

Meetings and Societies

Physics Teachers

The annual winter meeting of the American Association of Physics Teachers was held 30 Jan.-1 Feb., in New York, in conjunction with the meetings of the American Physical Society. Headquarters and site of the meetings was the Hotel New Yorker.

Thirty-six contributed papers were presented during the first three morning sessions. A symposium on "The crisis in secondary-school physics" made up the first afternoon session. Alvin C. Eurich (vice president, Fund for the Advancement of Education), in outlining the "Nature, magnitude, and gravity of the problem," presented statistics which make apparent the interlocking complexities of a situation compounded of an impending great increase in enrollment, a lack of qualified teachers, and a technologic and military situation which produces a shortage of the very people who have the background to be, and to prepare, the teachers.

"How the problem is handled in the U.S.S.R." was discussed by Harry Schwartz (*New York Times*). According to Schwartz, there is also a crisis in education in the U.S.S.R.: where we are running double shifts in the schools, they are running triple ones. There is also a critical shortage of teachers, and the material and economic wounds of a devastating war have by no means been completely healed. The American solution to the problem must and will be one which does not rob the citizen of his individuality and freedom of choice and movement.

J. A. Campbell (program director for summer institutes, National Science Foundation) described the NSF summer institute program for high-school and college teachers and appealed for a larger number of applications from colleges at which physics institutes might be held.

The contribution of Walter C. Michels (Bryn Mawr College) was entitled "Present activities and plans for the future." The Joint Committee on High-School Teaching Materials, established by the American Association of Physics Teachers, the National Science Teachers Association, and the American Institute of Physics, is studying high-school text-

books, the academic background of high-school physics teachers, and the possibility of providing the teacher with material for home study. The committee has also suggested to the College Entrance Examination Board and to the New York State Board of Regents that they modify their examinations so that a course may be given which will emphasize aptitudes that are more than a mere temporary skill in the solving of type problems and in the repeating of definitions. Controversies with departments of education, Michels said, cannot be allowed to dissipate the energy which is essential to a joint effort by scientists and educationists.

Part of the second morning session was devoted to a symposium on "Improving the quality and effectiveness of introductory physics courses—a report on the Carleton conference." Michels spoke on the "Background for the conference." The 27 conference members, representing industry, research, and teaching, met at Carleton College on 5-8 Sept. 1956. Since improvement in the effectiveness and attractiveness of the elementary course would do much to increase the number of physics majors, the conference had, as its prime objective, a study of introductory courses with a view to such improvement. Since any departure from the classical concept of an introductory course must be generally accepted and understood, it was important to have as wide a representation of interest as possible at the conference and to give the results of its deliberations the widest possible publicity.

"Implications for professional education in physics" was the contribution of Frank Verbrugge (University of Minnesota). Fundamental classical physics must continue to be taught to the future physician and engineer, he said, and since the scope of the subject has widened, the time allotted to it must be increased and the mathematical level raised. Thought should be given to utilizing the laboratory time for teaching geometric optics, the theory of electric instruments, elasticity, and those subjects which have a fundamentally experimental basis. He felt that the size of the textbook should be decreased.

Gerald Holton (Harvard University), in discussing the "Implications for non-professional education," made the point

that the student in general education should have a course which arouses and satisfies his curiosity concerning the physical world and which recognizes the scope and limitations of the physicist's description of his world. The unifying principles of physics must be made understandable and their mathematical formulation must be clarified; their historical background and quantitative nature must be appreciated. Finally, the teacher of the nonprofessional student is challenged to work out and to try new methods of presentation, since many of the old ones are admittedly inadequate.

"Implications for the training of physicists for industry" was the topic of G. C. Higgins (Eastman Kodak Company). The introductory course, in his opinion, should be planned to make it possible for the average student to earn average grades; the work should be practical, and the inventiveness which occasionally accompanies a lack of mathematical aptitude should not be stifled. It is not important to try to make a Ph.D. of every student.

On the last afternoon, in a program of invited papers on topics of current interest, G. L. Pearson (Bell Telephone Laboratories) described and demonstrated the solar battery, and Narinder S. Kapany (University of Rochester), in a paper on "Fiber optics," introduced a new method of "conducting" light through an optical system by means of total reflection in glass and quartz filaments. Harvey White's Pittsburgh experiment on the teaching of high-school physics by television was illustrated by films made during two of the broadcasts.

An annual feature of the winter meeting is the ceremonial session, held jointly with the American Physical Society. E. P. Wigner (Princeton University), as retiring president of APS, delivered the traditional address: his subject was "Relativistic concepts and quantum phenomena." The AAPT's Oersted medal for notable contributions to the teaching of physics was presented to Mark W. Zemansky (City College, New York), who responded with an address on "Fashions in thermodynamics." Emilio Segrè (University of California), in the role of Richtmyer memorial lecturer, spoke on "Antinucleons."

