

NEW!



BOOKS by DAVIS

BASIC ENDOCRINOLOGY

For Students of Biology and Science

by **BROWN & BARKER**

This new book is unique in its approach to endocrinology. It concentrates on the basic principles of endocrinology, the basic mechanisms of the glands, their functions, biological and biochemical assays of the hormones. The authors take the general approach—not clinical—and clarify a difficult subject. Simple, well-written, helpfully diagrammed.

By **J. H. U. BROWN, Ph.D.** and **S. B. BARKER, Ph.D.** 225 pages. \$4.50

ELECTROLYTES AND PLANT CELLS

by **BRIGGS, HOPE & ROBERTSON**

Specially prepared to aid the plant physiologist whose primary interests lie in the field of absorption of ions by plant cells and tissues. The authors discuss properties of electrolytes and plant cells, physical interactions between cells and electrolytes, metabolic interactions, electrolytes in tissues and plants.

By **G. E. BRIGGS, M.A., F.R.S.**, **A. B. HOPE, Ph.D.**, and **R. N. ROBERTSON, B.Sc., Ph.D., F.A.A., F.R.S.** 224 pages, illustrated. \$6.95

APICAL MERISTEMS

by **CLOWES**

This book discusses how all the organs of plants develop from apical meristems—a study that is the equivalent in botany to the embryology of animals. A valuable collection of evidence is brought together from experimental and observational studies, from biochemical and anatomical investigations, from chimeras and cell structure. The significance of the findings is carefully explained.

By **F. A. L. CLOWES, M.A., D.Phil.** 224 pages, illustrated. \$6.75

CYTOGENETICS OF POLYPOIDS

by **DAWSON**

Polyploids are here discussed in a concise and lucid presentation that will be most helpful to students of plant breeding, ecology, taxonomy, botany, zoology and agriculture. The book will prove useful, too, to workers in genetics and cytology.

By **G. W. P. DAWSON, B.Sc., M.A.** 96 pages, illustrated. Ready May 1962, about \$2.00

F. A. DAVIS COMPANY

PUBLISHERS—Since 1879

1914 Cherry Street

Philadelphia 3

man (Worcester Foundation), E. L. Durrum (Beckman Instruments), Kristen Eik-Nes (University of Utah), Leon Hellman (Sloan-Kettering Institute), Raymond Jonnard (Prudential Insurance Company), C. F. Kossack (International Business Machines), Seymour Lieberman (Columbia), Avery A. Sandberg (Roswell Park Memorial Institute), and J. F. Tait (Worcester Foundation).

A limited number of transcripts of this conference is available from the American Cancer Society, Inc., 521 West 57th Street, New York 19.

LEWIS L. ENGEL

Massachusetts General Hospital and Department of Biological Chemistry, Harvard Medical School, Boston

Forthcoming Events

April

14-18. Federation of American Societies for Experimental Biology, Atlantic City, N.J. (M. O. Lee, 9650 Wisconsin Ave., Washington 14)

14-19. American Inst. of Nutrition, Atlantic City, N.J. (A. E. Schaefer, Bldg. 16-A, Natl. Institutes of Health, Bethesda 14, Md.)

14-19. American Soc. of Biological Chemists, Inc., Atlantic City, N.J. (F. W. Putnam, Dept. of Biochemistry, Univ. of Florida College of Medicine, Gainesville)

15-18. American College Personnel Assoc., Chicago, Ill. (B. A. Kirk, Counseling Center, Univ. of California, Berkeley)

15-18. National Education Assoc., Council of Mathematics Teachers, San Francisco, Calif. (Chief of Information, Dept. of the Army, Washington 25)

16-18. Flight Test Instrument Symp., intern., Cranfield, England. (College of Aeronautics, Cranfield)

16-18. Spins and Phonons, conf., Bristol, England. (P. M. Llewellyn, H. H. Sills Physics Laboratory, Royal Fort, Bristol 8)

16-19. American Personnel and Guidance Assoc., annual, Chicago, Ill. (J. Fishbein, Science Research Associates, 259 E. Erie St., Chicago 11)

16-19. Interactions between Mathematical Research and High-Speed Computing, symp., American Mathematical Soc.-Assoc. for Computing Machinery, Atlantic City, N.J. (E. Pitcher, AMS, 190 Hope St., Providence 6, R.I.)

16-19. Paleoclimatology and Paleopedology, symp., International Soc. for Plant Geography and Ecology, Stolzenau, Germany. [R. Tüxen, Intern. Vereinigung für Vegetationskunde, Stolzenau (Weser)]

16-19. Vacuum Ultraviolet Radiation Physics, intern. conf., Los Angeles, Calif. (G. L. Weissler, Univ. of Southern California, Los Angeles 7)

16-20. American Physiological Soc., Atlantic City, N.J. (R. G. Daggs, APS, 9650 Wisconsin Ave., Washington 14)

16-20. American Soc. for Pharmacology and Experimental Therapeutics, Atlantic



F & M MODEL 240 TEMPERATURE PROGRAMMER FOR PRECISE TEMPERATURE CONTROL

If precise temperature control is required investigate F & M's new Model 240 Power Proportioning Temperature Programmer. The Model 240 supplies the right amount of power for maintaining the desired temperature for differential thermal analysis apparatus, gas chromatographs, melting point apparatus or any other application where precise temperature control or heating rates are required.

The Model 240 features digital temperature readout and twelve heating rates from 0.5 to 30°C per minute.

It has a standard range of 0°-500°C. Other ranges can be supplied on order.



For further information concerning the Model 240 or any F & M instrumentation, write or phone F & M today.

F & M SCIENTIFIC CORPORATION
STARR ROAD & ROUTE 41, AVONDALE, PENNA.
COlony 8-2281 (Area Code 215) § TWX K SQ 17

Don't be hoodwinked...
insist upon
KEWAUNEE
AIRFLOW
FUME HOODS

Our hero, after making extensive tests (inside, of course), unbiasedly reports that no other FUME HOOD, regardless of cost, performs like hisen's! Space doesn't permit details so just send for complete information on laboratory FUME HOODS.



Note: We have 4 ft., 5 ft., and 6 ft. stainless steel lined Airflow Fume Hoods in stock. They are available for immediate shipment.

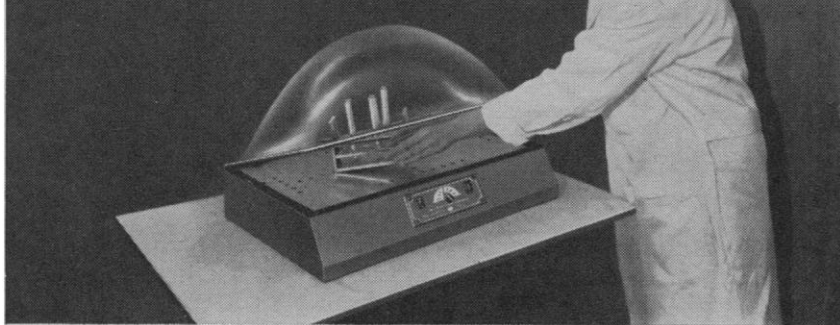
* If you have a group who'd like to see the real "inside dope" on fume hoods, there's a 20 minute movie available.

K · S · E

KEWAUNEE
SCIENTIFIC
EQUIPMENT
ADRIAN,
MICHIGAN

4004 Logan Street

Never before such
complete visibility...
such low cost!



