

industry is now receiving. In return, the university should not undertake more projects than are needed to further its prime objective, the training of personnel in optics.

There followed a fairly lively discussion of all facets of the "optics problem." However, compared to the somewhat bitter symposium at the annual meeting just 2 years ago, there is evidence of increasing understanding on the part of the members of what is occurring.

Optics is no longer an active discipline of physics. Neither is heat, sound, or mechanics. However, optical techniques are major tools of all branches of physics, and therefore physicists must themselves provide or find some means of obtaining personnel competent in optics.

Engineers must recognize that much of the resurgent need in optics is in the field of optical engineering, in which new components and systems for space reconnaissance, surveillance, and information processing are required. Engineers, like physicists, have a great need for competent workers in optics.

The pervasive influence of optics on physics, engineering, biology, and physiology may result in programs similar to Meinel's in which a graduate facility works with all departments.

Optics is an excellent area of research to be entered into by faculty members in small colleges, because the cost of equipment is often less than in other fields. It is still difficult for such faculty members to get requests for grants appreciated by granting agencies. However, there is evidence of increasing interest in optics by the Department of Defense; there is evidence that the small-college teacher can make his needs understood; and there is evidence that optics education is enlarging.

The meeting adjourned with a more optimistic outlook than prevailed 2 years ago.

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Forthcoming Events

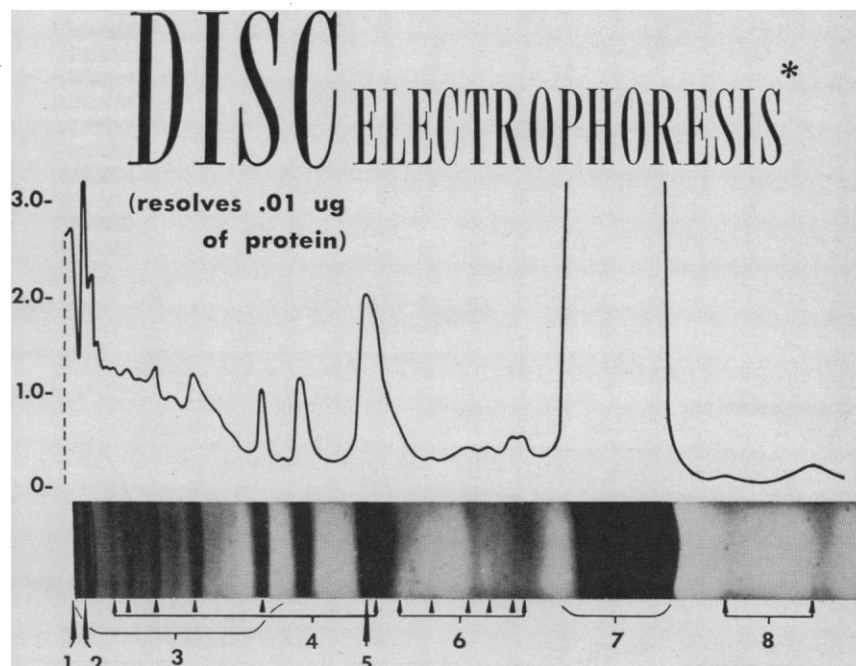
December

26-31. American Assoc. for the Advancement of Science, annual, Montreal, Canada. (R. L. Taylor, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C.)

The following 44 organizations will meet in conjunction with the AAAS an-

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20-30 PROTEIN FRACTIONS IN HUMAN SERUM BY

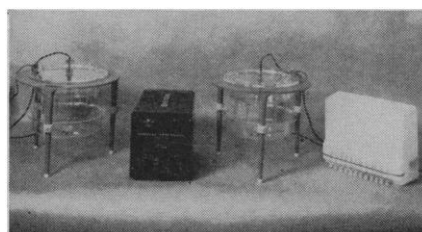


Proteins of a 3. ul sample of human serum (haptoglobin type 2-1, no free hemoglobin or hemoglobin-haptoglobin complexes): (1) slow beta 1 lipoprotein; (2) slow alpha 2 macroglobulin; (3) region of "7S" gamma globulins; (4) haptoglobins; (5) transferrin; (6) post-albumins; (7) albumin; (8) pre-albumins. Optical density traced by CANALCO Model E Microdensitometer.

