

Meetings and Societies

Malaria

The demonstration of remarkable antianopheline effectiveness of residually sprayed DDT, BHC, and Dieldrin during and immediately after World War II suggested the possibility of transforming national malaria control programs into rapid country-wide malaria eradication. Control usually means reducing the incidence of malaria—that is, holding it at a level that has little public health importance. It is a continuing attack with no foreseeable conclusion. Malaria eradication, on the other hand, implies the complete interruption of transmission and the elimination of the reservoir of infection by a campaign limited in time and carried out so thoroughly that there will be no resumption of transmission. The plasmodia are eradicated although mosquito vectors may remain.

Since 1945, nation-wide malaria eradication has been widely tested and found to be technically, financially, and administratively practicable in many places. Malaria has now been eradicated from extensive areas of Argentina, British Guiana, Ceylon, Chile, Cyprus, French Guiana, Greece, Italy, Mauritius, Taiwan, the United States, and Venezuela. Large eradication projects are also going forward in Indonesia, Iran, Madagascar, the Philippines, and Thailand, and in all the malarious countries of the Americas, on a regional basis. A second regional project, one embracing Europe and the Near East, is now being started.

A prime function of the World Health Organization is "to act as the directing and co-ordinating authority on international health work" (Constitution, Chapter II Article 2), and WHO had an important part in leading and stimulating the world-wide surge toward malaria eradication. Experience has shown that carefully focused regional and interregional conferences implement this function. Such conferences have been particularly useful in the development of national and regional malaria-eradication projects.

In order to accelerate the Europe-Near East scheme, the World Health Organization convened in Athens, Greece, in June an Inter-regional Conference on Malaria in the Eastern Medi-

terranean and European Regions. Of the member countries of these two WHO regions, Algeria, France, Greece, Iran, Israel, Italy, Morocco, Pakistan, Portugal, Spain, Turkey, the United Kingdom, and Yugoslavia sent representatives. Also attending and contributing notably to the discussions were malaria consultants from France, the United Kingdom, and the United States; the principal malariologists of Afghanistan, Brazil, Ceylon, India, Nigeria, Taiwan, Thailand, and Venezuela; WHO regional malaria advisers from the American, the Eastern Mediterranean, and Western Pacific regions; WHO field malariologists from Iraq, Saudi Arabia, and Syria; the WHO malariologist, UNRWA, Beirut; the parasitology adviser, USOM-Ethiopia (ICA); and representatives of the secretariats of WHO and UNICEF. Following the conference, which, because of the presence of Israeli delegates, was not attended by Arab officials, there was an advisory meeting on malaria eradication in Egypt, Iran, Iraq, Lebanon, Saudi Arabia, and Syria, to which each of the countries named sent representatives. The conference and advisory meeting benefited greatly from active participation of members of the sixth session of the WHO Expert Malaria Committee, which was held concurrently in Athens.

The subject discussed by the three groups was malaria eradication. The expert committee in closed meetings laid down general principles, preparing what will be an authoritative manual on the subject. The manual no doubt will be published by WHO in due time. The conference and advisory meeting discussed specific plans for eradicating malaria from Europe and the Near East, noting particularly the great desirability of achieving eradication before malaria vectors develop intractable resistance to residual insecticides.

The size of the problem in Europe and the Near East is suggested by the following data, which, although they are approximate, probably convey a reasonably correct idea of magnitude. Malaria is endemic in 14 European countries, excluding the Soviet Union: Albania, Bulgaria, Czechoslovakia, France (only in Corsica), Germany, Greece, Hungary,

Italy, Netherlands, Poland, Portugal, Roumania, Spain, and Yugoslavia, having a total population of 308,945,000 (U.N. Demographic Yearbook, 1955). Approximately 42,491,000 Europeans live in areas now or recently malarious, and some 33,451,000 of this total benefit by routine antimalaria activities, the remaining 9,040,000 having sporadic protection or none at all. The population of the Near East, including Cyprus, Iran, Iraq, Israel, Jordan, Lebanon, Syria, and Turkey is 57,257,000 (U.N. Demographic Yearbook, 1955) of whom some 37,908,000 live in malarious areas. Approximately 19,757,000 persons are under some routine antimalaria protection, leaving some 18,151,000 unprotected. Egypt's population is 22,651,000; some 12 million are in malarious areas and some 8 million are under antimalaria protection. Corresponding figures for Saudi Arabia are 7, 6, and 0.85 million. Although no accurate data are available, one can estimate that more than 10 million clinical cases of malaria occurred in these European and Near Eastern countries in 1955, with about 100,000 deaths directly due to the disease. In numerous areas, malaria is a major retarding factor in social and economic development.