JOHN J. HEILEMANN

Ursinus College,
Collegeville, Pennsylvania

AAAS Southwestern and Rocky Mountain Division Meeting

The annual meeting of the Southwestern and Rocky Mountain Division of the AAAS is to be held at the University of Arizona, Tucson, 28 Apr. through 2 May. The Southwestern Section of the Mathematical Association of America and the

Arizona Academy of Sciences, which will start their annual meetings on 26 and 27 Apr., respectively, have arranged to terminate their sessions in joint meetings with the Southwestern and Rocky Mountain Division.

During the AAAS division meeting the new Biological Sciences Building at the university is to be dedicated. Frank M. Carpenter will deliver the dedicatory address. Another feature will be the annual John Wesley Powell memorial lecture, which is endowed by the Southwestern and Rocky Mountain Division. W. M. Stanley has been selected for this event and will speak on "New concepts of the nature of viruses."

Continuing a series of symposia arranged by the division's Committee on Desert and Arid Zone Research, there will be a session devoted to "Climate and man in the Southwest." Bertha P. Dutton will preside, with the panel of invited speakers consisting of T. L. Smiley, John P. Miller, Emil W. Haury, John Harshbarger, and Paul B. Sears.

Anton Berkman has organized a symposium on "The improvement of science teaching" and will serve as moderator. Panelists are John R. Mayor, John W. Robson, S. H. Lee, and Earl Camp.

The division's presidential address will be delivered by Marlowe G. Anderson on the subject, "Parasitism and evolution." Albert R. Mead is chairman of the committee in charge of arrangements on the Tucson campus.

Military Psychology

The National Academy of Sciences-National Research Council's Division of Anthropology and Psychology has announced that at the request of the U.S. Air Force Air Research and Development Command a 2-day International Symposium on Military Psychology will be held in Brussels, Belgium, at the Palais de Beaux Arts 26-27 July, immediately prior to the opening of the 15th International Congress of Psychology.

The symposium is being organized under the joint direction of the division's Committee on International Relations in Psychology (H. S. Langfeld, chairman) and the Committee on Military Psychology (W. A. Hunt, chairman). The Symposium Program is being planned by an international committee under the chairmanship of Frank A. Geldard of the University of Virginia. Geldard, who is spending this year as Office of Naval Research Scientific Liaison Officer, London, will serve also as general chairman of the symposium.

The program will consist of papers on military psychological research topics by representative psychologists from several Western European countries, the United Kingdom, and the United States. The

symposium will be open to the public.

Information with respect to hotels and pensions in Brussels may be obtained in this country from the Sabena Airlines office in any major city.

United Nations-Iran Mapping Seminar

An agreement was signed recently between Hugh L. Keenleyside, director-general of the United Nations Technical Assistance Administration, and Djalal Abdoh, permanent representative of Iran to the United Nations, by which the United Nations and the Government of Iran will sponsor a seminar on topographic mapping as a means of economic development. It is expected that the seminar will be held in Iran next September or October for a period of between 1 and 2 weeks.

The Economic and Social Council in a resolution adopted last year recognized the important role played by reliable cartographic information in economic development and drew the attention of governments to the possibilities offered by technical assistance in this field. The Government of Iran recently set up a National Cartographic Center to carry out a comprehensive mapping program and offered to serve as host country for a mapping seminar. Neighboring countries, such as Afghanistan, Iraq, Pakistan, and Turkey, which have also felt the need for fuller data in connection with development projects, are being invited to attend the seminar, while other countries in the area may be invited to send observers.

The seminar will deal primarily with technical questions related to the production of topographic maps, such as field surveying, aerial photography, and photogrammetry. Technical papers prepared by participants, by international experts, and by the United Nations and its specialized agencies will be distributed, so that participants can study them in advance. It is expected that commercial organizations specializing in the field of cartographic equipment will participate in the exhibition and in demonstrations of their instruments.

The Government of Iran will appoint a high official to act as president of the seminar. An executive director will be designated by the United Nations. A final report containing the full text of lectures and background papers and a summary of technical discussions will be made available to governments requiring it. It is hoped that this seminar will provide participants with knowledge which may be applied directly to specific mapping problems in their own countries and that it will also help their governments in planning and organizing improved cartographic services.

Industrial Research Conference

Industrial executives and the Secretary of the Air Force will be featured speakers at the National Industrial Research Conference in Chicago, 24-25 Apr. Sponsored by Armour Research Foundation of Illinois Institute of Technology, the conference will be the focal point of National Industrial Research Week, 21-27 Apr. More than 500 industrial executives are expected to attend the meeting in the Conrad Hilton Hotel, according to Christopher E. Barthel, Jr., conference chairman and assistant director of the foundation.