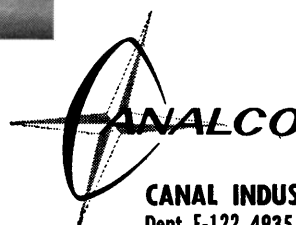
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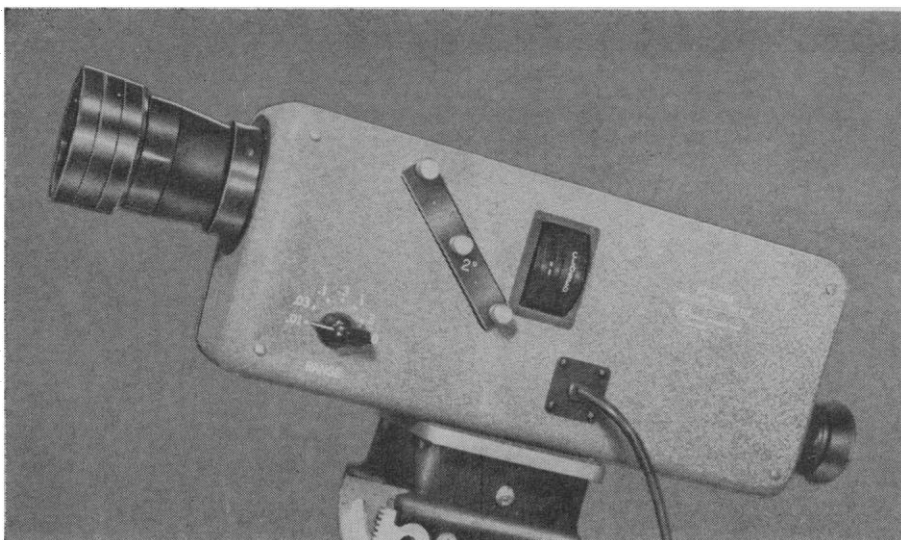
- * 14 in brain extract (previously 3 by starch)
- * 26 in neurospora
- * 9 in semi-purified skin protein (previously 1 by starch)
- * 18 in unconcentrated spinal fluid
- * 7 in connective tissue (previously 3 by starch)
- * 6 nucleic acids (previously 3 by starch)
- * 4 sharp major hemoglobins (prev. 3 blurred by paper)
- * 6 tagged fractions (previously 1 by paper)
- * 4 in frog embryo (previously 1 by starch)
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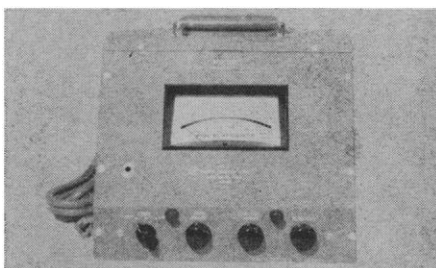
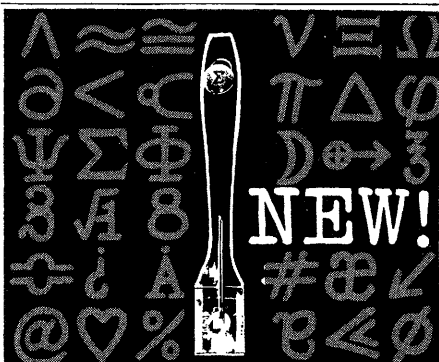


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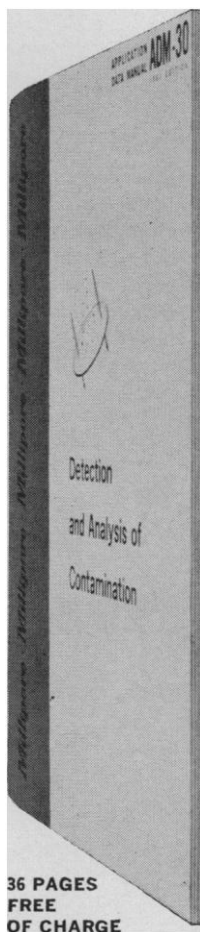
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Academy of Psychoanalysis (M. Ullman, Maimonides Hospital, 4802 Tenth Ave., Brooklyn 19, N.Y.)

