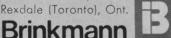




What makes the Brinkmann Automatic Dilutor so expensive (\$2,700) is what makes it so phenomenally accurate: a digital electronic volume setting system, and two precision cylinder and piston assemblies (with only two moving parts in each).

Sample and reagent are mixed additively, automatically. Liquids contact only glass and PTFE components. Simple, push-button operation. Operating range: Reagent, 1.0 to 5,000 μ l in steps of 1.0 μ l; Sample, 0.1 to 500 µl in steps of $0.1 \, \mu$ l.

Before you splurge, get our literature. Just write: Brinkmann Instruments, Cantiague Rd., Westbury, N.Y. 11590. In Canada, write: Brinkmann Instruments (Canada) Ltd., 50 Galaxy Blvd.,



Fred Wolfgram (University of California at Los Angeles) reviewed his studies of a factor that is found in the serum of patients with amyotrophic lateral sclerosis and causes the destruction of anterior horn cells in tissue culture (1). In these studies, slices from the ventral quadrant of the spinal cord in the mouse are cultured for 18 to 21 days, during which the neuronal processes grow out quite luxuriously. The cultures are then exposed to 30 percent serum from patients with amyotrophic lateral sclerosis or from patients with other neurological disease. Neurons die within 3 to 5 days in cultures treated with serum from patients with amyotrophic lateral sclerosis. Wolfgram has not obtained similar results with serum from patients with other neurological diseases. He is now working on further characterization of this cytolytic factor with the hope of devising a simpler assay system for the factor.

A discussion of therapy was initiated by Daniel Drachman (Johns Hopkins), Forbes Norris (Pacific Medical Center), and King Engel (National Institute of Neurological Diseases and Stroke). The many agents which have been tried unsuccessfully in amyotrophic lateral sclerosis were reviewed. Norris reviewed his studies with guanidine which suggest that the percentage of patients in whom the disease progression is slowed or temporarily halted is greater than previously reported for this agent. No claims were made that guanidine is a cure for the disease but only that it may slow the rapid progression. There was considerable discussion about the need for a doubleblind study to evaluate guanidine.

The conference ended with a general discussion of potential approaches to therapy. These ranged from antiviral drugs, such as intrathecal interferon, to immune enhancement by means of transfer factor on the one hand and intensive immunosuppression on the other. These antithetic suggestions for therapy indicated to all the pressing need to develop further insight into the possible mechanisms of the disease by exploiting the recent virological and immunological clues.

GUY M. McKhann RICHARD T. JOHNSON

Department of Neurology, Johns Hopkins University School of Medicine, Baltimore, Maryland 21205

References

1. F. Wolfgram and L. Myers, Science 179, 579

Forthcoming Events

April

11-14. Beta Kappa Chi, scientific honor society with chapters in Black colleges and universities, 50th annual, Lincoln Univ., Oxford, Pa. (R. J. Bonner, Hampton Inst., Hampton, Va. 23368)

14-18. American Psychiatric Assoc., Montreal, P.Q., Canada. (B. W. Hogan, APA, 1700 18th S., NW, Washington, D.C. 20009)

15-20. American Physiological Soc., Atlantic City, N.J. (O. E. Reynolds, APS, 9650 Rockville Pike, Bethesda, Md. 20014)

23-25. East Coast Offshore Symp., 2nd, American Assoc. of Petroleum Geologists, Atlantic City, N.J. (G. C. Grow, Jr., Transcontinental Gas Pipeline Corp., Suite 500, Gateway 1, Newark, N.J. 07102)

26-28. American Philosophical Assoc., Western Div., Chicago, Ill. (N. E. Bowie, Hamilton College, Clinton, N.Y. 13323) 26-28. Sickle Cell Anemia Symp.,

Baton Rouge, La. (J. M. Martin, Dept. of Chemistry, Southern Univ., Baton Rouge 70813)

May

1-3. Industrial Waste, 28th annual conf., West Lafayette, Ind. (D. W. Hawkins, Room 308, Civil Engineering Bldg., Purdue Univ., West Lafayete 47907)

3-4. National Information Retrieval Colloquium, 10th annual, Philadelphia, Pa. (M. Nussbaum, Computamation, 2955 Kensington Ave., Philadelphia 19134)

3-5. Society for American Archaeology, San Francisco, Calif. (R. E. W. Adams, Univ. of Texas, Suite 250, 4242 Piedras Dr., San Antonio 78228)

3-5. American Assoc. for the History of Medicine, Cincinnati, Ohio. (G. Miller, Howard Dittrick Museum of Historical Medicine, 11,000 Euclid Ave., Cleveland, Ohio 44106)

3-6. Association of Clinical Scientists, Tampa, Fla. (F. W. Sunderman, Jr., Univ. of Connecticut, School of Medicine, Box G, Farmington 06032)

3-6. National Assoc. of Social Workers, Atlanta, Ga. (C. A. Alexander, NASW, 600 Southern Bldg., 15th and H Sts., NW, Washington, D.C. 20005)