All endemic areas in Bulgaria, Cyprus, Czechoslovakia, France, Germany, Greece, Italy, and Roumania, and nearly all in the Netherlands and Yugoslavia are under antimalaria measures or surveillance. The disease has low incidence in these countries. Malaria has been practically eradicated from Crete, Cyprus, and Italy, including Sicily and Sardinia. In Israel, Lebanon, Portugal, Spain, and Turkey the incidence of the disease has been greatly reduced.

The conference reviewed the situation reflected by the afore-mentioned data and devoted much attention to administrative, financial, technical, and training needs of malaria eradication projects in the two regions. It discussed measures for dealing with residual foci when malaria has been nearly eradicated; problems of *Anopheles* resistance to insecticides; the place of antimalaria drugs in eradication programs; the establishment of adequate surveillance systems to supplant active control when transmission has been interrupted; the enlightenment of public and professional groups concerning the aims, needs, and benefits of malaria eradication; general public-health policy in relation to malaria eradication; research needs, and the necessity for international coordination and correlation.

The conference concluded that malaria eradication is technically feasible in the two regions, although it recognized that administrative and financial difficulties prevailing in some of the countries might be a serious handicap and that in-

ternational assistance might be required. Finally, the conference expressed the hope that the countries of the two regions would work toward eradication.

PAUL F. RUSSELL
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Physics Teachers

The summer meeting of the American Association of Physics Teachers was held this year 20-22 June in Toronto, Ontario. The host institutions were the University of Toronto and McMaster University in nearby Hamilton.

The papers on the first afternoon were invited papers by members of the Toronto faculty: "Reminiscences in physics, from 1895 on" by John Satterly, "Physics at low temperatures" by A. C. H. Hallett, and "Radio astronomy" by D. A. MacRae. The invited papers on the next afternoon included a masterly presentation by Philip Morrison (Cornell University) on the antiproton—the reasons that its existence was anticipated and the experimental evidence establishing its discovery.

The mornings were devoted to 10-minute contributed papers on various aspects of physics teaching. The paper stimulat-

ing the most discussion was that of W. W. Marsteller (Ursinus College) on "Archimedes and the floating needle," concerning which divergent opinions were expressed. The final paper was an amusing presentation by K. S. Woodcock (Bates College) on physics problems in the Lilliputian world that was created by Swift in *Gulliver's Travels*, such as the difficulty of pouring from Lilliputian goblets.

The after-dinner speech on the evening of the banquet was given by John P. Hagen (Naval Research Laboratory), who discussed the projected earth satellite, the difficulties that would be encountered in launching it, and the information that would be gained from such an experiment. On the remaining evening there was an informal showing of three movies on the atom by Edward Teller which had originally been produced on television.

On the final afternoon, the meeting moved to the campus of McMaster University, where those attending inspected the research and laboratory facilities. H. E. Duckworth (Hamilton College) gave an excellent lecture on the mass spectrograph. This included a demonstration with a highly colored model that made the fundamental working of the instru-

ment intelligible and interesting to all, including the wives and children in attendance. In a 10-minute "postscript" to the lecture, Duckworth presented a brief summary of the latest results obtained with the mass spectrographs constructed and operated under his direction. This lecture was a superb finale to a consistently excellent meeting.

MILDRED ALLEN
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South Hadley, Massachusetts

Meeting Notes

■ A 3-day conference on Management, Economics and Technology for the Atomic Industry has been announced by the Atomic Industrial Forum, Inc., New York. The meeting will be held in Chicago, Ill., at the Morrison Hotel, 25-27 Sept. in conjunction with the 1956 Trade Fair of the Atomic Industry, which will take place at the Navy Pier, Chicago, 24-28 Sept. More than 100 exhibiting organizations will take part in the show.

