)

28-30. National Soc. for **Prevention** of Blindness, Houston, Tex. (J. W. Ferree, 16 E. 40 St., New York 10016)

28-1. Biometric Soc., Florida State Univ., Tallahassee. (E. L. LeClerg, 6804 40th Ave., University Park, Hyattsville, Md. 28-1. American College Health Assoc.,

28-1. American College Health Assoc., Miami Beach, Fla. (R. E. Boynton, 5518 Merrick Dr., Coral Gables, Fla.)

29–30. Space Navigation and Communications, natl., Houston, Tex. (P. Schrock, Inst. of Navigation, 711 14th St. NW, Washington, D.C. 20005)

29-30. Association for **Symbolic Logic**, Chicago, Ill. (T. Hailperin, Dept. of Mathematics, Lehigh Univ., Bethlehem, Pa. 18015)

29-1. American Assoc. of Endodontists, Detroit, Mich. (E. C. Van Valey, 9 Rockefeller Plaza, New York 10020) 29-1. American Assoc. for History of

29-1. American Assoc. for **History of Medicine**, Philadelphia, Pa. (J. B. Blake, Natl. Library of Medicine, 9600 Wisconsin Ave., Bethesda, Md.)

29-1. American Acad. of Neurology, annual, Cleveland, Ohio. (AAN, 7100 France Ave. S., Minneapolis, Minn. 55410)

29-1. Midwestern **Psychological** Assoc., 27th annual, Chicago, Ill. (F. A. Mote, Psychology Bldg., Madison, Wis. 53706)

29-1. American Philosophical Assoc., western div., Chicago, Ill. (L. E. Hahn, Dept. of Philosophy, Southern Illinois Univ., Carbondale)

29-2. Protides of the **Biological Fluids**, 13th colloquium, Bruges, Belgium. (P.O.B. 71, Bruges 1)

29-2. Association of **Clinical Scientists**, New York, N.Y. (R. P. MacFate, ACS, 300 N. State St., Chicago, Ill. 60610)

29-2. Pan American Medical Assoc., 40th annual congr., Grand Bahama Island. (PAMA, 745 Fifth Ave., New York 10022)

29-2. Roentgen, 46th German congr., Nuremberg, Germany (A. Jakob, c/o Strahleninstitut der Städt, Krankenanstalten, Flurstr. 17, 85 Nuremberg)

30-1. Colorado-Wyoming Acad. of Science, annual, Univ. of Denver, Denver, Colo. (C. Norton, Dept. of Botany and Plant Pathology, Colorado State Univ., Fort Collins)

30-1. Indiana Acad. of Science, Culver. (C. F. Dineen, St. Mary's College, Notre Dame, Ind. 46556)

30-1. Nebraska Acad. of Sciences, Lincoln. (C. B. Schultz, Morrill Hall 101, Univ. of Nebraska, 14th and U St., Lincoln 68508)

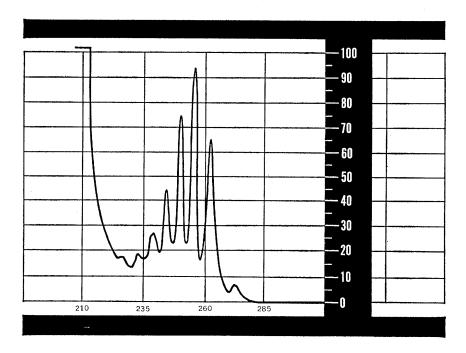
30-2. Society of **Biological Psychiatry**, New York, N.Y. (G. N. Thompson, 2010 Wilshire Blvd., Los Angeles, Calif.)

