New Products

Remotely controlled analytical balances allow highly precise weighings of radioactive, toxic, or explosive materials to be made safely and easily. With capacities to 8000 g, the balance has an optical scale range of 10 g. Accuracy is ± 1 mg. Safety is insured when working with high levels of radioactivity such as are found in fuel cores or contaminated specimens. Remote-control units can be used to determine the density of radioactive substances, and to measure density changes in radioactive fuel sources. Explosive materials can be compounded behind thick protective shields. Poisonous chemical compounds and bacteriological substances can be effectively weighed in isolation chambers. Balances can be sterilized and introduced into gnotobiotic systems. The large optical scale makes it possible to read results from a distance of 14 feet without the use of optical aids.-R.L.B. (Mettler Instrument Corp., Dept. \$292, 20 Nassau St., Princeton, N.J.)

M.O.U.S.E. spirometer continuously maintains constant pressure in a metabolism chamber by adjusting the volume with a piston moved by a servo system. Carbon dioxide is removed by an adsorbant so that the displacements of the piston measure the volume of oxygen removed so long as the temperature is maintained constant. As the piston moves, a pen fixed to the piston scribes a line on a graph paper along with 1-minute timer marks to provide a record of volume uptake per minute (length of line between markers) and total integrated oxygen consumption (total length of line). The standard instrument has a piston volume of 300 ml in 18 inches of travel and is accurate to 0.5 ml. M.O.U.S.E. stands for Minute Oxygen Uptake Servo Equipment, but the equipment is equally useful for small plants and animals that can be placed in an air-tight enclosure and maintained at constant temperature. Lucite animal chambers surrounded by water to reduce temperature changes are available as accessories.— R.L.B. (Aloe Scientific, Dept. S295, 1831 Olive St., St. Louis 3, Mo.)

Electronic printer (model S-C 3070) is said to be capable of printing at speeds up to 3000 words per minute. The device utilizes a shaped-beam tube and electrostatic printing. Beam-formed images are optically projected from the tube onto light-sensitive paper. Development is accomplished by brushing the exposed surface of the paper with a dry, powdered ink and passing the paper under a heating element to fuse the powdered ink to the paper. Replacement paper rolls can be loaded without interrupting operation .--- J.s. (General Dynamics/Electronics, Dept. S232, P.O. Box 127, San Diego 12, Calif.)

Airborne spectrum analyzer is designed for pretelemetering analysis of random acoustic and vibration signals generated in airborne vehicles. Compatible with IRIG telemetry standards, the nine-channel analyzer is said to reduce bandwidth requirements by factors as high as 1000 for telemetering over narrow-band PAM, PCM, or PDM channels. Output signals are double ended, balanced, and isolated from both each other and the inputs. Data are analyzed and transmitted in real time with data frequency range 200 cy to 2 kcy/sec. The equipment weighs 12 lb and measures 11 by 7 by 4 inches .----J.S. (Gulton Industries, Inc., Dept. S264, 212 Durham Ave., Metuchen, N.J.)

Grating monochromator is offered in building-block design to accommodate several sources, detectors, cell holders, and optical benches for assembly into special-purpose configurations. The slit mechanism is a tandem linked parallelogram design with a micrometer adjustment dial. Wavelength setting is indicated by a precision dial indicator linked to the grating cartridge. Wavelength range is 200 to 1400 m μ , depending on grating. Aperture f/4.4and reciprocal dispersion is 6.6 m_{μ} / mm for 600-line gratings and 250-mm spherical mirrors. Wavelength selection can be set manually or operated automatically for recording spectra by means of several drives available .--R.L.B. (American Instrument Co., Dept. S294, 8030 Georgia Ave., Silver Spring, Md.)

Radiation monitor is a Geiger-Müller tube instrument designed for carrying in the pocket. Four ranges of 0 to 10, 100, and 1000 mr/hr and 0 to 100 r/hr provide direct and instantaneous indication of the gamma or x-ray field. Energy dependence is said to be \pm 15 percent of gamma or x-ray energies between 80 kev and 1.2 Mev. All electronics circuits can be checked by a test position on the function selector switch. Radiological operation can be checked with a small radioactive source such as a luminous watch dial. A phone jack is provided for earphone monitoring. More than 40 hours of continuous operation are provided by one 4.2-v battery.-J.s. (Radiation Equipment and Accessories Corp., Dept. S281, 665 Merrick Rd., Lynbrook, N.Y.)

