

Meetings

Forthcoming Events

April

10-12. American Industrial Health Conf., Chicago, Ill. (M. E. Fairbank, Eastman Kodak Co., Rochester 4, N.Y.)

10-13. European Symp. on Size Reduction, European Federation of Chemical Engineering-Processing Technology Soc., Frankfurt am Main, Germany. (Verfahrenstechnische Gesellschaft im V.D.I., Rheingau-Allee 25, Frankfurt am Main 7)

10-14. International Conf. on Stress Analysis, Paris, France. (Secretary, 10, rue Vauquelin, Paris 5°)

11-13. Institute of Environmental Sciences, annual meeting and equipment exposition, Chicago, Ill. (J. P. Monroe, Lear, Inc., Grand Rapids, Mich.)

11-13. Institute of Radio Engineers, southwest conf. and electronic show, Houston, Tex. (IRE, 1 E. 79 St., New York 21)

12. Symposium on Non-Conventional Nuclear-Engineering Lubricants and Bearing Materials, symp., London, England. (Institution of Mechanical Engineers, 1 Birdcage Walk, London, S.W.1)

12-13. Histochemical Soc., annual, Atlantic City, N.J. (M. Wachstein, St. Catherine's Hospital, Bushwick Ave., Brooklyn 6, N.Y.)

12-13. International Assoc. for Dental Research, British Div., annual, Sheffield,

England. (C. H. Tonge, c/o Dept. of Anatomy, King's College Medical School, New-castle-upon-Tyne, England)

12-14. Association of Southeastern Biologists, Winston-Salem, N.C. (H. J. Bennett, Dept. of Zoology, Louisiana State Univ., Baton Rouge 3)

12-14. Experimental Arithmetic, symp., American Mathematical Soc., Chicago, Ill. (N. C. Metropolis, Inst. for Computer Research, Univ. of Chicago, Chicago)

13-14. American Soc. for Artificial Internal Organs, annual, Atlantic City, N.J. (E. C. Peirce, II, ASAIO, 514 W. Church Ave., Knoxville 1, Tenn.)

13-14. Iowa Acad. of Science, Waverly. (P. F. Romberg, Iowa State Univ., Ames)

13-14. Nebraska Acad. of Sciences, Lincoln. (C. B. Schultz, Univ. of Nebraska, Lincoln 8)

13-15. Alabama Acad. of Science, Inc., Troy. (W. B. DeVall, Forestry Dept., Auburn Univ., Auburn, Ala.)

13-15. American Assoc. for Cancer Research, annual, Atlantic City, N.J. (H. J. Creech, Inst. for Cancer Research, Fox Chase, Philadelphia 11, Pa.)

14-16. Kinetics, Equilibria, and Performance of High Temperature Systems, 2nd conf., Los Angeles, Calif. (G. S. Bahn, 16902 Bollinger Dr., Pacific Palisades, Calif.)

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 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)



laboratory tapes and labels

NAME _____	
SPECIMEN _____	
Rm. No. _____	Date _____

PATHOLOGY SPEC.		
NAME _____	SEX _____	AGE _____
ROOM _____	NUMBER _____	
DOCTOR _____		
SPECIMEN _____		

Use Time Tapes and Labels in your lab. Eliminate errors and confusion. Time labels are quick and easy to use. These clean, white tapes accept any kind of pen or pencil marking — or they can be pre-printed to your specifications.

Acid, water, dirt, grease or heat will not affect them. Withstand temperatures from 250° to -70°.

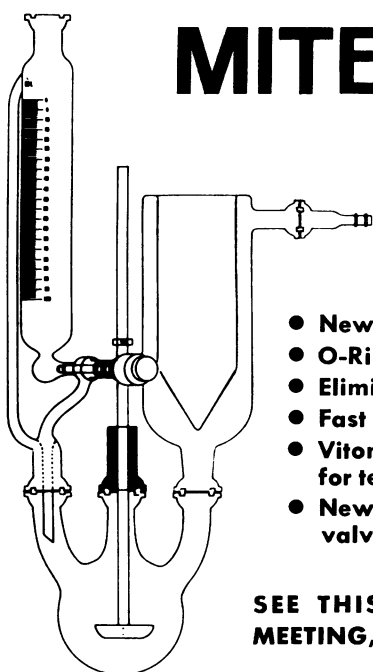
Also available in a variety of colors.

Cut costs and save time with
TIME Tapes and Labels

PROFESSIONAL TAPE CO., INC.
 365K BURLINGTON AVE. • RIVERSIDE, ILL.



new concepts in scientific glassware



MITE-O-WARE

GREASE FREE MICRO-GLASS LAB WARE

- New unique joints are leakproof
- O-Rings made of Buna N or Viton A
- Eliminates contamination
- Fast easy assembly . . . no joints to grease
- Viton O-Rings hold pressures as low as 10^{-6} , for temperatures from -40°F to $+500^{\circ}\text{F}$.
- New design for O-Ring needle valve stop cocks

SEE THIS EQUIPMENT AT THE FASEB MEETING, BOOTH 51, APRIL 16 THRU 19



Delmar
SCIENTIFIC LABORATORIES
317 MADISON ST., MAYWOOD, ILL.
A SUBSIDIARY OF COLEMAN INSTRUMENTS, INC.