NEW VISIDOME INCUBATOR

FUNCTION WITH A FLAIR! Clean-lined ultra-modern styling... a welcome addition to every well-equipped laboratory or doctor's office. Full visibility is achieved through the clear plastic domed cover; thus specimens may be viewed without disturbing them. Unit has a handsome "prestige" look... is portable, can be carried easily by one person and set upon any table top. Ingenious, uncomplicated design eliminates corners and crevices, facilitates cleaning; and

the tray can be sterilized. New flexible plastic hinge (no hinge pin) is guaranteed for one million flexes! Tray measures 12" x 21"; inside height of dome is 8 3/4". Temperature: ambient to 140° F. Capacity is just about twice that of competitive units... and the all-new VisiDome's amazingly low price virtually defies comparison. Yet, in spite of its modest cost, this is a finely made U. S. product, with top quality construction throughout.

T-14510 VISIDOME INCUBATOR . . . \$78.50
Write for detailed bulletin.

The EMIL GREINER Co.
(a div. of)

26 No. Moore St., Dept. 524, New York 13, N. Y.

City, N.J. (H. G. Mandel, George Washington Univ. School of Medicine, 1337 H St., NW, Washington 5)

16-20. Reactor Safety and Hazards Evaluation Techniques, symp., Vienna, Austria. (Intern. Atomic Energy Agency, 11 Kaerntnerring, Vienna 1)

17-18. Conference on Permafrost, Ottawa, Ont., Canada. (R. J. E. Brown, Div. of Building Research, Natl. Research Council, Ottawa 2)

17-20. International Mineralogical Assoc., Washington, D.C. (D. J. Fisher, Dept. of Geology, Univ. of Chicago, Chicago 37, Ill.)

17-20. Sector-Focused Cyclotrons, conf., Los Angeles, Calif. (B. T. Wright, Dept. of Physics, Univ. of California, Los Angeles 24)

18-20. American Inst. of Electrical Engineers, Fort Wayne, Ind. (R. S. Gardner, AIEE, 33 W. 39 St., New York 18)

18-20. Information Retrieval in Action, conf., Cleveland, Ohio. (Center for Documentation and Communication, Western Reserve Univ., 10831 Magnolia Dr., Cleveland 6)

18-28. World Seed Congr., Rome, Italy. (Intern. Agency Liaison Branch, Office of the Director General, Food and Agriculture Organization of the U.N., Viale delle Terme di Caracalla, Rome)

19. Southern California Acad. of Sciences, Los Angeles. (G. Sibley, Los Angeles County Museum, 900 Exposition Blvd., Los Angeles 7)

19-20. Southern Municipal and Industrial Waste Conf., Chapel Hill, N.C. (Dept. of Sanitary Engineering, Univ. of North Carolina, Box 899, Chapel Hill)

19-21. Southern Soc. for Philosophy and Psychology, Memphis, Tenn. (D. R. Kenshalo, Dept. of Psychology, Florida State Univ., Tallahassee)

20-22. Czechoslovak Soc. of Arts and Sciences in America, 1st natl. congr., Washington, D.C. (M. Rechcigl, Jr., 1703 Mark Lane, Rockville, Md.)

21. Pennsylvania Acad. of Science, Pittsburgh. (K. B. Hoover, Messiah College, Grantham, Pa.)

21-21 Oct. World's Fair of Science, Century 21 Exposition, Seattle, Wash. (J. Rockey, c/o Seattle World's Fair, Seattle)

22-26. Association of American Geographers, Miami Beach, Fla. (M. F. Burrill, AAG, 1785 Massachusetts Ave., NW, Washington, D.C.)

23-25. Canadian Inst. of Mining and Metallurgy, annual, Ottawa, Ont. (C. Gerow, CIMM, 1117 St. Catherine St., W. Montreal 2, Quebec, Canada)

23-25. Meteorological Uses of Rockets and Satellites, symp., Washington, D.C. (World Meteorological Organization, 41, Avenue Giuseppe Motta, Geneva, Switzerland)

23-25. Pan American Congr. of Gastroenterology, New York, N.Y. (C. A. Flood, 180 Fort Washington Ave., New York 32)

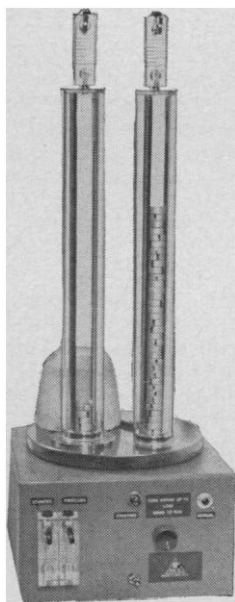
23-26. American Physical Soc., Washington, D.C. (K. K. Darrow, APS, Columbia Univ., New York 27)

23-27. International Conf. on Palynology, Tucson, Ariz. (G. O. W. Kremp, Geochronology Laboratories, Univ. of Arizona, Tucson)

23-27. Problems in Education and Re-

AUTOMATIC SAMPLE CHANGING

- windowless detection provides high efficiencies for H^3 , C^{14} , P^{32} , S^{35} , Ca^{45}
- continuous pre-flush speeds counting



New RCL Automatic Sample Changer provides *higher* efficiency of windowless gas flow detection without contaminating the counting chamber—and a *faster counting rate*. New design features unique pre-flush chamber ahead of the counting chamber and a four-position precision geneva movement sample changer.

Counting column holds 50 samples in pans up to $1\frac{1}{4}$ " diameter. Samples automatically (or manually) advance to pre-flush chamber, where counting gas atmosphere flushes out normal air contamination. Samples then enter counting chamber under positive pressure which prevents contamination from the pre-flushing chamber. Continuous flow of counting gas over samples permits instantaneous reading.

When changer is combined with RCL Printing Scaler-Timer, Model 20318, the count can be automatically recorded. Output can be routed to digital tape printer, x-y curve plotter, nixie display or almost any other readout or printout device.



**RADIATION COUNTER
LABORATORIES, INC.**

5121 West Grove Street, Skokie, Illinois,
U.S.A., Phone: YOrktown 6-8700

13 APRIL 1962

search in Tropical Biology, conf., San Jose, Costa Rica. (J. M. Savage, Dept. of Biology, Univ. of Southern Calif., Los Angeles 7)

23-5. Television Arts and Sciences, intern. symp. and festival, Montreux, Switzerland. (Intern. Television Symp., 8, Grand-Rue, Montreux)

24-25. Building Research Inst., spring conf., Washington, D.C. (M. C. Coon, Jr., BRI, 2101 Constitution Ave., NW, Washington 25)

24-25. Managing Petroleum and Petrochemical Operations, conf., San Antonio, Tex. (J. Harmon, Southwest Research Inst., 8500 Culebra Rd., San Antonio 6)

24-26. Mathematical Theory of Automata, intern. symp., New York, N.Y. (Symposium Committee, Polytechnic Inst. of Brooklyn, 55 Johnson St., Brooklyn 1, N. Y.)

25. Rocket Propulsion, symp., Cranfield, Bletchley, England. (Secretary, British Interplanetary Soc., 12 Bessborough Gardens, London, S.W.1, England)

25-27. International Federation of Associations of Textile Chemists and Colorists, annual, Amsterdam, Netherlands. (J. Boulton, Dean House, 19, Piccadilly, Bradford 1, Yorks, England)

25-27. Present Status and Future Prospects of Television and Motion Pictures as Media for Medical Education, intern. conf., Milan, Italy. (L. L. Leveridge, Medical Television Unit, New York Univ. Medical Center, 550 First Ave., New York 16)

25-27. Pulp and Paper Instrumentation Symp, natl., Jacksonville, Fla. (L. G. Good, Systems Service Corp., P.O. Box 952, Charlotte, N.C.)