The conference panels cover a wide variety of subjects of interest not only to technical and management people from the industry itself, but also to firms that are contemplating entry into the field either as suppliers of equipment and materials or as users of this new energy source. Panel subjects include: economics of power reactor systems, impact of atomic energy on the law, radiation utilization, new power reactor concepts, elements of nuclear power costs, insurance problems, new reactor projects, reactor materials, information requirements of the atomic industry, research programs and facilities, international developments, and impact of atomic energy on other fields.

The conference will be highlighted by three luncheons and a banquet. One luncheon speaker will be Willis Gale, chairman of the Commonwealth Edison Company. Franz Josef Strauss, Atomic Energy Minister for West Germany, will address a second luncheon, and the third will hear a discussion of "Atomic energy and the law." The last session is jointly sponsored with the Chicago Bar Association and the law schools of the University of Chicago and Northwestern University. The conference banquet will be addressed by Harold S. Vance, commissioner, U.S. Atomic Energy Commission.

■ The fourth biennial symposium on Organic Chemistry, sponsored jointly by the Philadelphia and Wilmington Organic Chemists' Clubs, will be held at the Du Pont Country Club in Wilmington, Del., on 24 Oct. The program will include George Buchi (Massachusetts Institute of Technology), "Recent novel reactions in organic chemistry"; Emil Schlittler (Ciba Pharmaceutical Prod-

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■ The American Psychosomatic Society will hold its 14th annual meeting at Chalfonte-Haddon Hall in Atlantic City, N.J., 4-5 May 1957. The program committee would like to receive titles and abstracts of papers for consideration for the program no later than 1 Dec. 1956. The time allotted for presentation of each paper will be 20 minutes. Abstracts, in sextuplicate, should be submitted to the chairman of the program committee, Dr. I. Arthur Mirsky, 551 Madison Ave., New York 22, N.Y.

■ A symposium on Optics and Microwaves will be held at George Washington University (Washington, D.C.), 14-16 Nov. The meeting is jointly sponsored by the Institute of Radio Engineers Professional Group on Antennas and Propagation, the George Washington

University School of Engineering, and the Optical Society of America.

The technical program will consist of six sessions, each embracing a subject of general interest to all persons who deal with optical phenomena in research or application in the fields of engineering, medicine, or the related physical sciences. Survey and tutorial papers will be presented to encourage understanding of the basic physics underlying fundamental characteristics which relate optics and microwaves as the two concepts now exist. Advance registration for the meeting is \$2.50 and may be made by mail to Symposium on Optics and Microwaves, Box 355, Falls Church, Va. Registration at the door will be \$3.50.

■ Twenty-four technical sessions and three luncheon addresses of general interest will highlight the 1956 National Electronics Conference that will take place in the Hotel Sherman, Chicago, Ill., 1-3 Oct. More than 10,000 persons are expected to attend the 3-day technical meeting and exhibition, which has as its theme "Fifty years of progress through electronics."

Principal addresses will be given by John P. Hagen, director of the "Vanguard" project at the Naval Research Laboratory, Washington, D.C.; Frederick

L. Hovde, president of Purdue University, Lafayette, Ind.; and Herbert Scoville, Jr., assistant director of the Central Intelligence Agency, Washington. Hagen will discuss earth satellites and space travel, and Scoville will compare United States and Soviet technical education policies. Hovde's subject has not been announced. For information write to Victor J. Danilov, Illinois Institute of Technology, Chicago 16, Ill.

■ Chemical advances against diabetes and cancer, progress in the cold sterilization of foods, and the latest developments in automotive lubricants will be reported at the 130th national meeting of the American Chemical Society, which will take place in Atlantic City, N.J., 16-21 Sept. Some 10,000 chemists and chemical engineers from all parts of the United States and several foreign countries will participate in the sessions.

Eger V. Murphree, special assistant for guided missiles in the Office of the Secretary of Defense, will address the society at a banquet on 18 Sept. Murphree, who is president of the Esso Research and Engineering Company, Linden, N.J., will discuss "Guided missiles and chemistry."