Alpha Epsilon Delta (M. L. Moore, 7 Brookside Circle, Bronxville, N.Y. 10708)

AAAS Commission on Science Education (J. R. Mayor, AAAS, 1515 Massachusetts Ave., NW, Washington, D.C. 20005)

American Astronautical Soc. (E. van Dreist, Director, Space Science Laboratory, North American Aviation, Downey, Calif.)

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American Soc. for Microbiology (S. J. Ajl, Director of Research, Albert Einstein Medical Center, York and Tabor Rds., Philadelphia 41, Pa.)

American Soc. of Zoologists, Animal Behavior and Sociobiology Div. (G. W. Barlow, Vivarium Bldg., Wright and Healey Sts., Univ. of Illinois, Champaign)

American Sociological Assoc. (W. E. Moore, Russell Sage Foundation, 230 Park Ave., New York, N.Y.)

Animal Behavior Soc. (J. P. Scott, Jackson Laboratory, Hamilton Station, Bar Harbor, Maine)

Association canadienne-française pour l'Avancement des Sciences (M. J. Beaugregard, ACFAS, C.P. 6128, Univ. of Montreal, Montreal)

Association for Computing Machinery, Bio-group (M. Woodbury, New York Univ. Medical Center, New York, N.Y.)

Biometric Soc. (D. S. Robson, Cornell Univ., Ithaca, N.Y.)

Canadian Aeronautics & Space Inst. (H. C. Luttman, CASI, 77 Metcalf St., Ottawa 4)

Canadian Assoc. of Geographers (J. T. Parry, Morrice Hall, McGill Univ., Montreal)

Canadian Assoc. of Physicists (A. C. H. Hallett, Dept. of Physics, Univ. of Toronto, Toronto 5)

Canadian Science Fairs Council (H. I. Bolker, Pulp & Paper Research Inst. of Canada, 3420 University St., Montreal 2)

Canadian Soc. Zoologists (J. Marsden, McGill Univ., Montreal, Canada)

Ecological Soc. of America (G. M. Woodwell, Brookhaven Natl. Laboratory, Upton, L.I., N.Y.)

Engineering Institute of Canada (G. T. Page, EIC, 2050 Mansfield St., Montreal)

Entomological Soc. of Canada (I. S.

Lindsay, Defence Research Board, 125 Elgin St., Ottawa)

History of Science Soc. (J. E. Murdoch, Harvard Univ., Cambridge, Mass.)

Institute of Management Sciences (B. V. Dean, Dept. of Management, Case Inst. of Technology, Cleveland, Ohio)

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Pharmacological Soc. of Canada (C. W. Nash, Dept. of Pharmacology, Univ. of Alberta, Edmonton)

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Society for Computer Science in Biology and Medicine (R. S. Ledley, Natl. Biomedical Research Foundation, 8600 16th St., NW, Silver Spring, Md.)

Society for Economic Botany (Q. Jones, New Crops Research Branch, Plant Industry Station, Beltsville, Md.)

Society for General Systems Research (J. H. Milsum, Dept. of Electrical Engineering, McGill Univ., Montreal)

Society for the History of Technology (J. J. Beer, Dept. of History, Univ. of Delaware, Newark)

Society of the Sigma Xi (T. T. Holme, Sigma Xi, 51 Prospect St., New Haven, Conn. 06511)

Society of Technical Writers and Publishers (G. Marx, Director of Communications, Illinois Inst. of Technology, Research Inst., Chicago)

27-29. **American Philosophical Assoc.**, Boston, Mass. (L. E. Hahn, Dept. of Philosophy, Southern Illinois Univ., Carbondale 62903)

27-30. **American Statistical Assoc.**, Chicago, Ill. (D. C. Riley, ASA, 810 18th St., NW, Washington, D.C. 20006)

28-30. **American Economic Assoc.**, annual, Chicago, Ill. (H. F. Williamson, AEA, 629 Noyes St., Evanston, Ill.)

28-30. **American Geophysical Union**, Seattle, Wash. (W. W. Kellogg, Rand Corp., 1700 Main St., Santa Monica, Calif.)

28-30. **Linguistic Soc. of America**, New York, N.Y. (A. A. Hill, Post Office Box 8120, University Station, Austin, Tex.)