27-28. Idaho Acad. of Science, annual, Moscow. (L. M. Stanford, College of Idaho, Caldwell)

27-29. Oklahoma Acad. of Science, Woodward. (A. D. Buck, Northern Oklahoma Junior College, Tonkawa)

27-29. West Virginia Acad. of Science, Bethany. (J. D. Draper, Dept. of Chemistry, West Virginia Univ., Morgantown)

28. Mississippi Acad. of Sciences, Inc., Jackson. (C. Q. Sheely, Mississippi State Univ., State College)

29-2. International Acad. of Pathology—American Assoc. of Pathologists and Bacteriologists, Montreal, Canada. (F. K. Mostofi, c/o Armed Forces Inst. of Pathology, Washington 25)

29-2. National Workshop on Aging, American Home Economics Assoc., Lafayette, Ind. (A. J. Bricker, AHEA, 1600 20th St., NW, Washington 9)

29-3. American Ceramic Soc., annual, New York, N.Y. (C. S. Pearce, ACS, 4055 N. High St., Columbus 14, Ohio)

29-4. Society of Motion Picture and Television Engineers, annual, Los Angeles, Calif. (H. Teitelbaum, SMPTE, 55 W. 42 St., New York 36)

30-1. International Acad. of Pathology, annual, Montreal, Canada. (M. Davis, Intersociety Committee on Pathology Information, 1785 Massachusetts Ave., NW, Washington 6)

30-1. International Acetylene Assoc., annual, Toronto, Canada. (L. Matthews, 30 E. 42 St., New York 17)

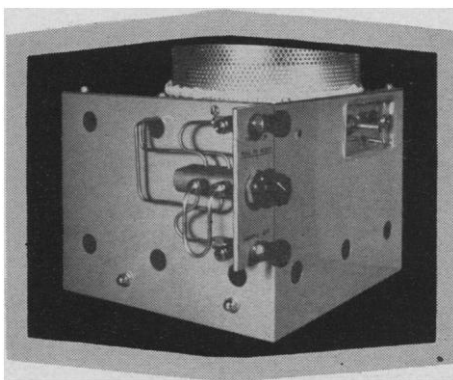
30-2. American Soc. of Mechanical Engineers, Design Engineering Div., Phil-



F & M GAS CHROMATOGRAPH SAMPLING ACCESSORIES

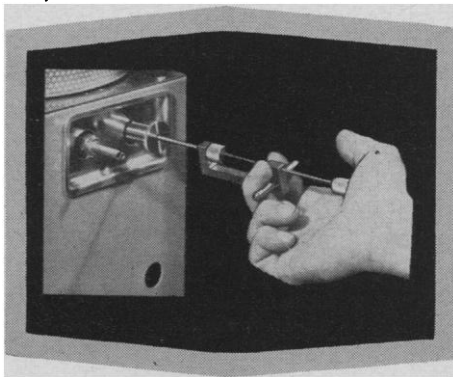
F & M has sampling accessories available for introduction of gases, liquids, or solids into gas chromatographs.

A complete line of Hamilton Microliter syringes is available from F & M, including gas tight syringes for delivering gases and corrosive liquids.



For the introduction of reproducible gas samples F & M offers the Model GV-10 Gas Sampling Valve. The GV-10 is designed for leak-free performance at pressures up to 100 psig and temperatures up to 200°C.

The Model SI-4 Solid Sample Injector provides a convenient method of introducing solid samples. Introduction of the sample as a solid eliminates the interference of a solvent on separation and analytical results.

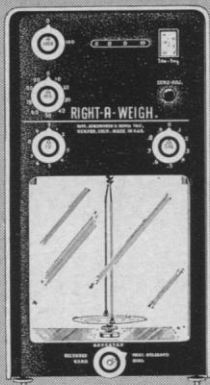


For further information concerning any F & M instrumentation or accessories write or phone F & M today.

F & M SCIENTIFIC CORPORATION
STARR ROAD & ROUTE 41, AVONDALE, PENNA.
COlony 8-2281 (Area Code 215) 5 TWX K SQ 17

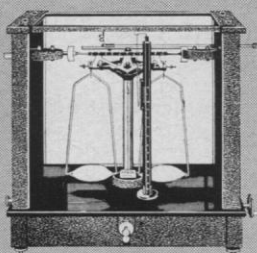
a balance for every need

by
AINSWORTH



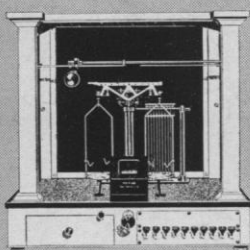
Right-A-Weigh Model SC Substitution Weighing Balance

Speed, accuracy and convenience...you just load the pan, dial weights, and read results. Capacity: 200 g; sensitivity: 1/10 mg; reproducibility (precision): ± 0.03 mg; readability: 1/20 division on projected scale.



Model DLB-M2 Analytical Balance

A long-time favorite for reliable, versatile and economical performance, with fairly fast operation. Capacity: 200 g; sensitivity: 1/20 mg.

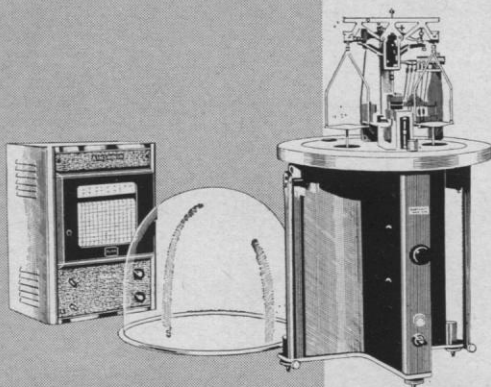


Model FHM Micro Balance

A quality instrument for dependable, accurate operation. Direct reading in micrograms and sensitivity reciprocal of 2 micrograms. Fine built-in Magni-Grad® projection system. Capacity: 20 g; sensitivity: 0.001 mg; built-in automatic keyboard range of 222 mg.

Automatic Recording Vacuum Balances

Weighs samples in controlled environment. Recorder charts weight, or weight and temperature, against time.



Analytical and Semi-Micro with capacities of 200 g and 100 g; ranges of automatic weight operation 4000 mg and 400 mg; sensitivity reciprocals 1 mg/div. and 0.1 mg/div.; reproducibility (precision) ± 0.1 mg and ± 0.03 mg, respectively.

Write for Catalog AW-14 for details on the most complete line of balances

Made in U.S.A. by

W. M. AINSWORTH & SONS, INC.
2151 LAWRENCE ST. • TELEPHONE ALpine 5-1723 • DENVER 5, COLORADO

adelphia, Pa. (A. B. Conlin, Jr., ASME, 29 W. 39 St., New York 18)

30-2. Association of Iron and Steel Engineers, Detroit, Mich. (T. J. Ess, AISE, 1010 Empire Bldg., Pittsburgh 22, Pa.)

30-2. Instrumental Methods of Analysis, natl. symp., Instrument Soc. of America, Pittsburgh, Pa. (E. E. Buckston, Works Engineering Dept., Union Carbide Chemicals Co., P.O. Box 8004, S. Charleston 3, W.Va.)

30-2. Role of Food in World Peace, intern. symp., Columbus, Ohio. (R. M. Kottman, College of Agriculture, Ohio State Univ., Columbus 10)

30-3. Mid-America Spectroscopy, annual symp., Soc. for Applied Spectroscopy, Chicago, Ill. (J. R. Ferraro, Argonne, Natl. Laboratory, 9700 S. Cass Ave., Argonne, Ill.)

