the corpus callosum is incapable of reversing the effects of direct sensory experience.

To sum up, the participants were largely in agreement concerning the nature of coding in receptor organs and the signaling of peripheral sensory nerves. Perhaps a critical voice would have been heard, had we been successful in securing the presence of G. Weddell. Debate was lively with occasional sparks, when the topic shifted to the mechanism of central information processing. Mountcastle stressed the need for adequate identification of the cells that are being observed in experiments using the essentially blind method of probing by microelectrodes. He also pointed out the difficulty of controlling stimulus parameters in free-moving animals. Whitfield reminded us that the dangers of drawing conclusions from the behavior of paralyzed animals may be quite as great as those from anesthetized animals, and that, from higher neural levels, any such results must be viewed with extreme caution.

The meeting was the third annual symposium sponsored by the Research Training Program in Sciences Related to the Nervous System of Duke University.

G. G. SOMJEN Department of Physiology and

Pharmacology, Duke University, Durham, North Carolina

Calendar of Events

Awards

The Lalor Foundation program of awards for 1968 emphasizes research in the field of reproductive physiology. The principal present aim of the foundation is to assist qualified investigators working on applied scientific and medical research directed to the study of uterine phenomena relevant to implantation and postimplantation birth control and to better and safer means of female sterilization.

The awards are open to all nationalities. Preference will be given to younger members of university or college faculty and staff with an upper age limit of 41 years. The work may be carried on at the applicant's own institution or elsewhere. The awards may be for a few months or up to 1 year and may range from \$1300 to \$8500, depending upon the scope and the duration of projects approved.

Requests for information and for application forms should be directed to the Lalor Foundation, 4400 Lancaster Pike, Wilmington, Del. 19805. *Deadline* for executed applications: 15 January 1968.

20 OCTOBER 1967

 ABEL
 Quickly · easily · permanently with ...

 TIME SCOPE LABELS

Identify glass slides in an instant with Time Scope Labels. Permanent self-sticking adhesive labels meet all legal requirements . . . eliminate unsanitary licking. Available in Standard or Tissue high thickness, Time Scope Labels measure $\frac{7}{8}'' \ge \frac{7}{8}''$. In plain white or imprinted with laboratory name, Time Scope Labels can be pre-numbered if desired. Plain white end labels $\frac{3}{8}'' \ge \frac{7}{8}''$ also in Standard or Tissue high thickness. Pencil, pen, grease marker — all write perfectly on Time Scope Labels. In easy-to-use dispenser or sheet form.

See your laboratory or hospital supplier for service.

PROFESSIONAL TAPE COMPANY, INC. 365 Burlington Ave. • Riverside, III. • 60546

New, Simplified Cryogenic Liquefier Only \$95.00

TIME

microscope

slide labels

1 . . . roll

1000 LABELS

SIZE 7/8" X 7/8

PROFESSIONAL TAPE CO., INC.

SCOPE

LABELS

For demonstrating the principle of gas cooling and liquefaction by adiabatic and Joule-Thomson expansion.

Converts gaseous Argon, Nitrogen or Air to liquid in 1 to 2 minutes, using adiabatic cooling and Joule-Thomson principle. High pressure gas from a cylinder passes through special coiled heat exchanger where it expands and cools on passing through an expansion orifice. The cooled gas then passes to the atmosphere through the heat exchanger. The ap-paratus cools the gas progressively until gas is condensed upon final expansion at the orifice, and drops into a small glass Dewar flask. No external work is done in operation. Comes with interesting paperback book, "Near Zero," which discusses the fundamentals of cryogenics showing how cold increases atomic order and why low temperatures enable more precise measure-ments. Additional copies, \$1.25 each. The Matheson Cryogenic Liquefier is \$95.00 complete, plus shipping. Order direct from The Matheson Co., Inc., P.O. Box 85, East Rutherford, N.J. Write for Engineering Report

and price list. **BARATHESON** East Rutherford, N. J.; Joliet, III.; La Porte, Texas; Morrow, Ga.; Newark, Calif.; Matheson of Canada, Whitby, Ont.