Precision power supply and null voltmeter are combined in the model VC-200 voltage calibrator. The instrument is completely solid-state in design except for three tubes in the power supply output stage. Output is 0 to 1000 v d-c and measurement range is 0 to 1000 v. Accuracy as a voltage source is said to be ± 0.01 percent $+50 \mu v$ and, as a voltmeter, ± 0.01 percent $+5 \mu v$. Zener diodes are utilized as voltage reference. Selected and aged wire-wound resistors and an ultra-linear Kelvin-Varley divider are said to assure stability of 0.001 percent for a 10-percent change in line voltage and similar regulation from no-load to full-load. The instrument is continuously selfcalibrating .-- J.s. (Calibration Standards Corp., Dept. S301, 1031 Westminster Ave., Alhambra, Calif.)

SCIENCE, VOL. 137

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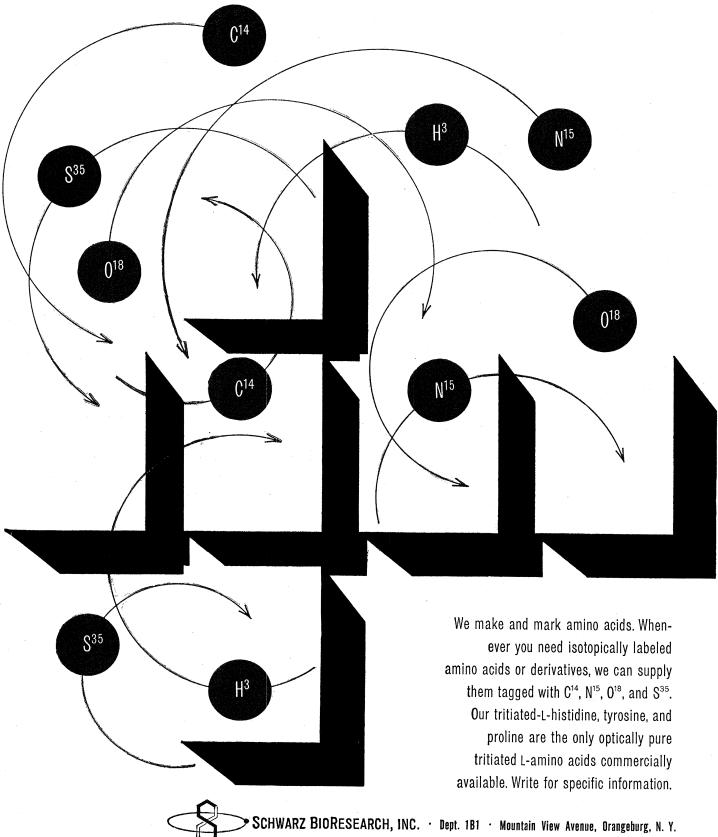
Robert L. Bowman (R.L.B.), Laboratory of Technical Development, National Heart Institute, Bethesda 14, Md. (medical electronics and biomedical laboratory equipment). Joshua Stern (J.S.), Basic Instrumentation Sec-

Joshua Stern (J.s.), Basic Instrumentation Section, National Bureau of Standards, Washington 25, D.C. (physics, computing, electronics, and nuclear equipment).