30-4. Compressed Air and Hydraulics, intern. conf. and exhibition, London, England. (W. G. H. Chesher, c/o John Trundell and Partners Ltd., St. Richard's House, Eversholt St., London, N.W.1)

30-5. Automobile Technical Congr., intern., London, England. (Automobile Div., Institution of Mechanical Engineers, 1 Birdcage Walk, London, S.W.1)

May

1-3. Biologistics for Space Systems, symp. and workshop, Dayton, Ohio. (Col. A. I. Karstens, Aerospace Medical Research Laboratories, Aeronautical Systems Div., Wright-Patterson AFB, Ohio)

1-3. Joint Computer Conf., San Francisco, Calif. (R. I. Tanaka, Computer Systems-Logical Design, Lockheed Missiles & Space Co., Palo Alto, Calif.)

1-4. Conference on Radiodiagnosis and Radiotherapy, Southern Rhodesia. (P. E. S. Palmer, P.O. Box 958, Bulawayo, Southern Rhodesia)

1-4. Gamma Alpha Graduate Scientific Fraternity, St. Paul, Minn. (W. T. Keeton, Dept. of Entomology, Cornell Univ., Ithaca, N.Y.)

1-4. Permeability, intern. symp., Wageningen, Netherlands. (Centrum voor Plantenfysiologisch Onderzoek, Landbouwhogeschool, Herenstraat 18, Wageningen)

1-5. Latin American Iron and Steel Inst., Buenos Aires, Argentina. (F. A. Tupper, Moneda 1140-6° Piso, Casilla 13810, Santiago, Chile)

2. International Symp. on Crop Protection, Ghent, Belgium. (I. J. Van den Brande, Institut Agronomique de l'Etat, Coupure Gauche 233, Ghent)

2-3. Iron and Steel Inst., annual, London, England. (ISI, 4 Grosvenor Gardens, London, S.W.1)

2-4. American Assoc. of Pathologists and Bacteriologists, annual, Montreal, Canada. (Intersociety Committee on Pathology Information, 1785 Massachusetts Ave., NW, Washington 6)

2-4. European Corrosion Conf., Paris, France. (Société de Chimie Industrielle, 28, rue St. Dominique, Paris 7°)

2-4. Institute of Management Sciences, Toronto, Canada. (T. Fabian, c/o Mathematics, 76 Nassau St., Princeton, N.J.)

2-5. Air Force Systems Command Management Conf., Monterey, Calif. (Office of Information, AFSC, Andrews AFB, Washington 25)

2-5. Midwestern Psychological Assoc., Chicago, Ill. (D. R. Meyer, 1314 Kinnear Rd., Columbus 12, Ohio)

2-5. National Science Fair-International, Seattle, Wash. (Science Service, 1719 N St., NW, Washington 6)

2-6. Film Techniques, conf., Budapest, Hungary. (Hungarian Soc. of Optics, Acoustics and Film Techniques, Szabadság tér 17, Budapest V)

2-8. Space Science Symp., intern., Washington, D.C. (Secretary, Committee on Space Research, 28 Nieuwe Schoolstraat, The Hague, Netherlands)

3. Electronic Marketing Seminar, intern., San Diego, Calif. (E. T. Clare, Cohu Electronics, Inc., Box 623, San Diego)

3-4. Human Factors in Electronics, intern. congr., Long Beach, Calif. (C. Hopkins, Hughes Aircraft Co., Culver City, Calif.)

3-5. Institute of Hospital Administrators, annual, Cardiff, Wales, England. (J. F. Milne, 75 Portland Pl., London, W.1)

3-5. Kansas Acad. of Science, Pittsburgh. (G. A. Leisman, Dept. of Biology, Kansas State Teachers College, Emporia)

3-5. Ohio Acad. of Science, Toledo. (G. W. Burns, 505 King Ave., Columbus 1, Ohio)

3-5. Society for American Archaeology, Tucson, Ariz. (J. B. Wheat, Univ. of Colorado Museum, Boulder)

3-5. University Computing Centres, intern. conf., Mexico, D.F., Mexico. (Centro Electrónico de Cálculo, Universidad Nacional Autónoma de México, México, D.F.)

3-7. German Soc. of Metallurgy and Mining, Berlin. (Gesellschaft Deutscher Metallhütten und Bergleute, Schliessfach 51, Clausthal-Zellerfeld, Germany)

4. North Carolina Acad. of Science, Winston-Salem. (J. A. Yarbrough, Meredith College, Raleigh, N.C.)

4-5. Colorado-Wyoming Acad. of Science, Greeley, Colo. (R. G. Beidleman, Zoology Dept., Colorado College, Colorado Springs)

4-5. Minnesota Acad. of Science, annual, Winona. (J. P. Emanuel, 206 E. Howard, Winona)

4-5. North Dakota Acad. of Science, Fargo. (B. G. Gustafson, Box 573, Union Station, Grand Forks, N.D.)

4-5. Population Assoc. of America, Madison, Wis. (K. B. Mayer, Dept. of Sociology and Anthropology, Brown Univ., Providence, R.I.)

4-5. South Dakota Acad. of Science, Vermillion. (T. Van Bruggen, Dept. of Botany, Univ. of South Dakota, Vermillion)

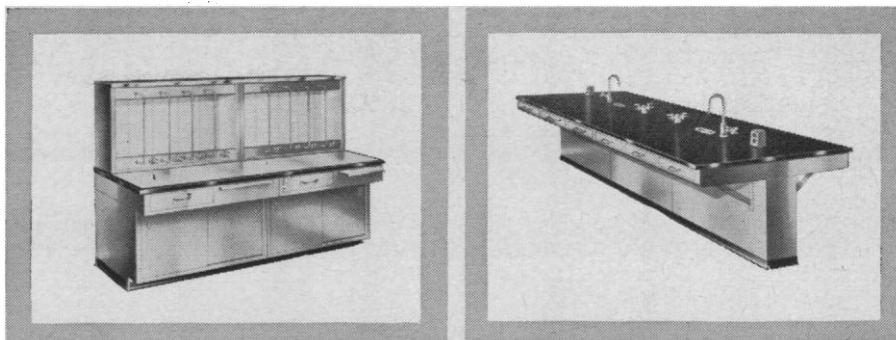
4-6. Protides of the Biological Fluids, colloquium, Bruges, Belgium. (H. Peeters, Sint Jans Hospitaal, Bruges)

4-6. Wisconsin Acad. of Sciences, Arts and Letters, La Crosse. (T. J. McLaughlin, Univ. of Wisconsin, 3203 N. Downer Ave., Milwaukee 11)

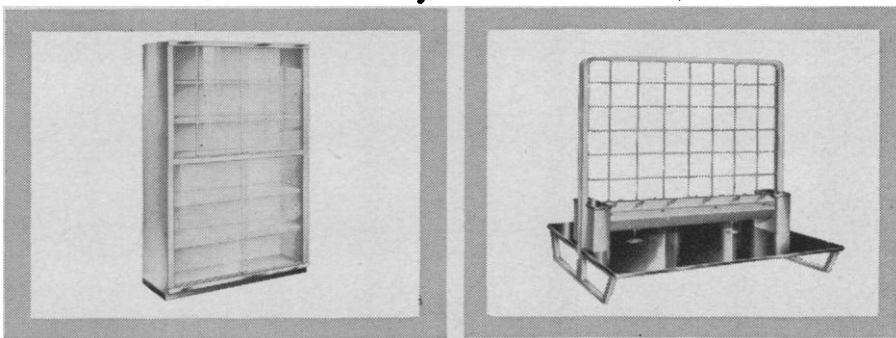
5-6. Academy of Psychoanalysis, annual, Toronto, Canada. (J. H. Merin, 125 E. 65 St., New York 21)

5-6. Society of Biological Psychiatry, annual, Toronto, Canada. (G. N. Thompson, 2010 Wilshire Blvd., Los Angeles 57, Calif.)