National Meetings

October

28–29. American College of **Dentists**, Washingon, D.C. (O. W. Brandhorst, American College of Dentists, 4326 Lindell Blvd., St. Louis, Mo. 63108)

28–2. American **Fracture** Assoc., annual mtg., Chicago, Ill. (H. W. Wellmerling, 610 Griesheim Bldg., Bloomington, Ill. 61701)

29–1. Association for **Research in Ophthalmology**, annual mtg., Chicago, Ill. (Secretary-Treasurer, Univ. of Florida, College of Medicine, Gainesville 32603)

29–4. American College of **Gastroenter**ology, 32nd annual conv., Los Angeles, Calif. (D. Weiss, 33 W. 60 St., New York 10023)

30-2. American **Dental** Assoc., 108th annual mtg., Washington, D.C. (H. Hillenbrand, 211 E. Chicago Ave., Chicago, Ill.)

30-2. Nuclear Science, 14th symp., Los Angeles, Calif. (R. E. Emberson, 345 E. 47 St., New York 10017)

31-2. Numerical Prediction, conf., Monterey, Calif. (K. C. Spengler, 45 Beacon St., Boston, Mass. 02108)

31-3. Society for Experimental Stress Analysis, annual mtg., Chicago, Ill. (B. E. Rossi, 21 Bridge Sq., Westport, Conn.)

November

1-3. Northeast Electronics Research and Engineering, Boston, Mass. (E. Witschi, IEEE, 31 Channing St., Newton, Mass. 02158)

1-3. Industrial Engineering and Management Clinic, 31st annual, Chicago, Ill. (R. J. Mayer, 330 S. Wells St., Chicago, Ill.)

1-3. Operations Research Soc. of America, 32nd natl., Chicago, Ill. (T. E. Caywood, % Caywood, Schiller Assocs., 401 N. Michigan Ave., Chicago 60611)

1-3. American Soc. of **Tropical Medicine and Hygiene**, Philadelphia, Pa. (G. M. Jeffrey, P.O. Box 295, Kensington, Md. 02795)

1-4. Irrigation and Drainage, conf., Sacramento, Calif. (C. E. Lent, Jr., American Soc. of Chemical Engineers, 345 E. 47 St., New York 10017)

2-3. **Product Assurance** Conf., New York, N.Y. (J. Rayfield, EDO Corp., College Point, N.Y. 11356)

2-5. Association of **Clinical Scientists**, annual mtg. (R. P. Mac Fate, ACS, 300 N. State St., No. 5322, Chicago, Ill. 60610)

5-8. National Agricultural Chemicals Assoc., 34th annual mtg., Palm Springs, Calif. (National Agricultural Chemicals Assoc., 1145 19th St., NW, Washington, D.C. 20006)

5-8. American Society of **Plastic and Reconstructive Surgeons**, annual mtg., New York, N.Y. (P. Randall, ASPRS, 2850 Sixth Ave., Suite B, San Diego, Calif.)

5-9. American Nuclear Soc., Chicago, Ill. (O. J. Du Temple, Executive Secretary, American Nuclear Soc., 244 E. Ogden Ave., Hinsdale, Ill. 60521)

5-10. American Soc. of Agronomy, Washington, D.C. (Executive Secretary, 677 S. Segoe Rd., Madison, Wis. 53711)
5-10. Crop Science Soc. of America, Washington, D.C. (Executive Secretary,

SCIENCE, VOL. 158

You mean I can get \$50,000 of TIAA Life insurance for less than \$100?

That's what an Assistant Professor asked us when he heard about TIAA's low life insurance costs.

It's true. At his age 30 the annual premium for a 20-Year Home Protection policy providing \$50,000 initial amount of insurance is \$159.00. The first year dividend, based on our current dividend scale, is \$61.00, making a net payment of \$98.00. Dividends, of course, are not guaranteed.

The Home Protection plan is level premium Term insurance providing its largest amount of protection initially, reducing by schedule each year to recognize decreasing insurance needs. This is just one example of the many lowcost TIAA plans available. If you need more protection for your family, ask us to mail you a personal illustration with figures for a policy issued at your age. We'll also send the Life Insurance Guide describing other TIAA policies.