For full details
on Delmar's new
MITE-O-WARE line
ask for Catalog 61-MS.



UNITRON'S Model MSA
makes teaching easier
... learning faster!

Here is a teaching microscope with built-in features to aid the instructor and student, yet priced for school budgets.

- Comfortably inclined eyepiece rotates 360° permitting two persons to share the same instrument, make comparisons, discuss results
- High intensity illuminating system with built-in transformer base
- Substage condenser with aperture iris diaphragm assures correct and brilliant illumination at all powers
- Low positioned coarse and fine focusing controls with protective stops to prevent damage to objectives or slides
- Large stage projects beyond objective preventing accidental damage
- Three parfocal achromatic objectives 4X, 10X, 40X of professional quality with full numerical aperture and resolving power . . . three eyepieces 5X, 10X, 15X . . . gives magnifications from 20X to 600X
- 10X widefield eyepiece now optionally available . . . gives large, flat field of view and desirable magnification

\$107
Only (\$96.30 each in lots 5-10)

FREE 10-DAY TRIAL
Even higher discounts on quantities more than 10.

UNITRON

INSTRUMENT COMPANY • MICROSCOPE SALES DIV.
66 NEEDHAM ST. NEWTON HIGHLANDS 61, MASS.

Please rush UNITRON's Microscope Catalog 4A-I

Name _____
Company _____
Address _____
City _____ State _____

New, 1961 AAAS Symposium Volumes

SCIENCES

in Communist China

Editor: Sidney H. Gould. 884 pages. 23 illustrations. Author, subject and geographical index. Cloth. June, 1961.

Price: \$14.00*

\$12.00 prepaid, for AAAS members

OCEANOGRAPHY

Editor: Mary Sears. 665 pages. 146 illustrations. Index. Cloth. May, 1961.

Price: \$14.75*

\$12.50 prepaid, for AAAS members

GERM PLASM RESOURCES

Editor: Ralph E. Hodgson. 394 pages. 59 illustrations. Index. Cloth. April, 1961.

Price: \$9.75*

\$8.50 prepaid, for AAAS members

* If you are not a member of the AAAS, you may join now, and order any of these volumes at the special member price. Enclose \$8.50 dues for your first year of membership, along with payment for the volumes you want.

Membership in the AAAS offers many benefits in addition to savings on AAAS volumes. It includes *Science* and the quarterly *AAAS Bulletin*.

Order Today From

**American Association for the
Advancement of Science**
1515 Mass. Ave., NW Washington 5, D.C.

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. Rocky, 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 Research 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

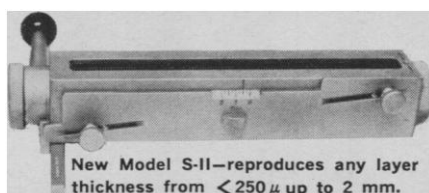
Thin Layer Chromatography Advanced With Introduction of Improved Variable Thickness Applicator

Desaga Delivers First New Instruments GUARANTEEING Uniform Layers

by Klaus P. Brinkmann

Since its commercial introduction in the United States, by Brinkmann, in the fall of 1960, Thin Layer Chromatography has become the fastest growing analytical method and has been installed in more than 500 U. S. laboratories. However, the ability to develop a versatile apparatus, to improve it and to provide new accessories to expand the application of a technique, is directly related to experience in a particular field.

While the original Desaga apparatus, according to Stahl, has become the most widely used equipment, a substantial advance over the first adjustable applicator is now available. In addition, a number of unique and exclusive accessories are offered for the first time. These include:



- 1) **An improved adjustable applicator—model S-II.** This instrument permits the user to select and reproduce any layer thickness from less than 250μ up to 2 mm. The novel parallel sliding design completely eliminates the possibility of a layer whose thickness is not uniform across the entire plate—a problem which is inherent in a variable thickness model unless both sides of the exit gate are individually supported for rigidity and centrally regulated by a common thickness control to assure a uniform calibrated height.
- 2) **Removal of layers**—a major technological breakthrough in TLC now permits the user to remove complete layers from the glass plate with our new adhesive film. This technique facilitates preservation, elution and photometry.
- 3) **Chamber for small quantities of solvent**—a special unit consisting of a plate holder and liquid chamber permits separations on individual plates with a minimum of solvent material.
- 4) **Utility "kit" for TLC**—provides an inexpensive complete TLC apparatus for smaller laboratories and occasional requirements.
- 5) **Pyrex brand glass plates**—new high temperature glass plates for scorching techniques and for obtaining a high activity stage with alumina.
- 6) **Improved Silica Gel G**—now produces even better results through manufacturing techniques which result in an even more uniform particle size.
- 7) **New Cellulose Powders**—ion exchange and acetylated cellulose powders are now available.
- 8) **New indicator sprays**—in aerosol container are now available.

For complete information and new Bibliography of almost 300 references, please request "TLC Bulletin #5."

BRINKMANN

INSTRUMENTS, INC. 115 Cutter Mill Road, Great Neck, N.Y.
PHILADELPHIA • CLEVELAND • HOUSTON • MIAMI • MENLO PARK, CAL. • ST. LOUIS

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., Philadelphia, 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)