3-7. American Psychoanalytic Assoc., Honolulu, Hawaii. (S. Goodman, 3021 Telegraph Ave., Berkeley, Calif. 94705)

3-7. Association for Research in Vision and Ophthalmology, Sarasota, Fla. (R. D. Reinecke, Albany Medical College, Albany, N.Y. 12208)

4-6. American College of Apothecaries, St. Louis, Mo. (D. C. Huffman, Jr., 5291 Rock Ridge Rd., Memphis, Tenn. 38128)

4-6. Drosophila Research Conf., De Kalb, Ill. (S. Mittler, Dept. of Biological Science, Northern Illinois Univ., De Kalb

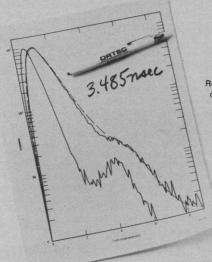
4-6. American Acad. of Psychoanalysis, Honolulu, Hawaii. (J. Barnett, AAP, 40 Gramercy Park North, New York 10024)

6-11. American Soc. for Microbiology, Miami Beach, Fla. (R. W. Sarber, ASM. 1913 I St., NW, Washington, D.C.

7-9. Rocky Mountain Bioengineering

Your most valuable tool for measuring...

- · nanosecond fluorescence decay
- molecular structure by polarization anisotropy
- molecular conformation changes
- · enzyme-protein & other reaction rates



Resolution of 3.485nsec decay component of dansyl-cystine in water. Light pulser rate: 40,000/sec. Accumulation time: 110 sec. Despite low yield, computer-calculated data, represented by broken line, is within a few percent of experimental data.

...is the Ortec 9200 system.

Single-photon counting

This extraordinarily sensitive and rapid technique, based on the probability of single-photon events as a function of light intensity, is acknowledged as the best method of measuring very low light levels. Single-photon counting is also the reason why our 9200 Nanosecond Fluorescence Spectrometer System is orders of magnitude superior to other instrumentation in both sensitivity and accuracy.

Our system consists, essentially, of a very fast light pulser to excite the sample, and a network of timing electronics and multichannel analyzer to measure the decaying fluorescence intensity as a function of time over several decades. Both single and multiple decay components as small as 2nsec can

be measured with linearity typically better than 1%. Sensitivity is better than 1ppb quinine sulfate in sulfuric acid.

AN SEGRE COMPANY

Computer-based or basic system?

Shown below is our computer-based version of the 9200 system which includes, in addition to PDP-11 computer and peripherals, the necessary software for single/double decay time constants and anisotropy rotational correlations.

Since single-photon counting is inherently digital and a computer interface is already engineered into the Ortec MCA, the system is compatible with any computer, not just the PDP-11. In fact, you can get beautiful results with no computer at all—using only the basic system—if you don't mind deconvoluting data by hand.

For full details, including a copy of our 9200 system technical bulletin, con-

tact your nearby Ortec

representative or Ortec Incorporated, 110 Midland Road, Oak Ridge, Tenn. 37830. Phone (615) 482-4411. In Europe: Ortec Ltd., Dallow

Road, Luton, Bedfordshire. Phone LUton 27557. Ortec GmbH,

8 München 13, Frankfurter Ring 81, West Germany. Phone (0811) 359-1001.

5525 West Germany. Phone (0811)

Symp., 10th annual, Boulder, Colo. (N. B. Kindig, Dept. of Electrical Engineering, Univ. of Colorado, Boulder 80302)

7-9. Society of Economic Paleontologists and Mineralogists, Anaheim, Calif. (Mrs. R. Tener, SEPM, Box 979, Tulsa, Okla. 74101)

7-10. Aerospace Medical Assoc., Las Vegas, Nev. (M. H. Goodwin, AMA, Washington National Airport, Washington, D.C. 20001)

7-11. Society of Manufacturing Engineers, Detroit, Mich. (R. W. Taylor, SME, 20501 Ford Rd., Dearborn, Mich. 48128)

7-11. Society of Plastics Engineers, Montreal, P.Q., Canada. (C. C. Campbell, SPE, 656 W. Putnam Ave., Greenwich, Conn. 06830)

8-9. Fluvial Processes and Sedimentation, 9th Canadian Hydrology Symp., Edmonton, Alta., Canada. (C. R. Neill, Research Council of Alberta, 303 Civil-Electrical Engineering Bldg., Univ. of Alberta, Edmonton T6G 2E1)

9-11. Operations Research Soc. of America, Milwaukee, Wis. (J. R. Borsting, Dept. of Operations Research and Administrative Science, Naval Postgraduate School, Monterey, Calif. 93940)

9-11. Midwestern **Psychological** Assoc., Chicago, Ill. (W. F. Hill, Dept. of Psychology, Northwestern Univ., Evanston, Ill. 60201)

9-11. International Symp. on Thrombosis and the Molecular Biology of the Platelet and Other Interacting Cells. Chicago, Ill. (F. M. Booyse, Dept. of Biochemistry, Rush Medical College, 1753 W. Congress Pkwy., Chicago 60612)