ARE YOU ELIGIBLE FOR TIAA?

Yes, if you are employed by a college, university, private school or other nonprofit educational or scientific institution that qualifies for **TIAA** eligibility.

 \mathbf{O}

TEACHERS INSURANCE AND ANNUITY AS 730 Third Avenue, New York, N. Y. 10017	SOCIATION
Please mail the new Life Insurance	Guide and a personal illustration.
Name	YourDate of Birth
Address	ZIP
Dependents' Ages	
Nonprofit Employercollege, univer	rsity, or other educational or scientific institution



- Converts any container up to 15 liters into a constant temperature bath.
- Compact, palm size, and only 21/2 lbs.
- "Instadjust" thermoregulator —maintains \pm 0.25°C bath uniformity.
- Dependable, completely solid state—no relays. ALL THIS FOR ONLY \$105.00

Only half as big and less than half the price of our popular larger model —YET this CTC-JR. performs like a giant! Frees all but a tiny 2 x 3" corner of your bath surface for useful work . . . requires *less than 2 inches* of bath depth to operate. Mercury contact thermoregulator controls from 0-100°C, sensitive to $\pm 0.005^{\circ}$ C! We know of nothing comparable on the market.

Ideal for enzyme studies—for incubating cultures—and a host of other biochemical tasks. Want to see one? Ask your Bronwill dealer, or write us for literature on our complete line of Constant Temperature Circulators.



20 OCTOBER 1967

677 S. Segoe Rd., Madison, Wis. 53711) 5-10. Soil Science Society of America, Washington, D.C. (Executive Secretary, 677 S. Segoe Rd., Madison, Wis. 53711) 6-8. Applied Superconductivity, conf. and exhibition, Austin, Tex. (G. D. Cody, Publicity Chairman, RCA Laboratories, Princeton, N.J. 08540)

6-8. Ground-Water Hydrology, natl. symp., San Francisco, Calif. (M. A. Marino, % AERA Hq., 1201 16th St., NW, Washington, D.C. 20006)

6-8. Speech Communication and Processing, annual conf., Cambridge, Mass. (G. Cushman, 555 Huntington Ave., Boston, Mass.)

6-8. Weather Forecasting, conf., Fort Worth, Tex. (K. C. Spengler, American Meteorological Soc., 45 Beacon St., Boston, Mass.)

6-9. Interstate **Postgraduate Medical** Assoc. of North America, annual mtg., Chicago, Ill. (R. T. Ragatz, Box 1109, Madison, Wis.)

7-9. Automatic Support Systems for Advanced Maintainability, 1967 symp., Clayton, Mo. (D. L. Reed, Box 4124, Jennings Station, St. Louis, Mo. 63136)

7-9. Reliability Physics, 6th symp., Los Angeles, Calif. [A. Coppola, Publicity Chairman, RADC (EMERS), Griffis AFB, New York 13440]

8-10. Eastern Analytical Symp., New York, N.Y. (E. G. Brame, Jr., Elastomer Chemistry Dept., duPont Experiment Sta., Wilmington, Del. 19898)

8-10. American Water Resources Assoc., 3rd annual conf., San Francisco, Calif. (A. A. Stone, International Engineering Co., 74 New Montgomery St., San Francisco 94105)

8-11. Respiratory Therapy, 4th annual conf., Boston, Mass. (M. J. Nicholson, 6 Beacon St., Suite 620, Boston 02108)

9-11. Gerontological Soc., Inc., 20th annual mtg., St. Petersburg, Fla. (Mrs. M. Adler, 660 S. Euclid St., St. Louis, Mo.)

10. Laboratory Animal in Gerontologic Research, symp., St. Petersburg, Fla. (R. H. Yager, Natl. Acad. of Sciences-Natl. Research Council, 2101 Constitution Ave., NW, Washington, D.C.)