30-2. Academy of Psychoanalysis, annual, New York, N.Y. (A. H. Rifkin, 125 E. 65 St., New York 10021)

30-2. American **Psychosomatic** Soc., annual, Philadelphia, Pa. (APS, 265 Nassau Rd., Roosevelt, N.Y. 11575)

30-3. American **Psychoanalytic** Assoc., 52nd annual, New York, N.Y. (APA, 1 E. 57 St., New York 10022)

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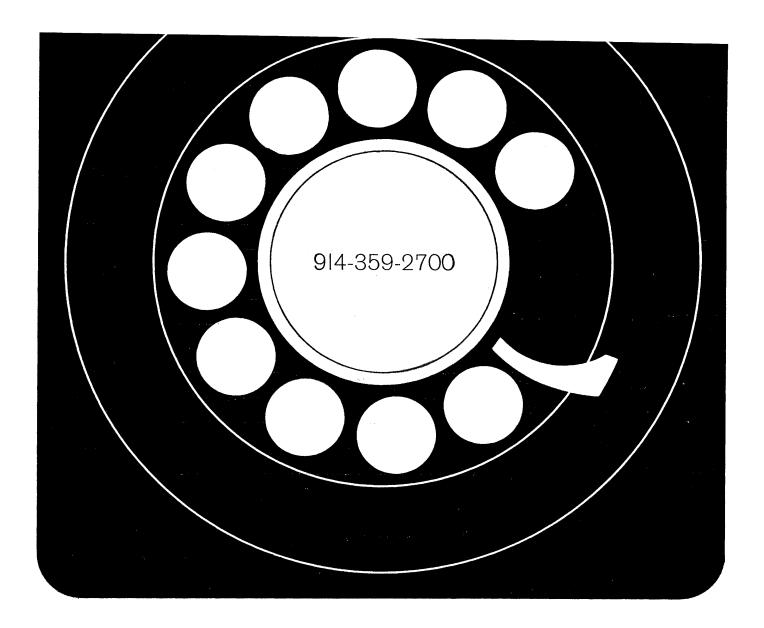
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Atmospheric particle sampler, versatile, compact, economical, collects particles  $\geq 1 \mu$  from large volumes of air (≤ 115 lit./min) on miniature-battery power. The portable Rotorod has two components: constant-speed motor in a case measuring 1.5 by 1.5 by 3.5 inches high (3.8 by 3.8 by 8.9 cm); and a rotating collector rod. Particles are collected by impaction on the leading edge of the rotating rod. Volume of air sampled is that swept out by the collection surface; sampling rate is constant if motor speed is constant. Number, character, and size of particles collected are determined microscopically, and volume of air sampled and particles per unit volume are calculated. Motor speed is constant at 2400 rev/min  $\pm$  2 percent at from 9 to 16 volts. Battery life for continuous operation: 4 hours on two 6-volt radio batteries; 50 hours on 12-volt lantern battery; 700 hours on 12-volt automobile battery. Rods available in two configurations: type H for particles of 1 to 10  $\mu$  (sampling rate, 41 lit./min); type U for particles  $\geq 10 \mu$ (115 lit./min). Collecting surface is coated with tacky silicone grease or other suitable material. Samples may be collected on either side of the rod by reversing battery polarity (and rod rotation). Model 60A (170 g) can be tripod-mounted or suspended from a balloon; several can be arranged for sequential measurements. For laboratories or industries concerned with measuring indoor-air pollution, table-

The material in this section is prepared by Denis J. Prager (D.J.P.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment).

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 Readers' Service card N.Y.)

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By Gustav Levander, Department of Anatomy, University of Uppsala, Uppsala, Sweden

1965

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mount model 60A-P has: both batteries and a jack for external power, reversing switch, and jack for timer. Model 60A costs less than \$100.—D.J.P. (Metronics Associates, Inc., 3201 Porter Drive, Stanford Industrial Park, Palo Alto, Calif.)

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Sample chromatograms of physiological fluid analyses made in 11 hours with Beckman Instruments model 120B amino acid analyzer are featured in a new brochure, DS-248. The accelerated run-times result from the use of spherical resins as the column packing. All peaks are labeled, and accelerated run times are indicated. Samples represented are human urine, human plasma, and a synthetic mixture of amino acids and related compounds normally found in physiological fluids (the concentration of each component of this mixture is indicated). Column size and height, flow rates, back pressure, sample size, buffers and times, and column temperatures and times are given. The brochure is a convenient reference, and a convincing advertisement for the Beckman analyzer. Dimensions: 21.75 by 16.75 inches (55 by 42 cm). Copies of the brochure are available from Beckman. -D.J.P. (Spinco Div., Beckman Instruments, Inc., Palo Alto, Calif.)