9-12. Society for Technical Communication, Houston, Tex. (C. T. Youngblood, STC, Suite 421, 1010 Vermont Ave., NW, Washington, D.C. 20005)

10-11. Polymer and Fiber Microscopy, 12th symp., Textile Research Inst., Raleigh, N.C. (D. C. Felty, Chemstrand Research Center, Research Triangle Park, Durham, N.C. 27702)

11-12. American Assoc. of Clinical Urologists, New York, N.Y. (R. B. Carson, AACU, 708 E. Broward Blvd., Fort Lauderdale, Fla. 33301)

13-17. Radiation Research Soc., St. Louis, Mo. (R. J. Burk, Jr., RRS, 4211 39th St., NW. Washington, D.C. 20016)

13-18. Electrochemical Soc., Chicago, Ill. (E. G. Enck, ES, P.O. Box 2071, Princeton, N.J. 08540)

13-18. Electronics Div., Electrochemical Soc., Chicago, Ill. (H. R. Huff, Texas Instruments, Inc., Mail Station 202, Dallas, Tex. 75222)

13-18. Society for Experimental Stress Analysis, Los Angeles, Calif. (B. E. Rossi, SESA, 21 Bridge Sq., Westport, Conn. 06880)

14-16. American Assoc. of **Petroleum** Geologists, Anaheim, Calif. (T. L. Bear, Bear & Kistler, 1052 W. 6 St., Los Angeles, Calif. 90017)

14-17. Irregularities in the Equatorial Ionosphere, American Geophysical Union, Dallas, Tex. (A. F. Spilhaus, Jr., AGU, 1717 L St., NW, Washington, D.C. 20036)

14-18. Symposium on Environmental Behavior of Radionuclides Released in the Nuclear Industry, Intern. Atomic Energy Agency, Aix-en-Provence, France.

(J. H. Kane, Office of Information Services, U.S. Atomic Energy Commission, Washington, D.C. 20545)

15-17. American Inst. of Chemists, Houston, Tex. (P. B. Slawter, Jr., AIC., 79 Madison Ave., New York 10016)

15-17. Electrical and Electronic Measurement and Test Instrument Conf., Ottawa, Ont., Canada. (G. R. Symonds, 4-261 Fifth Ave., Ottawa K1S 2N4)

15-20. American Physiological Soc., Atlantic City, N.J. (R. G. Daggs, APS, 9650 Rockville Pike, Bethesda, Md. 20014)

16-18. National Soc. for the **Prevention of Blindness**, New York, N.Y. (W. D. David, NSPB, 79 Madison Ave., New York 10016)

16-19. Society of Technical Writers and Publishers, Houston, Tex. C. T. Young-blood, STWP, Suite 421, 1010 Vermont Ave., NW, Washington, D.C. 20005)

16-20. American Pediatric Soc., San Francisco, Calif. (C. D. Cook, 333 Cedar St., New Haven, Conn. 06510)

17-19. Radioimmunoassay Symp., American Assoc. Clinical Chemists (Texas section), San Antonio. (P. K. Besch, Dept. of Obstetrics and Gynecology, Baylor College of Medicine, Houston, Tex. 77025)

20-22. Council of Biology Editors, Bethesda, Md. (K. F. Heumann, Federation of American Socs. for Experimental Biology, 9650 Rockville Pike, Bethesda, Md. 20014)

20-23. American Thoracic Soc., New York, N.Y. (R. G. Weymueller, ATS, 1740 Broadway, New York 10019)

20-23. National Tuberculosis and Respiratory Disease Assoc., New York, N.Y. (R. J. Anderson, NTRDA, 1740 Broadway, New York 10019)

20-24. Dental Training Project in Mental Retardation and Related Developmental Disorders, 3rd mtg., New Hyde Park, N.Y. (S. Kamen, Dept. of Dentistry, Long Island Jewish Hillside Medical Center, New Hyde Park 11040)

20-25. Conference on Mass Spectrometry and Allied Topics, 21st, San Francisco, Calif. (F. E. Saalfeld, Naval Research Lab., Code 6110, Washington, D.C. 20390)

20-26. American Gastroenterological Assoc., New York, N.Y. (J. A. Benson, Jr., 3181 SW Sam Jackson Park Rd., Portland, Ore. 97201)

20-26. American Soc. for Gastrointestinal Endoscopy, New York, N.Y. (J. A. Rinaldo, Jr., ASGE, 16001 W. Nine Mile Rd., Southfield, Mich. 48075)

21-23. Biomedical Perspectives of Agglutinins of Invertebrate and Plant Origins, New York Acad. of Sciences, New York, N.Y. (E. Cohen, Roswell Park Memorial Inst., Buffalo, N.Y.)