The conference will have "Research for profit" as its theme and will deal with management-level decisions on research and development. Three general sessions will be devoted to "Sales growth through research," "More research for the dollar," and "Extra dividends from research."

Spectroscopy at Ohio State

The annual Symposium on Molecular Structure and Spectroscopy at Ohio State University will be held 10-14 June. The order of the symposium has been reversed this year in order to bring the dates of the electronic band spectroscopy sessions nearer to the dates of the Carbon Conference to be held at the University of Buffalo. The mornings throughout the week will be devoted to invited papers and the afternoons to contributed papers. Participants must submit abstracts in duplicate *not later than 19 Apr.* to Harald H. Nielsen, Department of Physics and Astronomy, Ohio State University, Columbus 10, Ohio.

Forthcoming Events

April

29-30. National Assoc. of Boards of Pharmacy, annual, New York, N.Y. (P. H. Costello, NABP, 77 W. Washington St., Chicago 2, Ill.)

29-1. American Assoc. of Spectrographers, 8th annual, Chicago, Ill. (T. H. Zink, H. Cohn & Sons, 4528 W. Division St., Chicago 51.)

29-1. American Geophysical Union, 38th annual, Washington, D.C. (W. E. Smith, AGU, 1515 Massachusetts Ave., NW, Washington 5.)

29-1. American Oil Chemists' Soc., 48th annual, New Orleans, La. (R. T. O'Connor, Southern Regional Research Laboratory, New Orleans.)

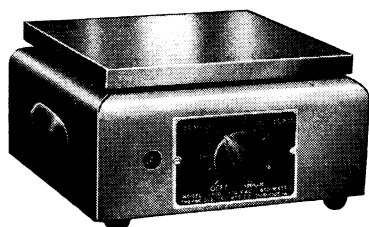
29-2. Flight Test Instrumentation Symp., 3rd annual, Los Angeles, Calif. (E. Spencer, Los Angeles Section, Instrument Soc. of America, 5225 Wilshire Blvd., Los Angeles 36.)

29-2. International Acad. of Proctology, 9th annual, New York, N.Y. (A. J. Cantor, IAP, 147-41 Sanford Ave., Flushing 55, L.I.)



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**American Association
for the
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1515 Massachusetts Ave., NW
Washington 5, D.C.

29-4. Irrigation and Drainage, 3rd internatl. cong., San Francisco, Calif. (W. E. Blomgren, 260 Leetsdale Dr., Denver 22, Colo.)

30-1. Metal Powder Assoc., 13th annual, Chicago, Ill. (MPA, 130 W. 42 St., New York 36.)

May

1-2. Image Formation and Measurement with Electronic Techniques, symp., Boston, Mass. (F. Brech, 26 Farwell St., Newtonville, Mass.)

1-3. Electronic Components Conf., Chicago, Ill. (R. M. Soria, 1830 S. 54 Ave., Chicago 50.)

1-3. Society for Experimental Stress Analysis, spring, Boston, Mass. (W. M. Murray, SESA, P.O. Box 168, Cambridge 39, Mass.)

2-3. Basic Problems of Biological Aging, internatl. conf. of AIBS, Gatlinberg, Tenn. (H. T. Cox, AIBS, 2000 P St., NW, Washington 6.)

2-4. American Philosophical Assoc., annual, Chicago, Ill. (W. H. Hay, Bascom Hall, Univ. of Wisconsin, Madison 6.)

2-4. Animal Disease and Human Health Conf., New York, N.Y. (Mrs. E. T. Miner, New York Acad. of Sciences, 2 E. 63 St., New York 21.)

2-4. Illinois State Acad. of Science, annual, Normal. (R. A. Evers, Illinois Natural History Survey, Urbana.)

2-4. Kansas Acad. of Science, annual, Manhattan. (C. T. Rogerson, Dept. of Botany, Kansas State College, Manhattan.)

2-4. Midwestern Psychological Assoc., annual, Chicago, Ill. (D. W. Fiske, Dept. of Psychol., Univ. of Chicago, Chicago.)

2-5. Society for American Archaeology, annual, Madison, Wis. (D. A. Baerreis, Dept. of Sociology and Anthropology, Univ. of Wisconsin, Madison 6.)

3. Engineers and Architects Conf., 4th annual, Columbus, Ohio. (G. B. Carson, College of Engineering, Ohio State Univ., Columbus 10.)

3-4. Minnesota Acad. of Science, Rochester. (B. O. Krogstad, Univ. of Minnesota, Duluth 5B.)

3-4. North Carolina Acad. of Science, annual, Winston-Salem. (J. A. Yarbrough, Meredith College, Raleigh, N.C.)