28-30. **Western Soc. of Naturalists**, Univ. of Washington, Seattle. (I. A. Abbott, Hopkins Marine Station of Stanford Univ., Pacific Grove, Calif.)

January

5-7. **Glass Formation, Phase Equilibria, Nucleation and Crystal Growth**, symp., Sheffield, England. (D. Hawskworth, Soc.

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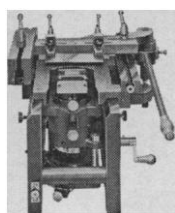


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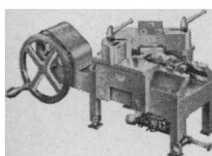
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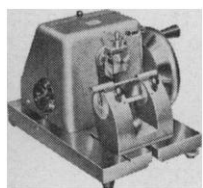
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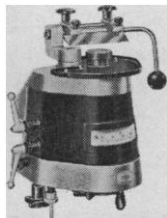
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5-8. **Solid State Physics**, 2nd annual conf., H. H. Wills Physics Laboratory, University of Bristol, England. (Administrative Assistant, Inst. of Physics and Physical Soc., 47, Belgrave Sq., London S.W.1)

6-8. **Industrial Electronics and Control Instrumentation**, 13th annual conf., Philadelphia, Pa. (E. Weiss, Sun Oil Co., Marcus Hook, Pa.)

6-9. **Psychopharmacological Conf.**, Czechoslovak Medical Soc., Psychiatry Section, Jesenik Spa. (M. Vojtechovsky, Budejovicka 800, Pavilion A1, Prague, Czechoslovakia)

8-9. **Orthopaedic Research Society**, New York, N.Y. (R. A. Calandrucio, 869 Madison Ave., Memphis, Tenn.)

9-14. **American Acad. of Orthopedic Surgeons**, annual, New York, N.Y. (H. K. Hart, AAOS, 29 E. Madison, Chicago 2, Ill.)

10-16. **The New Science**, symp., Colorado Springs, Colo. (F. A. Sondermann, Colorado College, Colorado Springs)

11-14. **Civilian and Military Uses of Aerospace**, conf., New York, N.Y. (I. B. Laskowitz, New York Acad. of Sciences, 2 E. 63 St., New York)

12-14. **Reliability and Quality Control**, symp., Miami, Fla. (H. D. Hulme, Westinghouse R&D Center, Bldg. 601-1346, Churchill Boro, Pittsburgh, Pa.)

12-15. **Crustacea**, symp., Cochin, India. (Marine Biological Assoc. of India, Marine Fisheries P.O., Mandapam Camp, S. India)

14. **American Genetic Assoc.**, Washington, D.C. (W. R. Singleton, Biology Bldg., Univ. of Virginia, Charlottesville)

18-20. **Solar Radiation Simulation**, intern. conf., Los Angeles, Calif. (H. F. Sander, Inst. of Environmental Science, 34 S. Main St., Mount Prospect, Ill.)

19. **American Inst. of Mining, Metallurgical, and Petroleum Engineers**, Metallurgical Soc., 7th mechanical working conf., Pittsburgh, Pa. (R. W. Shearman, Secretary, Metallurgical Soc. of AIME, 345 E. 47 St., New York 10017)

19. **Cor Pulmonale**, New York Heart Assoc., New York, N.Y. (NYHA, 10 Columbus Circle, New York 10019)

19-20. **Die Design and Press Tooling Conf.**, American Soc. of Tool and Manufacturing Engineers, Hartford, Conn. (M. Zapico, Asst. Conf. Director, ASTM, 10700 Puritan Ave., Detroit 38, Mich.)

20-22. **Instrumentation**, College Station, Tex. (P. T. Eubank, Chemical Engineering Dept., Texas A&M Univ., College Station)

20-23. **National Soc. of Professional Engineers**, New Orleans, La. (P. H. Robbins, 2029 K St., NW, Washington, D.C.)