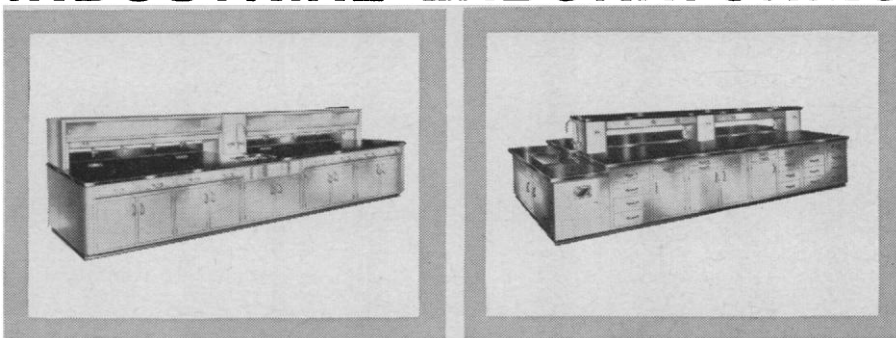
5-7. International Congr. of Medical



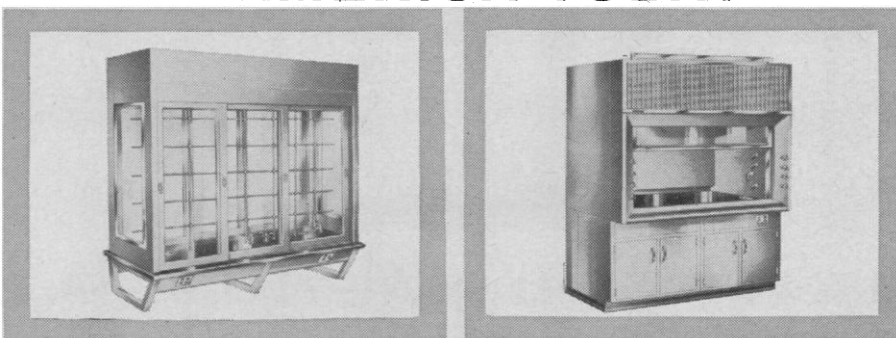
MODERN, EFFICIENT



INDUSTRIAL LABORATORIES



IN AMERICA TODAY



**ARE EQUIPPED
AND FURNISHED**

by



Write for Metalab catalog and literature

METALAB *Equipment Company*

289 DUFFY AVENUE, HICKSVILLE, L. I., N. Y.

SUBSIDIARY OF CRESCENT PETROLEUM CORPORATION

Laboratory Technologists, Cologne, Germany. (M. Gesundheitsverwaltung, Intern. Assoc. of Medical Laboratory Technologists, Cologne)

6-9. Bockus Alumni Intern. Soc. of Gastroenterology, annual, Geneva, Switzerland. (J. L. A. Roth, Graduate Medical Bldg., Suite 302, 419 S. 19 St., Philadelphia 46, Pa.)

6-9. National Power Instrumentation Symp., Fort Worth, Tex. (C. W. Macune, Westronics, Inc., 3605 McCart, Fort Worth 10)

6-10. American Soc. for Microbiology, annual, Kansas City, Mo. (P. Gerhardt, Dept. of Bacteriology, Univ. of Michigan, Ann Arbor)

6-10. Electrochemical Soc., annual, Los Angeles, Calif. (R. K. Shannon, 1860 Broadway, New York 23)

6-10. French Soc. of Ophthalmology, Paris. (M. A. Dollfus, FSO, 27, rue du Faubourg-Saint-Jacques, Paris 16^e)

6-12. World Congr. of Gastroenterology, Munich, Germany. (G. A. Martini, Martinstr. 52, Hamburg 20, Germany)

7. League against Trachoma, annual, Paris, France. (J. Sédan, Ligue contre le Trachoma, 94, rue Sylvabelle, Marseilles, France)

7-8. American Inst. of Mining, Metallurgical and Petroleum Engineers, Soc. of Petroleum Engineers' Secondary Recovery Symp., Wichita Falls, Tex. (E. O.

Kirkendall, AIME, 29 W. 39 St., New York 18)

7-9. American Oil Chemists' Soc., annual, New Orleans, La. (W. O. Lundberg, Hormel Inst., Univ. of Minnesota, 801 16 Ave., NE, Austin)

7-9. Implications of Organic Peroxides in Radiobiology, intern. symp., Argonne, Ill. (R. N. Feinstein, Div. of Biological and Medical Research, Argonne Natl. Laboratory, Argonne)

7-9. National Watershed Congr., annual, Columbus, Ohio. (C. R. Gutermuth, Wildlife Management Inst., Washington, D.C.)

7-11. American Psychiatric Assoc., Toronto, Canada. (C. H. H. Branch, 156 Westminster Ave., Salt Lake City, Utah)

7-11. American Soc. of Tool and Manufacturing Engineers, annual convention and tool exposition, Cleveland, Ohio. (A. Cervinka, Vanderbilt Blvd., Oakdale, N.Y.)

7-11. Radiation Damage in Solids and Reactor Materials, symp., Intern. Atomic Energy Agency, Venice, Italy. (IAEA, 11 Kärntner Ring, Vienna 1, Austria)

7-11. Society of Photographic Scientists and Engineers, annual, Boston, Mass. (E. S. Cobb, Box 1609, Main Post Office, Washington, D.C.)

7-12. International Conf. of Marine Engineers, London, England. (Inst. of Marine Engineers, Memorial Bldg., 76 Mark Lane, London, E.C.3)

7-12. International Seed Testing Assoc., annual congr., Lisbon, Portugal. (A. F. Schoorel, ISTA, Binnenhaven 1, Wageningen, Netherlands)

8. American Soc. of Safety Engineers, Chicago, Ill. (A. C. Blackman, ASSE, 5 N. Wabash Ave., Chicago 2)

8. World Health Assembly, annual, Geneva, Switzerland. (World Health Organization, Palais des Nations, Geneva)

8-10. American Soc. of Lubrication Engineers, annual, St. Louis, Mo. (A. E. Cichelli, Bethlehem Steel Co., 701 E. Third St., Bethlehem, Pa.)