#### Circle 5 on Readers' Service card

Thermoelectric microwave power meter, measures from 0.3 µw to 100 mw full scale within 1 percent. Power heads employ a well-matched load which absorbs the incident radio-frequency power; the load is made up of bismuth and antimony films vacuumdeposited on a Mylar substrate in a configuration that produces a number of thermoelectric junctions. Some junctions are thermally "sinked" to the transmission line; others are located in the air space within the line. The absorbed power increases the temperature of these junctions relative to the "sinked" junctions, and a thermoelectric emf, linearly proportional to the power, is generated. This voltage is fed to a chopper-stabilized d-c voltmeter (calibrated to read in power) whose noise and drift are specified at less than 1 percent peak-to-peak of full scale on the lowest ranges and correspondingly less on higher ranges. Dynamic operating range of the voltmeter is 65 db, permitting measurements of rf power from 0.3 µw full scale to 100 mw full scale in 12 ranges. Accuracy is ± 1 percent of full scale; ambient-temperature sensitivity is less than 0.1 percent of reading per degrees centigrade. Three coaxial power heads, each with a dynamic range of 45 db and each covering the frequency range from 10 Mcy/sec to 12.4 Gcy/sec, are available. Two such heads, models N421 and N422, cover the rated power range, with a 25 db (5 scale) overlap; the third head, model N420, covers an intermediate range from 3 µw full scale to 10 mw full scale. Waveguide power heads, covering the frequency range from 8.2 to 40.0 Gcy/sec and rated from 3  $\mu$ w to 10 mw, are also available. The voltmeter zero-set position carries over from range-to-range. The power heads require no bias current, so that after zero-setting the operator simply connects to the source under test and reads rf power. Several heads can be used with a single meter for multipoint monitoring. Junction box for manual switching between five different power heads is an accessory. List: voltmeter model 454A, \$475; power heads, \$250 to \$400 .- D.J.P. (General Microwave Corp., 155 Marine St., Farmingdale, N.Y. 11735)

#### Circle 6 on Readers' Service card

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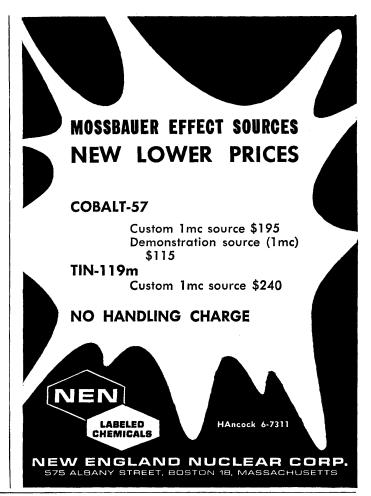
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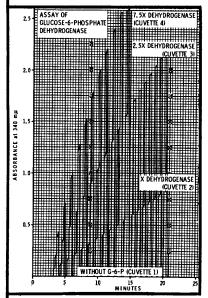
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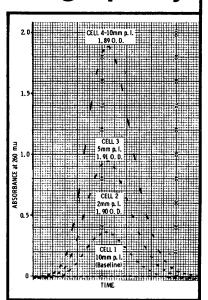
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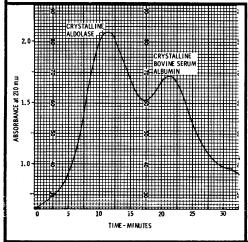
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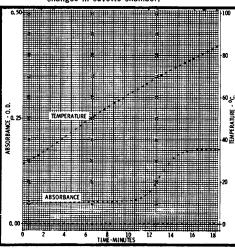
Salmon Sperm DNA profile illustrates linear registration of both temperature and absorbance changes on the same scale. Gilford Model 2000 equipped with Gilford Linear Thermosensor which measures temperature changes in cuvette chamber.

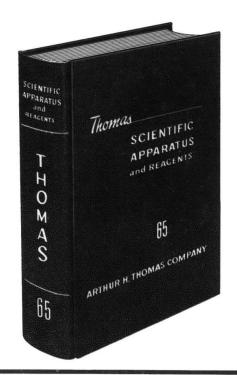




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