11-12. American Acad. of **Psychother**apists, annual conf., Warrenton, Va, (H. Rockberger, Conference Chairman, 44 South Munn Ave., East Orange, N.J. 07017)

11-15. American Soc. for Cell Biology, 7th annual mtg., Denver, Colo. (M. J. Moses, Box 2982, Duke Univ. Medical Center, Durham, N.C. 27706)

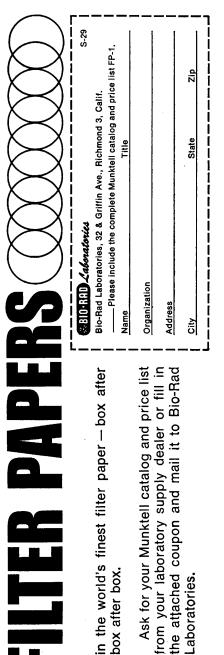
12-17. American Soc. of Mechanical Engineers, winter annual mtg., Pittsburgh, Pa. (A. B. Conlin, Jr., 345 E. 47 St., New York 10017)

13-15. Industrial Diamond Revolution, technical conf., Columbus, Ohio (Conference Hq., 330 S. Wells St., Chicago, Ill. 60606)

13-15. American **Petroleum** Inst., 47th annual mtg., Chicago, Ill. (American Petroleum Inst., 1271 Ave. of the Americas, New York 10020)

13-16. Engineering in Medicine and Biology, 20th annual conf., Boston, Mass. (Professional Assocs., 6520 Clayton Rd., St. Louis, Mo. 63117)

14-16. American Federation of Infor-



Munktell filter papers have been the world wide choice of analytical chemists ever since they were launched by Berzelius in 1815. The same standards of reproducibility on which Berzelius insisted have been maintained and actually improved upon by Munktell over the years. Their careful manufacture and traditional Swedish attention to detail have resulted

411

mation Processing Societies, fall joint computer conf., Anaheim, Calif. (Executive Secretary, 211 E. 43 St., New York 10017)

14-17. American Acoustical Soc., fall mtg., Miami Beach, Fla. (J. Steinberg, Inst. of Marine Science, Univ. of Miami, Miami 33149)

14-18. Air-Conditioning and Refrigeration Inst., annual mtg., Miami, Fla. (1815 N. Fort Myer Dr., Arlington, Va. 22209)

15-18. American Society of Tool and Manufacturing Engineers, semi-annual conv., Dearborn, Mich. (The Society, 20501 Ford Rd., Dearborn 48128)

16-18. American Physical Soc., New York, N.Y. (W. W. Havens, 538 W. 120 St., New York 10027)

16-19. National Soc. for Crippled Children and Adults, annual mtg., Los Angeles, Calif. (K. Bauer, Director of Public Relations, 2023 W. Ogden Ave., Chicago, Ill.)

17-18. Computer Applications in Clinical Electrocardiography, postgraduate program, Washington, D.C. (J. S. France, Assistant Director, American College of Cardiology, Bethesda, Md. 20014)

19-21. International College of Surgeons, 5th Western regional mtg., Las Vegas, Nev. (F. M. Turnbull, Jr., 1127 Wilshire Blvd., Los Angeles, Calif. 90017)

19-22. Association of Military Surgeons of the U.S., annual mtg., Washington, D.C. (Brig. Gen. F. E. Wilson, AMSUS, 1500 Massachusetts Ave., NW, Suite 132, Washington, D.C. 20005)

20-22. Society of Economic Geologists, New Orleans, La. (J. O. Kalliokoski, Dept. of Geology, Princeton Univ., Princeton, N.J. 08540)

20-22. American Physics Soc., annual Fluid Dynamics mtg., Bethlehem, Pa. (P. S. Klebanoff, Natl. Bureau of Standards, Connecticut Ave. at Van Ness St., NW, Washington, D.C. 20234)

20-22. Geological Soc. of America, annual mtg., New Orleans, La. (G. E. Murray, Texas Technical College, Box 4680, Technical Station, Lubbock, Tex., or Miss D. Curtis, Shell Oil Co., Box 60193, New Orleans 70160)

20-22. Geochemical Soc., annual mtg., New Orleans, La. (E. C. T. Chao, % U.S. Geological Survey, Washington, D.C.) 20-22. Mineralogical Soc. of America, New Orleans, La. (G. Switzer, % U.S. National Museum, Washington, D.C.