8-10. World Commission on Vocational Rehabilitation, annual, Washington, D.C. (D. Warms, Intern. Soc. for Rehabilitation of the Disabled, 701 First Ave., New York 17)

8-19. Latin American Meeting on Higher Agricultural Education, Medellín, Colombia. (Intern. Agency Liaison Branch, Office of Director General, U.N. Food and Agriculture Organization, Viale delle Terme di Caracalla, Rome, Italy)

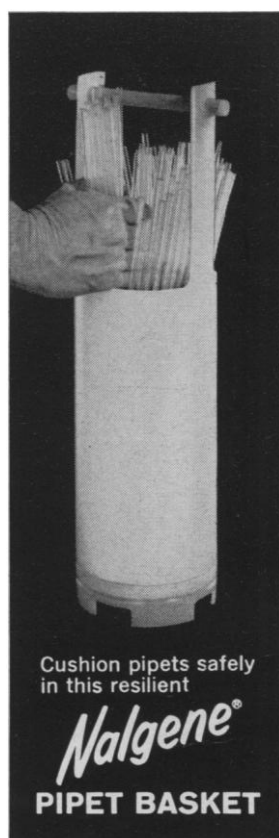
9-11. Conference on Mucous Secretions, New York, N.Y. (S. Jakowska, Natl. Cystic Fibrosis Research Foundation, 521 Fifth Ave., New York 17)

9-11. Operations Research Soc. of America, Washington, D.C. (G. D. Shellard, New York Life Insurance Co., 51 Madison Ave., New York 10)

9-12. Glass Technology Conf., Baden-Baden, Germany. (Deutsche Glastechnische Gesellschaft, Bockenheimerlandstr. 126, Frankfurt am Main)

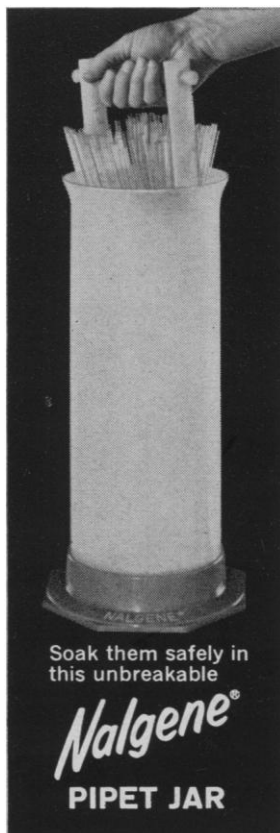
9-12. Science Writers Seminar, intern., Seattle, Wash. (Intern. Press Inst., Münster-gasse 9, Zurich 1, Switzerland)

9-12. Virginia Acad. of Science, Norfolk. (P. M. Patterson, Hollins College Branch, Roanoke)



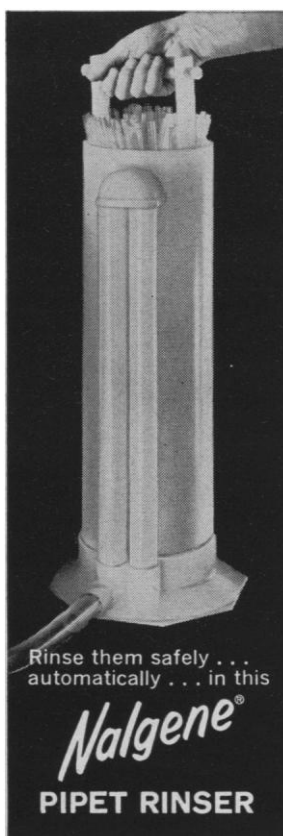
Cushion pipets safely
in this resilient

Nalgene®
PIPET BASKET



Soak them safely in
this unbreakable

Nalgene®
PIPET JAR



Rinse them safely...
automatically... in this

Nalgene®
PIPET RINSER

Safest way to clean pipets

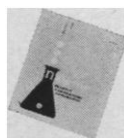
You cut *two* kinds of cost when you standardize on Nalgene® pipet washing equipment. (1) Less breakage of pipets—because Nalgene polyethylene cushions them with the resilience no glass or metal vessels can provide. (2) Less replacement of washing equipment—unlike glass or metal, Nalgene plastic pipet baskets, jars and rinsers are unbreakable and non-corroding. Sizes to accommodate all standard pipet lengths. Ask your laboratory supply dealer. For complete catalog of Nalgene lab ware, write Dept. 2116.



THE NALGE CO., INC. · ROCHESTER 2, NEW YORK

The Quality Standard of Plastic Laboratory Ware

"Visit our Booth No. 233 at Annual Meeting of Federation of American Societies for Experimental Biology—Atlantic City, April 14-18th".



9-19. Prediction of Volcanic Eruptions and the Relationship between Magmas and the Nature of Volcanic Eruptions, symp., Tokyo, Japan. (Secretary, Organizing Committee, c/o Science Council of Japan, Ueno Park, Tokyo)

10-12. Meetings on Diabetes, University of Paris, Paris, France. (M. Rathery, Hotel-Dieu, Paris)

10. Glass Container Technology, seminar, New York, N.Y. (Packaging Inst., 342 Madison Ave., New York 17)

10. Vitamins and Transplantation Immunity, Assoc. of Vitamin Chemists, Chicago, Ill. (H. S. Perdue, Abbott Laboratories, N. Chicago)

10-11. American Inst. of Chemists, Inc., Chicago, Ill. (J. Kotrady, c/o AIC, 60 E. 42 St., New York 17)

10-12. Food Protection, intern. symp., Ames, Iowa. (J. C. Ayres, Dept. of Dairy and Food Industry, Iowa State Univ., Ames)

12. International College of Surgeons, clinical meeting, London, England. (Secretary, ICS, 1516 Lake Shore Dr., Chicago 10, Ill.)

13-16. American Acad. of Dental Medicine, annual, Baltimore, Md. (P. Block, 36 N. Luzerne Ave., Baltimore)

13-16. Transfer of Calcium and Strontium across Biological Membranes, conf., Ithaca, N.Y. (R. H. Wasserman, Dept. of Physical Biology, New York State Veterinary College, Cornell Univ., Ithaca)

13-17. American Industrial Hygiene Assoc., conf., Washington, D.C. (W. S. Johnson, Bethlehem Steel Co., Bethlehem, Pa.)

14-16. National Aerospace Electronics Conf., Dayton, Ohio. (Inst. of the Aerospace Sciences, 2 E. 64 St., New York 21)

14-16. Technical Assoc. of the Pulp and Paper Industry, coating conf., annual, Cincinnati, Ohio. (TAPPI, 155 E. 44 St., New York 16)

14-18. American Soc. of Civil Engineers, convention, Omaha, Neb. (W. H. Wisely, 345 E. 47 St., New York 17)

14-18. Hormonal Steroids, intern. congr., Milan, Italy. (L. Martini, Istituto de Farmacologia e Terapia, 21 Via A. del Sarto, Milan)

14-19. International Office of Epizootics, Paris, France (Office Internationale des Epizooties, 12, rue de Prony, Paris)

15-16. Council on Medical Television, annual, Bethesda, Md. (J. F. Huber, CMT, Inst. for Advancement of Medical Communication, 33 E. 68 St., New York 21)

15-17. World Food Forum, Washington, D.C. (J. K. McClarren, U.S. Dept. of Agriculture, 409 Administration Bldg., Washington 25)

15-19. International College of Surgeons, European federation, surgical congr., Amsterdam, Netherlands. (J. Blazenburg, ICS Netherlands Section, A. Perkstraat 57, Hilversum, Netherlands)

16. Design of Talking and Writing Machines for the Rehabilitation of Communication Disabilities, conf., New York, N.Y. (C. Berkeley, Foundation for Medical Technology, 2 E. 63 St., New York 21)

16-17. Navy Medical-Dental TV Workshop, Bethesda, Md. (Inst. for Advancement of Medical Communication, 33 E. 68 St., New York 21)

16-18. Conference on Dust, Scheveningen, Netherlands. (Fachgruppe Staubtechnik, Prinz-Georg-Str. 77/79, Düsseldorf 10, Germany)

16-18. Noise Abatement, intern. congr., Salzburg, Austria. (Österreichischer Arbeitsring für Lärmbekämpfung, Stubenring 1, Vienna 1, Austria)

16-26. Large Electric Systems, intern. conf., Paris, France. (ICLES, 112 Boulevard Haussmann, Paris 8°)

17-19. American Inst. of Industrial Engineers, annual, Atlantic City, N.J. (W. J. Jaffe, Newark College of Engineering, Newark, N.J.)