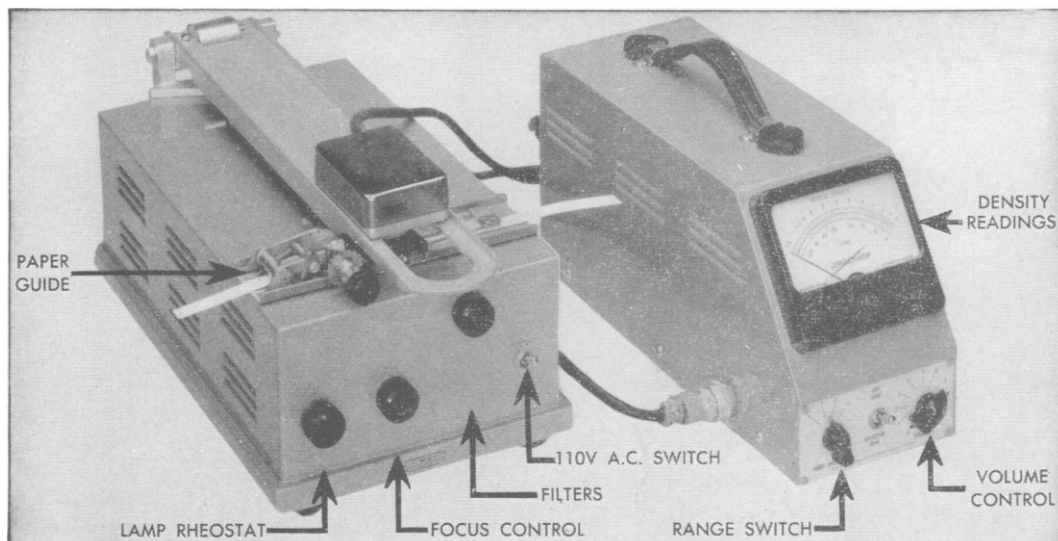
Other special speakers will be Gen. John E. Hull, U.S.A. (Ret.), president

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of the Manufacturing Chemists Association; Bradshaw Mintener, Assistant Secretary of the Department of Health, Education and Welfare; Byron T. Shaw, administrator of the Agricultural Research Service in the Department of Agriculture; and Robert C. Watson, United States Commissioner of Patents.

John C. Warner, president of the society and president of the Carnegie Institute of Technology, will deliver the presidential address on 19 Sept. His topic will be "Is chemical education too specialized?"

■ Each year in conjunction with its annual meeting the American Cancer Society sponsors a scientific session. The subject of the session this year will be "Endocrines and cancer." The meeting will serve as a summarization, as well as a critical evaluation, of the etiologic and therapeutic role that hormones play in neoplastic diseases.

The program will consist of a series of discussions presented by investigators and clinicians from this country and abroad. Further details may be obtained from the American Cancer Society, Professional Education Section, 521 W. 57 St., New York 19, N.Y.

■ The American Nuclear Society has announced that a winter meeting of the society will be held 10-12 Dec. in the Sheraton-Park Hotel, Washington, D.C. This meeting has been scheduled in addition to the society's annual June meeting because of the accumulation of material resulting from the rapid growth of unclassified research in the atomic-energy field.

Authors desiring to present papers are requested to send titles and estimates of presentation time to Dr. L. D. P. King, Los Alamos Scientific Laboratory, Post Office Box 1663, Los Alamos, N.M., before 1 Oct. Abstracts must be received by 1 Nov.

Society Elections

■ Virginia Academy of Science: pres., Edward S. Harlow, American Tobacco Company Research Laboratory; pres-elect, William G. Guy, William and Mary College; sec.-treas., Foley F. Smith, Virginia Academy of Science, P. O. Box 1420, Richmond. Representative to the AAAS Council is Foley F. Smith

■ American Institute of Mining, Metallurgical, and Petroleum Engineers: pres., Carl E. Reistle, Jr., Humble Oil and Refining Company, Houston, Tex.; pres-elect, Grover J. Holt, Cleveland-Cliffs Iron Company, Ishpeming, Mich.; treas., Gail F. Moulton, Rockefeller Brothers, Inc., New York; sec., Ernest Kirkendall, AIME, New York, N.Y.