3-4. North Dakota Acad. of Science, annual, Grand Forks. (B. G. Gustafson, Chemistry Dept., Univ. of North Dakota, Grand Forks.)

3-9. Food Additives, 3rd symposium, Como, Italy. (International Bureau of Analytical Chemistry of Human and Animal Food, 18, avenue de Villars, Paris 73, France.)

4-5. American Psychosomatic Soc., 14th annual, Atlantic City, N.J. (I. A. Mirsky, APS, 551 Madison Ave., New York 22.)

4-5. Population Assoc. of America, annual, Philadelphia, Pa. (D. O. Price, Inst. for Research in Social Science, Univ. of North Carolina, Chapel Hill.)

4-7. American Assoc. for Thoracic Surgery, Chicago, Ill. (H. T. Langston, 600 S. Kingshighway, St. Louis 10, Mo.)

5-7. American Soc. for Clinical Investigation, Atlantic City, N.J. (W. H. Wheat, Jr., Steven K. Herlitz, Inc., 280 Madison Ave., New York 16.)

5-9. American Ceramic Soc., 59th annual, Dallas, Tex. (C. S. Pearce, ACS,

4055 N. High St., Columbus 14, Ohio.)

5-10. International Cong. of Otolaryngology, 6th, Washington, D.C. (P. H. Holinger, 700 N. Michigan Ave., Chicago 11, Ill.)

6-9. American Urological Assoc., Pittsburgh, Pa. (W. P. Didusch, 1120 N. Charles St., Baltimore 1, Md.)

7. International Hydrographic Conf., 7th, Monte Carlo, Monaco. (International Hydrographic Bureau, Quai des Etats-Unis, Monte Carlo.)

7-24. World Health Assembly, 10th, Geneva, Switzerland. (World Health Organization, Palais des Nations, Geneva.)

8-9. European Federation of Chemical Engineering, 12th, Amsterdam, Netherlands. (Federation, Frankfurt/Main, 7, Germany.)

8-11. American Astronomical Soc., Cambridge, Mass. (J. A. Hynek, Smithsonian Astrophysical Observatory, 60 Garden St., Cambridge 38.)

8-11. American Helicopter Soc., 13th annual, Washington, D.C. (H. M. Lounsbury, AHS, 2 E. 64 St., New York 21.)

9. Dietary Essential Fatty Acids, Assoc. of Vitamin Chemists, Chicago, Ill. (M. Freed, Dawe's Laboratories, Inc., 4800 S. Richmond St., Chicago 32.)

9-10. Microwave Ferrites and Related Devices and Their Applications, New York, N.Y. (S. Weisbaum, Bell Telephone Laboratories, Murray Hill, N.J.)

9-10. Operations Research Soc. of America, 5th annual, Philadelphia, Pa. (M. L. Ernst, P.O. Box 2176, Potomac Sta., Alexandria, Va.)

9-11. Drugs in Psychotherapy, internatl. symp., Milan, Italy. (Secretary, Pharmacology Inst., Via Andrea del Sarto 21, Milan.)

9-11. Virginia Acad. of Science, Old Point Comfort. (F. F. Smith, Box 1420, Richmond, Va.)

9-12. American Psychoanalytic Assoc., Chicago, Ill. (J. N. McVeigh, APA, 36 W. 44 St., New York 36.)

10-11. Indiana Acad. of Science, Turkey Run State Park, Ind. (H. Crull, Dept. of Mathematics, Butler Univ., Indianapolis 7.)

10-11. Vocational Training and Rehabilitation of the Mentally and Physically Handicapped, Woods Schools Conf., Chicago, Ill. (J. M. MacDonald, Woods Schools, Langhorne, Pa.)

12-13. International Soc. of Bronchoesophagology, cong., Philadelphia, Pa. (C. L. Jackson, 1901 Walnut St., Philadelphia 3.)

12-16. Electrochemical Soc., Washington, D.C. (H. B. Linford, 216 W. 102 St., New York 25.)

12-16. Institute of Food Technologists, annual, Pittsburgh, Pa. (C. S. Lawrence, IFT, 176 W. Adams St., Chicago 3, Ill.)

13-15. Industrial Waste Conf., 12th Lafayette, Ind. (D. E. Bloodgood, Purdue Univ., Lafayette.)

13-15. Radiation Research Soc., annual, Rochester, N.Y. (A. Adelman, Nuclear Science and Engineering Corp., P.O. Box 10901, Pittsburgh 36, Pa.)

13-15. Recent Developments in Research Methods and Instrumentation, symp., Bethesda, Md. (J. A. Shannon, National Institutes of Health, Bethesda.)

(See issue of 15 March for comprehensive list)