17-19. Eccrine, Apocrine, and Holocrine Glands, symp., Madison, Wis. (Div.

of Postgraduate Medical Education, University of Wisconsin Medical School, Madison 6)

17-19. Nepiology, intern. conf., Catania, Sicily. (S. Rapisardi, Via Mavilla 37, Catania)

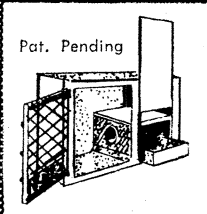
17-19. Paralanguage and Kinesics, conf., Bloomington, Ind. (T. A. Sebeok, Research Center in Anthropology, Rayl House, Indiana Univ., Bloomington)

17-20. International Medical Soc. of Endoscopic Photocinematography, Television and Radiocinematography, Louvain, Belgium. (J. M. Dubois de Montreynaud, Société Médicale Internationale d'Endoscopie et de Radiocinématographie, 4, rue du Général-Baratier, Rheims, France)

For CAGES and LABORATORY EQUIPMENT

Specify PORTER-MATHEWS

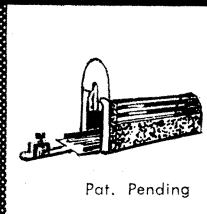
Over a century of experience, blended with modern manufacturing facilities



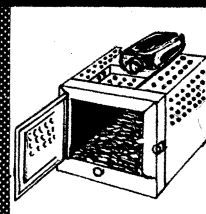
CAT CAGE



RACK UNIT



RAT RESTRAINER



RAT, GUINEA PIG CAGE

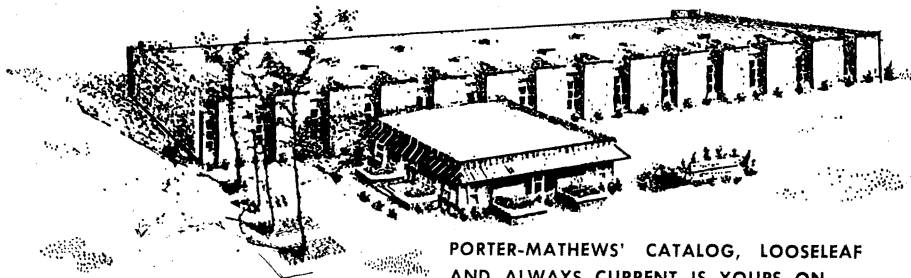
In this vast new Princeton Plant, Porter-Mathews' century-odd, metal manufacturing experience has been combined with the most modern manufacturing facilities. Porter-Mathews' small animal cages and laboratory equipment, both deluxe and custom, are sturdily built . . . designed for efficiency . . . made to meet the most rigorous requirements of those we serve.

Our design and developmental staff is available for consultation to all interested companies and institutions.

CAGES . . . Mice to monkeys and chickens . . . and RACKS, of stainless steel, galvanized and aluminum.

RESTRAINERS, STERILIZING CASES, AUTOPSY TABLES, FOOD FEEDERS and WATER TUBES of stainless steel.

Deluxe and Custom-made



Your inquiry will receive immediate attention.

PORTER

SINCE 1830

MATHEWS COMPANY, INC.

U.S. ROUTE #1,

PRINCETON, NEW JERSEY

WAInut 1-2550

PORTER-MATHEWS' CATALOG, LOOSELEAF AND ALWAYS CURRENT, IS YOURS ON REQUEST. USE THE COUPON BELOW.

PORTER-MATHEWS COMPANY, INC.
Princeton, New Jersey

Please send your complete catalog to:

Name _____ Position _____
Company, Institution _____
Address _____



MODEL JM-2000

SINCLAIR-PHOENIX AEROSOL PHOTOMETER

for

- Measurement & Control in dust-free manufacturing "white rooms."
- Smog and Air Pollution Measurements in industrial areas.
- Medical Research—study of respiratory accumulation of dust and smoke particles.
- Evaluation of air filters, air conditioners and air-wash systems.

Featuring:

**Extreme Sensitivity
Wide Range
Portability
Control**

The Sinclair-Phoenix Model JM-2000 Aerosol Photometer is a complete self-contained instrument for measurement of the mass concentration of particulate matter in the atmosphere. The concentration at any instant is determined from the meter reading, or the instrument can be used with a recorder to obtain a continuous record of the variation in mass concentration during any given period.

**PHOENIX PRECISION
INSTRUMENT CO.**

3805 N. 5th St.

PHILADELPHIA 40, PA.

17-31. Special Libraries Assoc., Washington, D.C. (J. B. North, Missile and Space Div., Lockheed Aircraft Corp., 50-14, Palo Alto, Calif.)

18-19. Indiana Acad. of Science, Mitchell. (W. W. Bloom, Valparaiso Univ., Valparaiso, Ind.)

18-29. European Plastics and Rubber Conf., Paris, France. (Du Mont Publicity Co., 18 Queensberry Place, London, S.W.7, England)

19-20. International Assoc. for the Study of the Liver, Munich, Germany. (G. A. Martini, c/o Universitäts Krankenhaus, Eppendorf, Hamburg, Germany)

20-23. American Inst. of Chemical Engineers, natl., Baltimore, Md. (F. J. Van Antwerpen, AICE, 345 E. 47 St., New York 17)

20-23. Humidity and Moisture, intern. symp., Washington, D.C. (W. A. Wildhack, Natl. Bureau of Standards, Washington 25)

20-23. Radiation Research Soc., annual, Colorado Springs, Colo. (E. L. Powers, RRS, Argonne Natl. Laboratory, Argonne, Ill.)

20-24. Air Pollution Control Assoc., annual, Chicago, Ill. (D. A. Sullivan, APCA, 4400 Fifth Ave., Pittsburgh, Pa.)

20-24. American Assoc. of Cereal Chemists, Saint Louis Park, Minn. (B. S. Miller, Dept. of Flour and Feed Milling, Kansas State Univ., Manhattan)

21-22. Society of American Military Engineers, annual, Washington, D.C. (SAME, 808 Mills Bldg., Washington 6)

21-23. National Aerospace Instrumentation Symp., Washington, D.C. (C. Creveling, Goddard Space Flight Center, Greenbelt, Md.)

21-24. Air Pollution Instrumentation Symp., Chicago, Ill. (D. F. Adams, Div. of Industrial Research, Washington State Univ., Pullman)

21-25. Max Planck Inst. for the Advancement of Science, general assembly, Düsseldorf, Germany. (MPIAS, Kaiserswerther Str. 164, Düsseldorf)

21-25. Plastic and Reconstructive Surgery of the Eye and Adnexa, intern. symp., New York, N.Y. (R. Troutman, Manhattan Eye, Ear & Throat Hospital, 210 E. 64 St., New York 21)

21-25. Thermodynamics of Nuclear Materials, symp., Vienna, Austria. (Intern. Atomic Energy Agency, 11 Kärntner Ring, Vienna 1)

21-26. Ceramic Congr., intern., Copenhagen, Denmark. (Arbejdsgivere, Indenfor de Keramiske Industrier, Nørre Voldgade 34, Copenhagen K)

21-26. Rubber Technology Congr., annual, London, England. (Secretary, Institution of the Rubber Industry, 4, Kensington Palace Gardens, London, W.8)

22-24. National Microwave Theory and Techniques, symp., Inst. of Radio Engineers, Boulder, Colo. (L. G. Cumming, IRE, 1 E. 79 St., New York 21)

22-24. Self-Organizing Systems, conf., Chicago, Ill. (G. T. Jacobi, Armour Research Foundation, 10 W. 35 St., Chicago 16)

22-25. Rationalizing Consumption of Electric Power, intern. symp., Warsaw, Poland. (Ministry of Mines and Power, Krucza 36, Warsaw)

22-25. Rubber Technology Conf., Scarborough, England. (Institution of the Rub-

YOU'RE NEVER IN DOUBT WHEN IT'S "Alconox- Clean!"