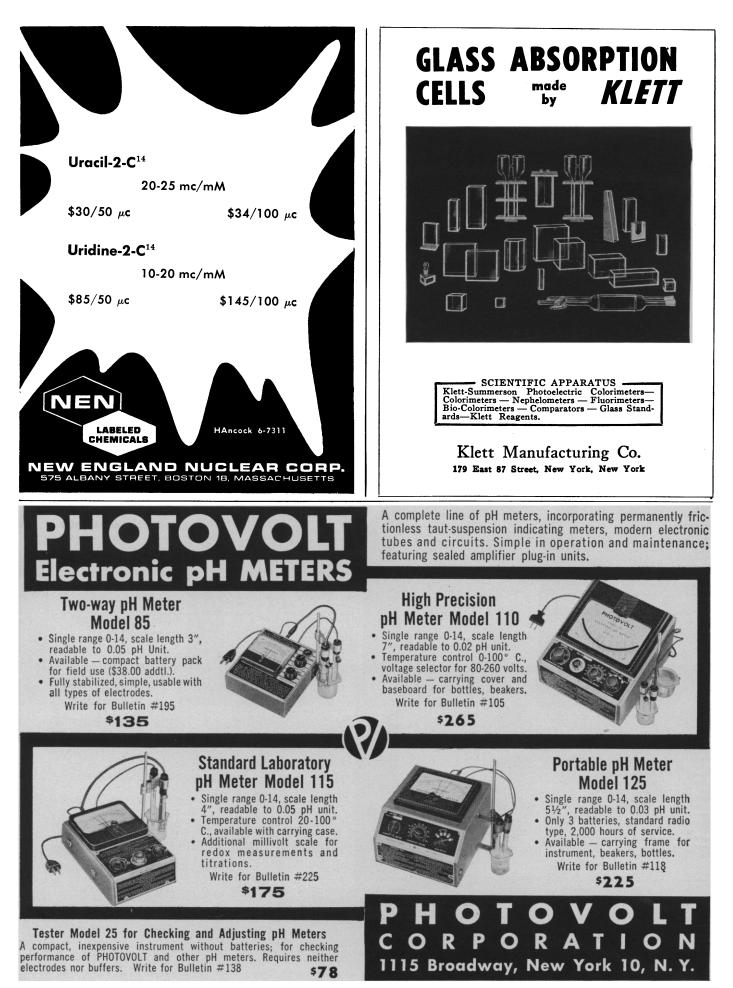
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SCIENCE, VOL. 137

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Biologist, Ph.D. Well-trained in physiology, cy-tology, histology, anatomy, embryology, entomol-ogy, parasitology, zoology; 6 years' experience in teaching and research. Publications. Member of scientific societies, Seeks faculty appointment at college or graduate school. Box 148, SCI-ENCE. 7/13

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Virologist-Microbiologist, M.A., Ph.D. Desires supervisory, administrative or teaching and research position. Experience in virology, tissue culture, virologic diagnostic work and teaching medical microbiology. Prefer West Coast. Box 157, SCI-ENCE. 7/27

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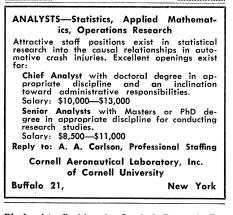
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Desire Ph.D. in general physiology or pharmacology preferably with some training in calculus to conduct basic and applied research studies which encompass broad functional areas, e.g., analgesics, cardiovascular agents, antitussives, etc.

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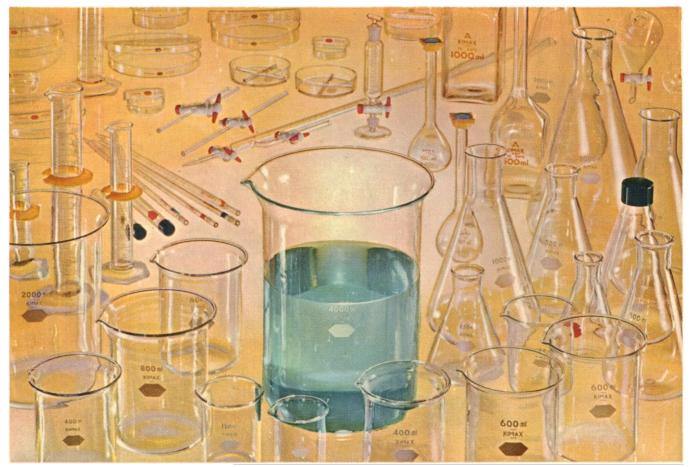
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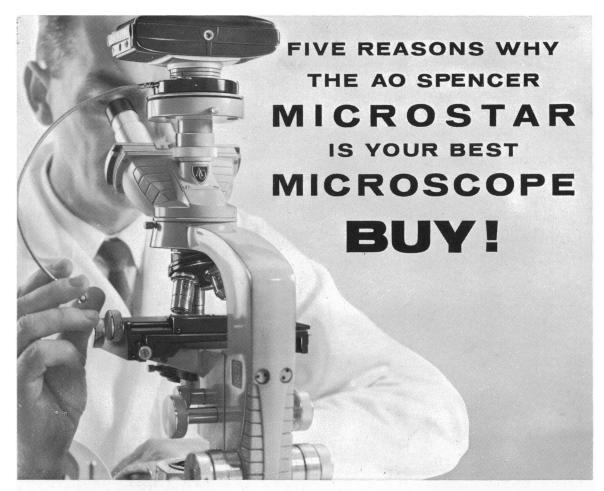
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