21-23. American Soc. for Quality Control, Cleveland, Ohio. (R. W. Shearman, ASQC, 161 W. Wisconsin Ave., Milwaukee, Wis. 53203)

21-24. American College of **Obstetricians and Gynecologists**, Bal Habour, Fla. (M. Newton, ACOG, 79 W. Monroe St., Chicago, Ill. 60603)

21-25. American **Industrial Hygiene** Assoc., Boston, Mass. (G. D. Clayton, AIHA, 25711 Southfield Rd., Southfield, Mich., 48075)

21-26. World Congr. of Otorhinolaryngology, 10th Venice, Italy. (M. Arslan,

Clinica ORL, Policlinico, Univ. of Padua, Padua, Italy)

23-25. American Inst. of Industrial Engineers, Chicago, Ill. (J. F. Jericho, AIIE, 345 E. 47 St., New York 10017)

24-25. Fluorescence: Microscopy, Measurements and Photochemistry, intern. symp., Lisbon, Portugal. (A. de Lemos Bastos, Instituto Portugues de Oncologia de Francisco Gentil, Palhava-Lisboa 4)

25-26. New Developments in Diagnosis and Treatment of Cancer, Pittsburgh, Pa. (J. M. Sacuto, Community Relations and Development, Allegheny General Hospital, 320 E. North Ave., Pittsburgh 15212)

27-30. International Congr. of Bronchoesophagology, 14th, Lausanne, Switzerland. (J. P. Taillen, Clinique ORL, Hopital Cantonal, 1011 Lausanne)

28-30. American **Ophthalmological** Soc., Hot Springs, Va. (R. W. Hollenhorst, AOS, 200 First St., SW, Rochester, Minn. 55901)

29-1. American Orthopsychiatric Assoc., 50th annual, New York, N.Y. (M. F. Langer, AOA, 1790 Broadway, New York 10019)

30-1. Biometric Soc., Eastern North American Region, Ithaca, N.Y. (F. B. Cady, Biometric Unit, 337 Warren Hall, Cornell Univ., Ithaca 14850)

30-1. Canadian Meteorological Soc., 7th annual congr., Halifax, N.S. (Miss N. Waller, Maritime Command Headquarters, FMO Halifax, N.S.)

30-1. Laser Engineering and Applications, 4th biennial joint sponsorship of the Inst. of Electrical and Electronics Engineers and the Optical Soc. of America, Washington, D.C. (D. Edgar, Courtesy Associates, Suite 700, 1629 K St., NW, Washington, D.C. 20006)

30-1. European Conf. on the Use of Low Energy Accelerators, Polytechnic of the South Bank and Inst. of Physics, London, England. (A. H. Jiggins, Dept. of Physics, PSB, London, S.E.1 OAA)

June

2-3. Focus on the Future: The Challenges and the Opportunities, 100th women graduates mtg., sponsored by the Assoc. of Massachusetts Inst. of Technology Alumnae, Cambridge. (S. E. Schur, 1 Emerson Pl., Boston, Mass. 02114)

3-5. Royal Soc. of Canada, Kingston, Ont. (Public Relations Dept., RSC, Queen's Linix Kingston)

Univ., Kingston)
3-7. Special Libraries Assoc., Pittsburgh, Pa. (F. E. McKenna, SLA, 235
Park Ave. S., New York 10003)

3-7. Asian Pacific Congr. of Plastic Surgery, Jerusalem, Israel. (N. Ben-Hur, P.O. Box 16271, Tel-Aviv, Israel)

4-6. Brookhaven Symp. in **Biology**, 25th, Upton, N.Y. (P. S. Carlson, Biology Dept., Brookhaven Natl. Lab., Upton 11973)

4-8. Carbon, 11th biennial conf., American Carbon Committee, Oak Ridge Natl. Lab., Gatlinburg, Tenn. (W. P. Eartherly, Oak Ridge Natl. Lab., P.O. Box X, Oak Ridge 37830)

4-8. International Ergonomics Assoc., 5th intern. congr., Amsterdam, Netherlands. (Information Organisatie Bureau Amsterdam NV, Postbus 7205, Amsterdam)

4-8. American Federation of Informa-



This is a centrifuge that has the patented Lourdes Continuous Flow System. A System that offers you simpler operation. Faster separation of solids from large volumes of liquids. Here in ml per minute are some of the flow rates you can achieve: Yeast cells 500. Bacterial Culture 200. E Coli 350.

This is also the centrifuge with up to $40,300 \times G$; up to 4 litre capacity with fail-safe brush life control; sliding top door for easy loading, automatic solid state speed control, temperature control -20° C to $+40^{\circ}$ C.

Lourdes' Beta-Fuge. You ought to look into it. Write Vernitron or contact your local dealer.... today. And you, too, will praise the Lourdes.