In the laboratory or hospital, just "clean" isn't good enough. Make sure your glassware and equipment are "Alconox-Clean."

Proven best by test* for over 20 years!

* for wetting power!

* for sequestering power!

* for emulsifying effect!

Use ALCONOX
For all equipment washed by hand
Box of 3 lbs. \$1.95
Case of 12 boxes — 3 lb. ea. \$18.00
Available in drums of 25, 50, 100 and 300 lbs. at additional savings!
(Prices slightly higher West of the Rockies)



SAVE TIME AND MONEY!
with **ALCONOX**

The World's Most Thorough Cleaner — Yet it costs up to 75% less!

Eliminates tedious scrubbing — Penetrates irregular and inaccessible surfaces — Removes dirt, grease, grit, blood, tissue, etc. with amazing ease — Completely soluble and rinsable — Gentle to the skin —

Use ALCOJET
For all equipment washed by machine
Box 5 lbs. \$3.00
Case of 6 boxes — 5 lbs. ea. \$15.00
Available in drums of 25, 50, 100 and 300 lbs. at additional savings!
(Prices slightly higher West of the Rockies)



Clean Pipettes in one easy operation with ALCO TABS — for all pipette washers. Box of 100 Tablets \$5.00

Order from your Supplier or ask him for samples and FREE Cleaning Guide.

ALCONOX, Inc.
853 Broadway, New York 3, N.Y.

ber Industry, 4 Kensington Palace Gardens, London, W.8)

22-26. Disposal and Utilization of Solid Domestic and Industrial Wastes, intern. Congr., Essen, Germany. (Haus der Technik, Schliessfach 668, Essen)

22-26. International Medico-Athletic Federation, Congr., Santiago, Chile. (G. La Cava, Via A. Serra, 104, Rome, Italy)

23-24. Forming and Testing of Sheet Metal, intern. colloquium, Düsseldorf, Germany. (J. Hooper, Intern. Deep Drawing Research Group, John Adam St., Adelphi, London, W.C.2, England)

23-25. American Soc. for Quality Control, annual, Cincinnati, Ohio. (A. W. Wortham, Texas Instruments, Inc., P.O. Box 5474, Dallas 22)

24-26. Institute of Radio Engineers, conf. on space communications, Seattle, Wash. (IRE, 1 E. 79 St., New York 21)

24-26. International Assoc. for Bronchology, Bruges, Belgium. (R. Pannier, c/o Service de Pneumo-Phthisologie, Hôpital Saint-Jean, Bruges)

26-30. International Federation for Hygiene and Preventive Medicine, intern. Congr., Vienna, Austria. (E. Musil, IFHPM, Mariahilfer Strasse 177, Vienna XV)

27-30. Chemical Inst. of Canada, annual conf. and exhibition, Edmonton. (CIC, 48 Rideau St., Ottawa 2, Ont.)

27-2. International Federation of Prestressing, 4th Congr., Rome, Italy. (IFP, 6, rue Paul Valéry, Paris, 16°)

28-29. World Heavy Water Reactor Technology, Canadian Nuclear Assoc., annual conf., Ottawa. (Manager, CNA, 19 Richmond St. West, Toronto 1, Ont.)

28-30. American Assoc. for Contamination Control, 1st annual, San Francisco, Calif. (D. M. Petersen, Central Vacuum Corp., 3008 E. Olympic Blvd., Los Angeles 23, Calif.)

28-30. Biology of the Transuranic Elements, symp., Richland, Wash. (R. C. Thompson, Hanford Biology Laboratory, General Electric Co., Richland)

28-30. Heavy Water Reactors, Canadian Nuclear Assoc., annual conf., Ottawa, Ont., (CNA, 19 Richmond St. West, Toronto 1)

28-30. International Discussion on Heat Treating, Lausanne, Switzerland. (Institut für Härterei-Technik, Postfach 13, Bremen-St. Magnus, Germany)

28-1. Modern Techniques of Computation and Industrial Automation, colloquium, Paris, France. (Assoc. Française de Régulation et d'Automatisme, 19, rue Blanche, Paris 9°)

28-2. International Ophthalmic Optical Congr., Berlin, Germany. (G. H. Giles, Intern. Optical League, 65 Brook St., London, W.1, England)

28-2. United Nations Scientific Committee on the Effects of Atomic Radiation, New York, N.Y. (UN, New York)

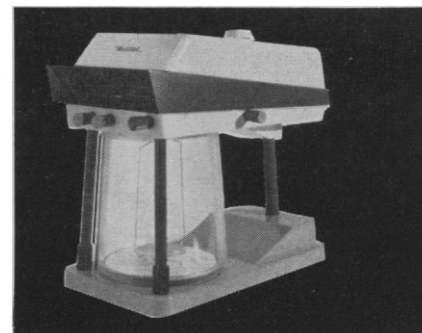
29-22. World Meteorological Organization, Congr., Geneva, Switzerland. (WMO, 41, Avenue Giuseppe Motta, Geneva)

29-31. Tissue Culture Assoc., annual, Washington, D.C. (R. E. Stevenson, Natl. Cancer Inst., Bethesda 14, Md.)

29-2. American College of Cardiology, Inc., Denver, Colo. (I. Brotman, 1746 K St., NW, Washington, D.C.)

**THESE
TWO NEW
METTLER
TYPE S
BALANCES
ARE IDENTICAL . . .**

**ONE
IS A
BETTER BUY!**



Because you're protected by Will's exclusive *double guarantee*—the manufacturer's warranty backed up by an *unconditional* guarantee of satisfaction by Will.

More reasons? Every Mettler Balance is installed by a Will technician . . . and a service check is conducted at no charge within one year after installation. Delivery is prompt, and you're always welcome back to use the industry's finest service facilities.

You choose from almost 1000 brands, over 20,000 items when you buy from Will. Your Will representative has a complete technical reference file on practically every one of them.

We like to think you can't make a better buy anywhere. Shop around and see if you don't agree.

**METTLER DIGITAL
ANALYTICAL BALANCES**

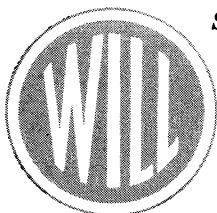
The new approach to perfection in weighing. Digital

readout to the last decimal saves error and fatigue. Beam with temperature compensation assures greater sensitivity stability.

Functional form, larger pan, easy-to-use compartment with all around clearance and greater lighting.

Wider optical range (1000 mg for Macro S5, 100 mg for Semi-Micro S6) gives differential weighing without weight calibration error.

Write for technical literature or free demonstration. No obligation.



Specialists in the distribution and service of scientific supplies

**WILL CORPORATION
AND SUBSIDIARIES**

ROCHESTER 3, N. Y. • NEW YORK 52, N. Y. • BUFFALO 5, N. Y.
ATLANTA 25, GA. • BALTIMORE 24, MD. • SO. CHARLESTON 9, W. VA.