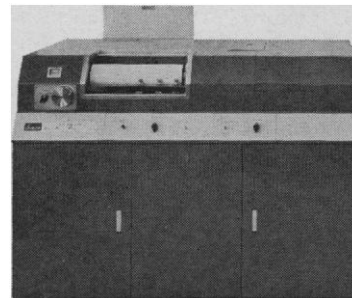
22. **Bibliographical Soc. of America**, New York, N.Y. (Mrs. H. C. Ralph, P.O. Box 397, Grand Central Station, New York 10017)

22-1. **Earthquake Engineering**, 3rd world conf., Auckland and Wellington, New Zealand. (Administrative Secretary, Third World Conf. on Earthquake Engineering, P.O. Box 5180, Wellington)

22-23. **Blood**, annual symp., Detroit, Mich. (W. H. Seegers, Dept. of Physiology and Pharmacology, Wayne State Univ. College of Medicine, Detroit)

22-23. **Hydrocarbon Analysis**, symp., American Soc. for Testing and Materials,

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25-26. **Fundamental Phenomena in the Material Sciences**, 3rd annual symp., Boston, Mass. (D. B. Fay, Ilikon Corp., Natick Industrial Centre, Natick, Mass.)

25-26. **Viruses of Laboratory Rodents**, symp., Atlanta, Ga. (R. Holdenried, Natl. Cancer Inst., NIH, Bethesda, Md. 20014)

25-27. **American Inst. of Aeronautics and Astronautics**, New York, N.Y. (J. Bidwell, AIAA, 1290 Avenue of the Americas, New York 10019)

25-28. **American Meteorological Soc.**, annual, New York, N.Y. (K. Spengler, AMS, 45 Beacon St., Boston 8, Mass.)

25-28. **American Society of Heating, Refrigerating and Air-Conditioning Engineers**, Chicago, Ill. (R. C. Cross, 345 E. 47 St., New York 10017)

25-28. **Modern Methods of Analytical Chemistry**, 18th annual intern. symp., Baton Rouge, La. (P. W. West, Dept. of Chemistry, Louisiana State Univ., Baton Rouge)

25-28. **Cardiovascular Diseases**, 2nd natl. conf., Washington, D.C. (C. H. Maxwell, 9650 Wisconsin Ave., NW, Washington, D.C. 20014)

25-29. **American Mathematical Soc.**, Denver, Colo. (G. L. Walker, AMS, 190 Hope St., Providence, R.I.)

25-29. **American Soc. for Testing and Materials**, steel meeting, Mexico City, Mexico. (H. H. Hamilton, Public Relations, ASTM, 1916 Race St., Philadelphia, Pa. 19103)

25-30. **American Library Assoc.**, Washington, D.C. (D. H. Clift, ALA, 50, E. Huron St., Chicago, Ill.)

26. **Quasi Stellar Radio Sources**, American Inst. of Physics, New York, N.Y. (E. H. Kone, AIP, 335 E. 45 St., New York)

26. **Mossbauer Effect Methodology**, symp., New York, N.Y. (M. Ress, New England Nuclear Corp., 575 Albany St., Boston, Mass.)

26-29. **Canadian Pulp and Paper Assoc.**, technical, annual, Montreal. (Miss J. M. McKenzie, CPPA, Technical Section, 2280 Sun Life Bldg., Montreal 2)

27-30. **American Group Psychotherapy Assoc.**, annual, San Francisco, Calif. (AGPA, Inc., 1790 Broadway, Room 516, New York, N.Y. 10019)

27-30. **American Physical Soc.**, New York, N.Y. (K. K. Darrow, Pupin Physics Laboratory, Columbia Univ., New York)

27-30. **Electrochemistry**, 5th seminar, Karaikudi-3, South India. (M. A. V. Devanathan, Central Electrochemical Research Institute, Karaikudi-3)

27-30. **Geological Soc.**, Southwestern Federation, Austin, Tex. (S. P. Ellison, Jr., Department of Geology, Univ. of Texas, Austin)

27-31. **Neurosurgical Soc. of America**, San Juan, Puerto Rico. (C. H. Davis, Jr., Bowman Gray School of Medicine, Winston-Salem, N. C.)

28-29. **Interactions of Man and His Environment**, symp., Chicago, Ill. (W. K. Stuckey, Dept. of Public Relations, 1802 Chicago Ave., Northwestern Univ., Evanston, Ill. 60201)

28-29. **Rheology Soc.**, winter meeting, Santa Barbara, Calif. (R. S. Porter, California Research Corp., Richmond Laboratory, 576 Standard Ave., Richmond 94802)

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