10025) 20-22. Paleontological Soc. of America, New Orleans, La. (R. L. Langenheim.

New Orleans, La. (R. L. Langenheim, Dept. of Geology, Univ. of Illinois, Urbana) 26 20 American Medical Association

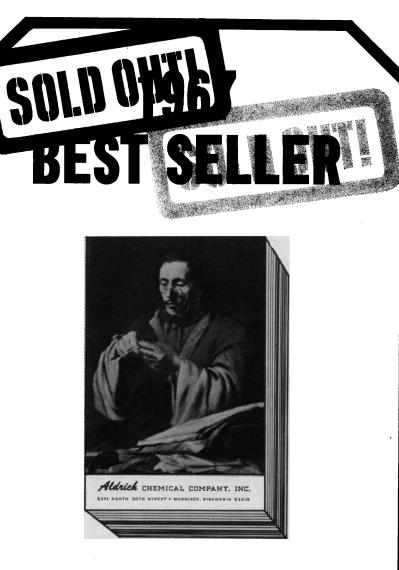
26–29. American Medical Assoc., clinical conv., Houston, Tex. (W. E. Burmeister, Director, Convention Services Dept., AMA, 535 N. Dearborn St., Chicago, Ill.)

26-30. American Inst. of Chemical Engineers, 60th annual mtg., New York, N.Y. (H. I. Wolff, Shell Chemical Co., 50 W. 50 St., New York 10020)

26-1. **Radiological** Soc. of North America, 53rd annual mtg., Chicago, Ill. (M. D. Frazer, RSNA, 713 East Genesee St., Syracuse, N.Y.)

27–29. American Astronautical Soc., natl. mtg., New York, N.Y. (N. Levin, Guidance and Control, Plt. 35, Grumman Engineering Corp., Bethpage, N.Y. 11714)

20 OCTOBER 1967



additional copies now being printed! reserve your free catalog today

THE LATEST ALDRICH CHEMICAL CATALOG lists nearly 9000 compounds (including 1500 new ones never before offered). Organic reagents, organo-metallics, analytical reagents, organic intermediates, and biochemical tools PLUS common laboratory and bulk chemicals. This massive source book is divided into five color-coded sections: 1 Alphabetical 2 Analytical 3 Structural Formula 4 Class of Compound 5 Empirical Formula. And most of the compounds are in stock, ready for same-day shipment. Have you received your free copy of our Best Seller? If not, use the coupon.

ALDRICH CHEMICAL COMPANY, II	V C

2371 North 30th Street, Milwaukee, Wisconsin 53210 Please send me my free 1967 Aldrich Catalog:

STATE

ZIP

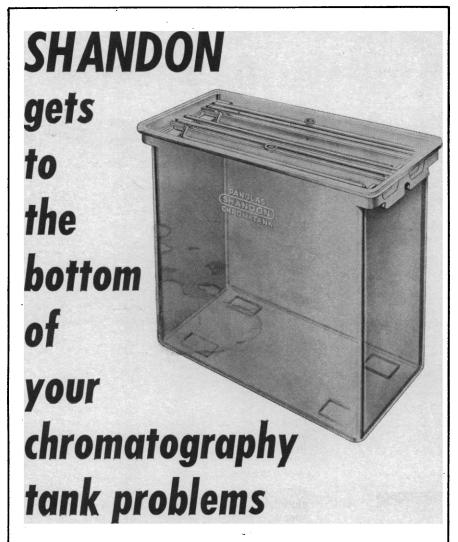
NAME

POSITION COMPANY

ADDRESS

CITY SC-10

A.
ALDRICH



What's so different about the bottom of a Shandon Model 500 Panglas® Chromatank®? It's flat absolutely flat! Shandon Chromatank is press molded, eliminating the mound found at the bottom of ordinary chromatography tanks. You benefit from an even distribution of solvent throughout the tank, and you save solvent, especially in ascending techniques.

Press molding also means the Panglas Chromatank is stronger with rugged corners and heavy walls. The Panglas Chromatank is made *entirely* of glass . . . there are no metal or plastic fittings of any kind which eliminates solvent contamination.