■ Society of Exploration Geophysicists: pres., Roy F. Bennett, Sohio Petroleum Company; v. pres., J. P. Woods, Atlantic Refining Company; sec.-treas., John C. Hollister, Colorado School of Mines, Golden.

Forthcoming Events

October

8. Science and Human Welfare, international conf., American Inst. of Geonomy and Natural Resources, Washington, D.C. (R. M. Field, AIGNR, South Duxbury, Mass.)

8-9. Shortage of Engineers and Scientists, conf., New York, N.Y. (E. S. Burdell, Cooper Union for the Advancement of Science and Art, Cooper Sq., New York 3.)

8-10. National Clay Conf., 5th, Urbana, Ill. (R. E. Grim, Univ. of Illinois, Urbana.)

8-12. American College of Surgeons, 42nd annual clinical cong., San Francisco, Calif. (ACS, 40 E. Erie St., Chicago 11, Ill.)

8-12. American Soc. of Clinical Pathologists, Chicago, Ill. (Indiana Univ. Medical Center, 1040-1232 W. Michigan St., Indianapolis.)

8-12. International Decennial Review Conf. on Tissue Culture, Woodstock, Vt. (P. R. White, Jackson Memorial Laboratory, Bar Harbor, Me.)

8-12. National Metal Cong., 38th annual, Cleveland, Ohio. (American Inst. of Mining, Metallurgical and Petroleum Engineers, 29 W. 39 St., New York 18.)

8-12. Pan-American Federation of Engineering Societies, 4th convention, Mexico, D.F., Mexico. (S. E. Reimel, Engineers Joint Council, 29 W. 39 St., New York 18.)

8-13. International Cancer Cytology Cong., Chicago, Ill. (A. H. Dearing, College of American Pathologists, Prudential Plaza, Chicago 1.)

9-10. Air Research and Development Command Science Symposium (classified), 4th annual, Boston, Mass. (Headquarters, ARDC, U.S. Air Force, P.O. Box 1395, Baltimore 3, Md.)

9-12. American Dietetic Assoc., 39th annual, Milwaukee, Wis. (Mrs. T. Pollen, ADA, 620 N. Michigan Ave., Chicago 11, Ill.)

9-15. World Medical Assoc., 10th general assembly, Havana, Cuba. (L. H. Bauer, WMA, 345 E. 46 St., New York, N.Y.)

10-18. Arid Zone Climatology with Special Reference to Microclimatology, international symposium, Melbourne and Canberra, Australia. (UNESCO, 19 Avenue Kléber, Paris 16^e, France.)

11-12. International Scientific Radio Union, U.S. National Committee, Berkeley, Calif. (J. P. Hagen, 2101 Constitution Ave., NW, Washington 25.)

11-13. Indiana Acad. of Science, Bloomington. (W. A. Daily, Eli Lilly Research Laboratories, Indianapolis 6, Ind.)

14-17. Society of American Foresters, Memphis, Tenn. (H. Clepper, SAF, 17th and Pennsylvania Ave., NW, Washington 6.)

14-19. American Acad. of Ophthalmology and Otolaryngology, annual, Chicago, Ill. (W. L. Benedict, 100 First Ave. Bldg., Rochester, Minn.)

15-17. Assoc. of Official Agricultural Chemists, annual, Washington, D.C. (W. Horwitz, Box 540, Benjamin Franklin Station, Washington 4.)

15-17. Soil Conservation Soc. of America, Tulsa, Okla. (H. W. Pritchard, SCSA, 1016 Paramount Bldg., Des Moines, Iowa.)

15-18. American Veterinary Medical Assoc., annual, San Antonio, Tex. (J. G. Hardenbaugh, AVMA, 600 S. Michigan Ave., Chicago 5, Ill.)

15-19. American Soc. of Civil Engineers, annual, Pittsburgh, Pa. (W. H. Wisely, ASCE, 33 W. 39 St., New York 18.)

15-26. New York Acad. of Medicine, annual graduate fortnight, New York,

N.Y. (Secretary, Graduate Fortnight, NYAM, 2 E. 103 St., New York 29.)