Vernitron Medical Products, Inc. Empire Blvd. & Terminal Lane, Carlstadt, N.J. 07072

tion Processing Soc., New York, N.Y. (T. C. White, AFIPS, 210 Summit Ave., Montvale, N.J. 07645)

4-8. Symposium on Rapid Methods and Automation in Microbiology, Stockholm, Sweden. (Miss S. Olsen, Dept. of Applied Microbiology, Karolinska Institutet, S-104 01 Stockholm 60

4-8. American Assoc. for the Study of Neoplastic Diseases, Heidelberg, Germany. (R. H. Jackson, 10607 Miles Ave., Cleveland, Ohio 44105)

4-9. International Assoc. of Hydrological Sciences, Madrid, Spain. (D. R. Dawdy, Engineering Research Center, U.S. Geological Survey, Colorado State Univ., Fort Collins 80521)

6-7. Government Data Systems Conf. on New Systems in Law Enforcement and Criminal Justice, 2nd natl., New York, N.Y. (W. A. Kulok, Div. of Business and Management, New York Univ., 600 Third Ave., New York 10016)

6-8. Alaska State Medical Assoc., Fairbanks. (R. G. Ogden, ASMA, 1135 W. 8 Ave., Anchorage 99501)

6-8. Mode of Action of Microbial Walls and Membranes, New York Acad. of Sciences, New York, N.Y. (M. R. J. Salton, New York Univ., New York)
7-9. International Congr. on Immu-

nology in Obstetrics and Gynaecology, Padua, Italy. (N. Carretti, Obstetrics and Gynaecology Clinic, Univ. of Padua, Via Giustiniani No. 3, Padua 35100)

7-9. American Rheumatism Los Angeles, Calif. (Miss L. Bonfiglio, ARA, 1212 Avenue of the Americas, New York 10036)

7-9. Mass Spectrometry in Biochemistry and Medicine, intern. symp., Milan Italy. (A. Frigerio, Istituto di Ricerche Farmacologiche "Mario Negri," 20157 Milan-Via Eritrea, 62 Italy)

8-10. Society of Biological Psychiatry, Montreal, P.Q., Canada. (I. F. Small, Larue D. Carter Memorial Hospital, 1315 W. 10 St., Indianapolis, Ind. 46202)

8-13. Astronomical Soc. of the Pacific, Los Angeles, Calif. (L. Salanave, California Acad. of Sciences, Golden Gate Park, San Francisco 94118)

10-14. Institute of Food Technologists, Miami Beach, Fla. (C. L. Willey, IFT, 221 N. LaSalle St., Chicago, Ill. 60601)

10-14. Special Libraries Assoc., Philadelphia, Pa. (F. E. McKenna, SLA, 235 Park Ave. S., New York 10003)

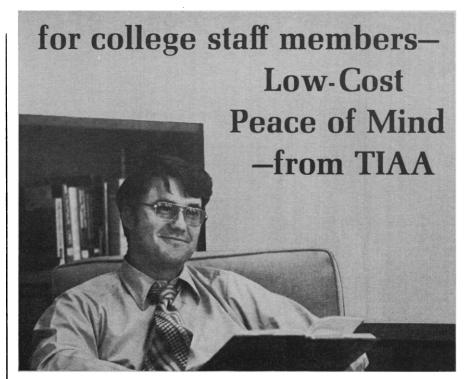
10-15. Neurosurgical Soc. of America, Pembroke, Bermuda. (S. N. Chou, Univ. of Minnesota Medical School, Minneapolis 55455)

10-15. American Nuclear Soc., Chicago, Ill. (O. J. Du Temple, ANS, 244 E. Ogden Ave., Hinsdale, Ill. 60521)

11-13. International Conf. on Communications, Seattle, Wash. (S. Tashiro, ICC, P.O. Box 648, Bellevue, Wash. 98009)

11-13. American Neurological Assoc. and Canadian Congr. of Neurological Sciences, Montreal, P.Q., Canada. (S. A. Trufant, Cincinnati General Hospital,

Cincinnati, Ohio 45229)
11-13. Power Electronics Specialists Conf., Inst. of Electrical and Electronics Engineers, Inc., Pasadena, Calif. (R. D. Middlebrook, Electrical Engineering Dept., 116-81 California Inst. of Technology, Pasadena 91109)



\$50,000 of life insurance costs less than \$100 at age 30.

That's right! For a man, 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 \$61.50, making a net payment of \$97.50. 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 low-cost 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.

ELIGIBILITY

Eligibility to apply for this or other TIAA life insurance is limited to persons employed at the time of application by a college, university, private school, or other nonprofit educational or scientific institution that qualifies for TIAA eligibility.

TEACHERS INSURANCE AND AN 730 Third Avenue, New York, N.		(TIAA) si
Please mail the Life Insurance Guide	and a personal illustration.	
Name		YourDate af Birth
Address		
	Street	
City	State	Zip
Dependents' Ages	· · · · · · · · · · · · · · · · · · ·	
Nonprofit Employer		
colle	ge, university, or other educatio	nal or scientific institution

11-13. Recent Advances in Staphylococcal Research, New York Acad. of Sciences, New York, N.Y. (W. W. Yotis, Loyola Univ. Stritch School of Medicine, Maywood, Ill.)