And here is another significant advantage ... the size. The Panglas Model 500 Chromatank is the largest tank of its kind ever produced. Inside measurements are 20" by 8" by 22" high. (51 cm by 20 cm by 56 cm). The Model 500 tank will accommodate either sheets or strips for ascending or descending chromatography. It will also accept 46 cm by 57 cm sheet making it ideal for two-way chromatography.

Get to the bottom of your chromatography problems, rely on Shandon Panglas Chromatank. For more information on other models of Chromatank and other Shandon equipment for Paper Chromatography, write for Bulletin L383. Shandon Scientific Company, Inc., 515 Broad Street, Sewickley, Pa. 15143 (Pittsburgh District).



27-30. Entomological Soc. of America, annual mtg., New York, N.Y. (R. H. Nelson, ESA, 4603 Calvert Rd., College Park, Md.) 27-1. Chemical Industries, New York,

27-1. Chemical Industries, New York, N.Y. (International Exposition Co., 200 Park Ave., New York 10017)

28. American Soc. of Therapeutic Radiologists, Chicago, Ill. (J. A. Del Regato, Penrose Cancer Hospital, Colorado Springs, Colo. 80907)

29-30. Society for Industrial and Applied Mathematics, fall mtg., Santa Barbara, Calif. (H. B. Hair, 33 S. 17 St., Philadelphia, Pa. 19103)

29-1. Wire and Cable Symp., Atlantic City, N.J. (J. Spergel, USAEC, Fort Monmouth, N.J. 07703, attn: AMSEL-KL-EE)

30-3. American Anthropological Assoc., annual mtg., Washington, D.C. (C. Frantz, 1530 P St., NW, Washington, D.C. 20005)

International and Foreign Meetings

November

1-3. Northern Development Conf., 4th, Edmonton, Alberta, Canada. (Alberta and Northwest Chamber of Mines and Resources, Edmonton)

5-11. Allergology, 6th intern. congr., Montreal, Canada. (S. O. Freedman, 1390 Sherbrooke St., W., Montreal 25)

5-11. Pharmaceutical Federation, 4th Central American, San Salvador, El Salvador. (% International Pharmaceutical Federation, 11 Alexanderstraat, The Hague, Netherlands) 6-10. Microbiological Standards and

 δ -10. Microbiological Standards and Testing Methods for Irradiated Food, Vienna, Austria. (International Agency Liaison Branch, Office of the Director General, Food and Agriculture Organization, Via delle Terme di Caracalla, Rome, Italy)

6-11. Global Impacts of Applied Microbiology, 2nd intern. conf., Addis Ababa, Ethiopia. (A. Lemma, Faculty of Science, Haile Sellassie I Univ., Addis Ababa)

6-14. Dentistry, intern. symp., Quito, Ecuador. (O. C. Jaramillo, Decano, Facultad de Odontologia, Universidad Central, Quito) 6-24. Meteorological Instructors, re-

6-24. Meteorological Instructors, regional seminar, Santiago, Chile. (World Meteorological Organization, 41, Av. Giuseppe Motta, Geneva, Switzerland) 7-10. Methods in Soil Ecology, symp.,

7-10. Methods in Soil Ecology, symp., Paris, France (UNESCO, Pl. de Fontenoy, Paris 7)

8–10. Electroplating, intern. conf., Erfurt, Germany. (Dr. Burkhardt, PV Elektrotechnik, Pa 16, Galvanotechnik, Kammer der Technik, Torgauer Str. 76, 705 Leipzig 5, Germany)

9-10. American Anthropological Assoc., annual mtg., Toronto, Ontario, Canada. (Executive Secretary, 1530 P St., NW, Washington, D.C. 20005)

9-11. Hematology, 2nd natl. conf., Bucharest, Rumania. (I. Caloeneschu, Union of Medical Science Societies of the Socialist Republic of Rumania, 8 rue Progresul, Bucharest)

10-11. Psychosomatic Disorders, 11th annual conf., London, England. (A. H. Crisp, % Academic Psychiatric Unit, Middlesex Hospital, London, W.1)

SCIENCE, VOL. 158