16-17. Agricultural Research Inst., 5th annual, Washington, D.C. (L. Voris, National Acad. of Sciences, NRC Annex, Washington 25.)

16-17. National Acad. of Economics and Political Science, Washington, D.C. (D. P. Ray, George Washington Univ., Washington 6.)

16-18. Conference on Magnetism and Magnetic Materials, Boston, Mass. (T. O. Paine, Measurements Laboratory, General Electric Co., West Lynn, Mass.)

17-18. International Union of Therapeutics, cong., Paris, France. (A. Lemaire, 54, rue de Saxe, Paris 7.)

17-19. Symposium on Antibiotics, 4th annual, Washington, D.C. (H. Welch, Div. of Antibiotics, Food and Drug Administration, U.S. Dept. of Health, Education, and Welfare, Washington 25.)

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18-19. Institute of Management Sciences, 3rd annual, Los Angeles, Calif. (C. M. Kelly, Litton Industries, Inc., 336 N. Foothill Rd., Beverly Hills, Calif.)

18-20. Optical Soc. of America, semi-annual, Lake Placid, N.Y. (A. C. Hardy, Massachusetts Inst. of Technology, Cambridge 39.)

21-23. American College of Apothecaries, Dallas, Tex. (R. E. Abrams, Hamilton Court, 39th & Chestnut St., Philadelphia 4, Pa.)

21-27. Iberian-Latin American Cong. of Dermatology, 3rd, Mexico City, Mexico. (Centro Dermatológico Pascua, Calle Dr. Garciadiego 21, Mexico 7, D.F., Mexico.)

22-24. American Standards Assoc., 38th annual, New York, N.Y. (ASA, 70 E. 45 St., New York 17.)

22-25. American Soc. for Pharmacology and Experimental Therapeutics, Louisville, Ky. (H. Hodge, Dept. of Pharmacology, Univ. of Rochester, Rochester, N.Y.)

22-26. National Safety Cong., Chicago, Ill. (R. L. Forney, National Safety Council, 425 N. Michigan Ave., Chicago, 11.)

22-27. Endocrine Soc., 8th annual postgraduate assembly, Houston, Tex. (Office of Dean, Univ. of Texas, Postgraduate School of Medicine, Texas Medical Center, Houston 25.)

22-28. Industrial Forestry Seminar, New Haven, Conn. (E. T. F. Wohlenberg, Industrial Forestry Dept., Yale Univ., New Haven.)

23. American Soc. of Safety Engineers, annual, Chicago, Ill. (J. B. Johnson, ASSE, 425 N. Michigan Ave., Chicago 11.)

25-26. National Soc. of Professional Engineers, White Sulphur Springs, W.Va. (P. H. Robbins, 2029 K St., NW, Washington 6.)

26-29. American Heart Assoc., annual, scientific sessions, Cincinnati, Ohio. (Medical Director, AHA, 44 E. 23 St., New York 10.)

27. Eastern Psychiatric Research Assoc., New York, N.Y. (T. R. Robie, 676 Park Ave., East Orange, N.J.)

29-30. American Cancer Soc., scientific session, New York, N.Y. (ACS, Professional Education Section, 521 W. 57 St., New York 19.)

29-30. East Coast Conf. on Aeronautical and Navigational Electronics, 3rd annual, Baltimore, Md. (W. D. Crawford, Westinghouse Electric Corp., Air Arm Div., Friendship International Airport, Baltimore 27.)

29-31. Energy Resources Conf., Denver, Colo. (Energy Resources Conf., c/o Denver Chamber of Commerce, 1301 Welton St., Denver 4.)

29-1. Conference on Climatology sponsored by American Meteorological Soc., Asheville, N.C. (K. C. Spengler, 3 Joy St., Boston 8, Mass.)

29-1. Society of Exploration Geophysicists, annual, New Orleans, La. (G. A. Grimm, Tide Water Associated Oil Co., Box 2131, Midland, Tex.)

29-2. Convention on Ferrites, Institution of Electrical Engineers, London, England. (Secretary, IEE, Savoy Place, London, W.C.2.)

(See issue of 17 August for comprehensive list)

ANTIMETABOLITES AND CANCER

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