11-14. Public Need and the Role of the Inventor Conf., sponsored by the Natl. Inventors Council, Natl. Bureau of Standards, and Dept. of Commerce, Monterey, Calif. (C. S. Draper, U.S. Dept. of Commerce, Natl. Bureau of Standards, Washington, D.C. 20234)

11-16. American Assoc. for the Advancement of Science, Pacific Div., Salt Lake City, Utah. (R. T. Orr, California Acad. of Sciences, Golden Gate Park, San Francisco 94118)

12-14. Frequency Control, 27th symp., Atlantic City, N.J. (J. R. Vig, U.S. Army Electronics Command, Fort Monmouth, N.J. 07703)

12-15. Identification and System Parameter Estimation, 3rd intern. symp., Federation of Automatic Control, The Hague, Netherlands. (IFAC, c/o Klvl, 23 Prinsessegracht, The Hague)

12-16. American Assoc. of **Bioanalysts**, Miami Beach, Fla. (D. Birenbaum, AAB, 805 Ambassador Bldg., 411 N. 7 St., St. Louis, Mo. 63101)

13-15. Society for **Developmental Biology**, 32nd symp., Manhattan, Kan. (T. J. King, Div. of Cancer Grants, Natl. Cancer Inst., Bethesda, Md. 20014)

14-16. American Assoc. of **Physics Teachers**, Reno, Nev. (W. V. Johnson, AAPT, 1785 Massachusetts Ave., NW, Washington, D.C. 20036)

16-18. American Assoc. of Neuropathologists, Freeport, Bahamas. (R. L. Davis, Cajal Lab. of Neuropathology, LAC-USC Medical Center, 1200 N. State St., Los Angeles, Calif. 90033)

16-20. Canadian Pediatric Soc., Sherbrooke, P.Q., Canada. (J. H. V. Marchessault, Centre Hôpital Universitaire, Sherbrooke Univ., Sherbrooke)

16-24. American Physical Therapy Assoc., Houston, Tex. (R. Noland, APTA, 1156 15th St., NW, Washington, D.C. 20005)

16-24. National Speleological Soc., Bloomington, Ind. (L. A. Klein, Apt. 18-0, 98-30 57th Ave., Flushing, N.Y. 11368)

17-20. American Soc. of Agricultural Engineers, Lexington, Ky. (J. L. Butt, ASAE, P.O. Box 229, St. Joseph, Mich. 49085)

17-21. Health Physics Soc., 18th annual, Miami Beach, Fla. (S. C. Bushing, Dept. of Radiology, Baylor College of Medicine, Houston, Tex. 77025)

17-22. American Inst. of **Biological Sciences**, 24th, Amherst, Mass. (A. Kulback, AIBS, 3900 Wisconsin Ave., NW, Washington, D.C. 20016)

17-22. Botanical Soc. of America, Amherst, Mass. (B. F. Palser, Dept. of Botany, Rutgers Univ., New Brunswick, N.J. 08903)

17-22. American Crystallographic Assoc., Storrs, Conn. (Mrs. E. E. Snider, ACA, 335 E. 45 St., New York 10017)

17-22. Cytopharmacology of Secretion, 2nd intern. symp., Venice, Italy. (F. Clementi, Instituto di Farmacologia, Universita di Milano, Via Vancitelli 32, 20129 Milan, Italy)

17-22. Ecological Soc. of America, Amherst, Mass. (J. F. McCormick, Dept. of Botany, Univ. of North Carolina, Chapel Hill, N.C. 27514)

17-22. American Soc. of Medical Technologists, Boston, Mass. (Mrs. N. Preuss, 116 W. Frier Dr., Phoenix, Ariz. 85021)

17-22. Phycological Soc. of America, Amherst, Mass. (M. J. Wynne, Dept. of Botany, Univ. of Texas, Austin 78712)

17-22. International Symp. on **Purine** Metabolism in Man, Tel-Aviv, Israel. (Mrs. K. Tchetchik, ISPMM, P.O. Box 16271, Tel-Aviv)

17-22. Society for the Study of Evolution, Amherst, Mass. (D. L. Jameson, Dept. of Biology, Univ. of Houston, Houston, Tex. 77004)

18-19. American Fern Soc., Amherst, Mass. (R. L. Hauke, Dept. of Botany, Univ. of Rhode Island, Kingston 02881)

18-20. Union Intern. des Laboratoires Independents, 7th general assembly, Wiesbaden, Germany. (A. Herzka, Ashbourne House, Alberon Gardens, London, NW11 OBN, England)

18-21. Society for Industrial and Applied Mathematics and Inst. for Computer Applications in Science and Engineering, Hampton, Va. (SIAM, 33 S. 17 St., Philadelphia, Pa. 19103)

18-21. American Soc. of Plant Physiologists, Calgary, Alta., Canada. (W. H. Klein, Smithsonian Radiation Biological Lab., 12441 Parklawn Dr., Rockville, Md. 20852)



18-22. Biomedical Physics and Biomaterials Science, Cambridge, Mass. (H. E. Stanley, Room 13-2114, Massachusetts Inst. of Technology, Cambridge 02139)

18-22. International College of Psychosomatic Medicine, 2nd congr., Amsterdam, Netherlands. (A. J. Krakowski, 202A Cornelia St., Plattsburgh, N.Y. 12901)

20-4. Science and Man in the Americas, inter-American scientific mtg., jointly by Mexico's Natl. Council for Science and Technology and AAAS, Mexico City. (AAAS Mtg. Office, 1444 N St., NW, Washington, D.C. 20005, or Consejo Nacional de Ciencia y Tecnologia, Avenida, Insurgentes sur 1677, Mexico 20 D.F.)

21-23. Viral Replication and Cancer, 2nd Duran Reynals Intern. Symp., Barcelona, Spain. (J. Oro, Dept. of Biophysics Sciences, Univ. of Houston, Houston, Tex. 77004)

21-23. American Astronomical Soc. (Div. on **Dynamical Astronomy**), Cincinnati, Ohio. (J. D. Mulholland, Dept. of Astronomy, Univ. of Texas, Austin 78712)

22-23. Society for Vascular Surgery, Toronto, Ont., Canada. (J. A. DeWeese, 260 Crittenden Blvd., Rochester, N.Y. 14642)

22-24. Society for Investigative Dermatology, New York, N.Y. (J. S. Strauss, Boston Univ. Medical Center, 80 E. Concord St., Boston, Mass. 02118)

24-27. American Dairy Science Assoc., Pullman, Wash. (C. Cruse, ADSA, 113 N. Neil St., Champaign, Ill. 61820)

24-27. American Assoc. of **Plastic Surgeons**, New York, N.Y. (N. Georgiade, Duke Univ. Medical Center, Box 3098, Durham, N.C. 27710)

24-28. American Soc. of Heating, Refrigerating, Air-Conditioning Engineers, Louisville, Ky. (A. T. Boggs III, ASH-RACE, 345 E. 47 St., New York 10017)

24-29. Corrosion in Seawater, American Soc. for Testing and Materials Committee G-1, Philadelphia, Pa. (W. H. Ailor, Metallurgical Research Div., Reynolds Metals Co., Richmond, Va. 23261)

24-30. American Library Assoc., Las Vegas, Nev. (D. H. Clift, ALA, 50 E. Huron St., Chicago, Ill. 60611)

25-28. American Soc. for Engineering Education, Ames, Iowa. (L. B. Williams, ASEE, Suite 400, 1 Dupont Circle, Washington, D.C. 20036)

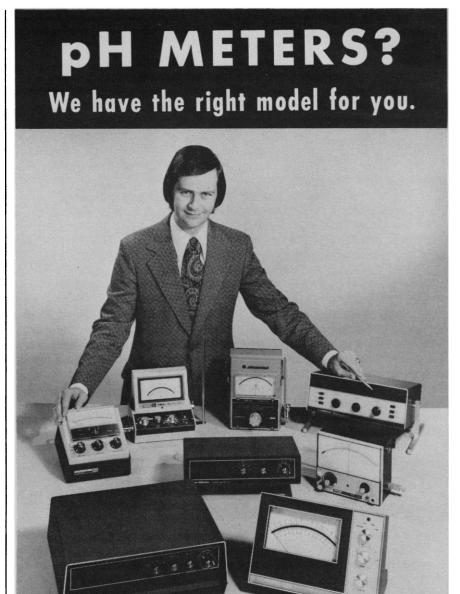
25-28. Canadian **Ophthalmological** Soc., Toronto, Ont. (G. A. Thompson, Suite 401, 1849 Yonge St. Toronto 7)

25-28. International Conf. on the Origin of Life, 4th, Barcelona, Spain. (J. Oro, Dept. of Biophysics Sciences, Univ. of Houston, Houston, Tex. 77004)

25-29. Information Theory, intern. symp., Inst. of Electrical and Electronics Engineers (Information Theory Group), Ashkelon, Israel. (Symp. Cochairmen: A. Wyner, Room 2C-357, Bell Labs., Murray Hill, N.J. 07974, or J. Ziv, Faculty of Electrical Engineering, Technion-Israel Inst. of Technology, Haifa)

25-30. International Congr. of **Psychotherapy**, Oslo, Norway. (F. Magnussen, Box 26, Vinderen/Oslo)

25-1. Aeronautical Technology, American Inst. of Aeronautics and Astronautics and the Soviet Ministry of Civil Aviation, Moscow, U.S.S.R. (P. D. Schaub, AIAA, 1290 Sixth Ave., New York 10019)

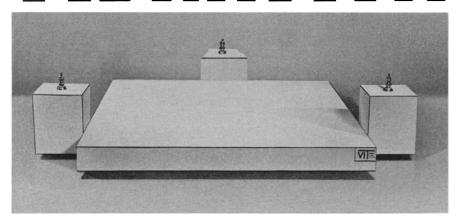


Pictured are just a few of the many different types of pH Meters we can supply. All told, we stock over thirty different models with either digital or meter readout . . . made by such outstanding manufacturers as Coleman, Corning, IBC, Orion and Photovolt.

We also stock all types of electrodes. In addition to the standard types, we can provide nineteen different specific ion electrodes.

Of course not only do we sell pH meters and electrodes, but we stock over 30,000 other items. So whether you are in the market for a simple little test tube or a sophisticated laboratory instrument, we can meet your requirement. Ask us for literature.





Elevators and air-conditioners hum. Construction and traffic rumbles. Even our footfalls cause vibration. The human body adjusts to vibrations. Sensitive equipment does not. The new EPOI/Barry VIT systems are engineered to isolate 90-95% of environmental vibrations. Simply, inexpensively, scientifically. Use one in your environment free for ten days. Call or write: Instrument Division, Ehrenreich Photo-Optical Industries, Inc., 623 Stewart Avenue, Garden City, N.Y. 11530. (516) 248-5200. Telex: 967806



See the VIT in operation at FASEB in Booths G1-G3

Circle No. 83 on Readers' Service Card

CYTOLOGISTS:

now prepare more slides in less time, with less fluid

The Shandon Cytospin cyto-centrifuge employs a unique cell concentrating and distributing technique permitting you to prepare a large quantity of microscope slides using a smaller amount of human blood plasma,



synovial fluid, peritoneal exudates, seminal or other body fluids. Centrifugation and slide preparation are performed simultaneously, which eliminates prior centrifugation and saves you time. Improved head design ensures safety when working with pathogenic organisms.

The Shandon Cytospin cyto-centrifuge produces a monolayer of cells and does not damage individual cell structure. Also, processed slides can be rapidly scanned using a preset high power objective without adjustment between slides. Get the catalog covering Cytospin and other outstanding Shandon-Elliott laboratory equipment . . . write Shandon Southern Instruments, Inc., 515 Broad Street, Sewickley, Pa. 15143 (Pittsburgh District).



26-28. Institute of Navigation, St. Louis, Mo. (R. E. Freeman, IN, Suite 832, 815 15th St., NW, Washington, D.C. 20005)

27-30. British Assoc. of **Plastic Surgeons**, Bristol, England. (I. Broomhead, Royal College of Surgeons, 35/43 Lincoln's Inn Fields, London W.C.2, England)

27-1. Society of Women Engineers, 23rd, San Mateo, Calif. (E. H. Williams, 2390 W. Middlefield Rd., Mountain View, Calif. 94040)

28-3. Perugia Quadrennial Intern. Conf. on Cancer, 5th, Perugia, Italy. (L. Severi, P.O. Box 327, 06100 Perugia)

July

1-6. National Education Assoc., Portland, Ore. (S. M. Lambert, NEA, 1201 16th St., NW, Washington, D.C. 20036)

1-6. Urology, 16th intern. congr., Amsterdam, Netherlands. (Holland Organizing Center, 16 Lange Voorhout, S-Gravenhague, The Hague, Netherlands)

1-7. **Biochemistry**, 9th intern. congr., Stockholm, Sweden. (G. Aulin-Erdtman, Svenska Kemistsamfunder, Wenner-Gren Centre, 6 tr., S-113 46 Stockholm)

2-6. Association Internationale de la Couleur, 2nd congr., York, England. (W. D. Wright, Applied Optics Section, Imperial College, London, SW7 2BZ, England)

2-6. Fuel and Fuel Elements for Fast Reactors, Intern. Atomic Energy Agency, Brussels, Belgium. (J. H. Kane, Office of Information Services, Atomic Energy Commission, Washington, D.C. 20545)

2-6. International Solar Energy Congr., Paris, France. (W. Klein, Smithsonian Radiation Biology Lab., 2441 Parklawn Dr., Rockville, Md. 20852)

6-9. Buckeye Intern. Rocketry Conf., Columbus, Ohio. (G. M. Pantalos, BIRC, 1191 Shanley Dr., Columbus 43224)

3-5. Conference on Scanning Electron Microscopy Systems and Applications, Inst. of Physics, Newcastle upon Tyne, England. (Meetings Officer, IP, 57 Belgrave Sq., London SW1X, 8QX, England)

8-14. Health Education, 8th intern. conf., Versailles, France. (L. P. Aujoulat, 20 rue Greuze, Paris 16e, France)

9-13. American Soc. of Civil Engineers, Tulsa, Okla. (E. Zwoger, ASCE, 345 E. 47 St., New York 10017)

9-13. Illuminating Engineering Soc., Philadelphia, Pa. (P. C. Ringgold, IES, 345 E. 47 St., New York 10017)

10-12. Electromagnetic Compatibility Symp., Inst. of Electrical and Electronics Engineers, San Francisco, Calif. (Technical Activities Board, 345 E. 47 St., New York 10017)

10-13. International Conf. on the Regulation of Adipose Tissue Mass, Marseille, France. (J. Boyer, Clinique Endocrinologique, Hôpital de la Conception, 136 rue St. Pierre, F-13 Marseille)

10-14. National Soc. of **Professional Engineers**, Chicago, Ill. (P. H. Robbins, NSPE, 2029 K St., NW, Washington, D.C. 20006)

23–28. Global Impacts of Applied Microbiology, 4th intern. conf., American Soc. for Microbiology, São Paulo, Brazil. (A. F. Langlykke, ASM, 1913 I St., NW, Washington, D.C. 20006)