Foundation. He was active in the National Committee of Biochemistry, the International Committee for Biochemistry (of which he was one of the two American representatives), and the India Science Congress in Calcutta of 1952, to which he had been invited as a guest of the Indian government. It is not improbable that the burden of all these activities, both scientific and administrative, hastened his end.

It is impossible to conclude a survey of Brand's life without a few words about his complex and many-sided personality. To many he appeared to be cantankerous, blunt, and forbidding. That despite these impressions he should have accomplished so much of value is a tribute to the very patent sincerity and unselfishness with which he fought for his causes. He was a creative and constructive force, and such people are usually angular and driven by a remorseless energy. Yet he frequently exhibited unexpected acts of personal kindness and generosity, and he was loyal to the core. Brand was, quite simply, a man incapable of the petty arts of social duplicity, and his personality was completely transparent. One had to know him well to understand and appreciate the mixture of rigorous intellectual honesty and of personal kindness which were his characteristics. He died quietly and in his sleep, a peaceful ending to a vigorous and notable career. His wife, Florence Brand, whom he married in 1932, and who is also a biochemist by training, survives him.

News and Notes

Report on the Eighth Pacific Science Congress and Fourth Far-Eastern Prehistory Congress[1]

THE Eighth Pacific Science Congress, which met in Manila, November 16–28, 1953, was an outstanding success both in terms of attendance and in scientific accomplishments. The Congress, which was held under the auspices of the Republic of the Philippines and the National Research Council of the Philippines, met jointly with the Fourth Far-Eastern Prehistory Congress, on invitation of President Elpidio Quirino, at the University of the Philippines in Quezon City. Originally, the Seventh Congress had been scheduled in Manila in 1943 but the war interfered. The rebuilding of Manila, recently completed, made it possible to renew the invitation originally extended by the late President Manuel L. Quezon.

Over 700 delegates representing some 30 countries and 20 fields of specialized scientific knowledge gathered for the opening sessions, the largest group of scientists ever assembled in the Pacific region. For the first time, also, there were large numbers of Asian scientists, an indication that the newly independent countries of east and south Asia recognize the value of science in meeting their problems. There were large delegations from Australia, the Republic of China, Hawaii, Indonesia, Japan, New Zealand, Thailand, the Philippines, and the United States. The U.S. delegation, led by Knowles A. Ryerson, consisted of 25 delegates from the National Research Council, including the 10 official U.S. delegates, and some 70 additional participants from research institutions, universities, governmental agencies, the military services, and the Trust Territory. This large U.S. participation was made possible through the efforts of Harold J. Coolidge, with the cooperation of various private foundations and government departments and agencies.

The scientific accomplishments consist of the papers which were presented and discussed over the two-week period and the intangible influences of scientists on one another and on the community in which they met. The objectives of the Pacific Science Association, the parent body responsible for the congresses, are "to initiate and promote cooperation in the study of scientific problems relating to the Pacific region, more particularly those affecting the prosperity and well-being of Pacific peoples; and to strengthen the bonds of peace among Pacific peoples by promoting a feeling of brotherhood among the scientists of all the Pacific countries."

The Congress opened with a plenary session in which acting foreign secretary Felino Neri welcomed the delegates on behalf of the Philippine government, and Vidal A. Tan, president of the University of the Philippines and of the Eighth Pacific Science Congress, addressed the audience of over 6000 delegates and guests on "The Role of Man in Science." The heads of foreign delegations made brief remarks before the delegates met in some 20 groups for the discussion of scientific problems. The organizing committee had arranged a program stressing symposia which cut across various fields, as well as divisional discussions, and had interspersed public lectures by outstanding scientists and excursions to various points of interest. A major feature was the invitation of the National Power Corporation to hold a symposium on conservation planning at the site of the Ambuklao power dam project on the Agno River near Baguio.

Physical science papers were grouped under Geology and Geophysics, Meteorology, and Oceanography, under the respective chairmanships of Jose M. Feliciano, Casimiro del Rosario, and V. Villadollid.

In the sessions of Geology and Geophysics, papers were presented in 9 symposia that covered such Pacific

[1] The writer is indebted to K. O. Emery, Geology Department, University of Southern California, E. W. Gifford, Department of Anthropology, University of California, and H. O. Beyer, University of the Philippines, for information and notes on various activities included below.

Ocean fields as Volcanology, Geologic Mapping, Geologic History, Mineral Deposits, Mining Geology, Plutonics, Basement Complex, Seismology, and Salient Problems. Seventy titles were listed in the program. About one-quarter of these were read only by title or by an alternate speaker in the author's absence, and an additional 5 or 10 papers, which arrived too late to be scheduled, were fitted into the program. Judging from the amount of discussion, the most popular symposia were those on Geological Mapping and Salient Problems.

In Oceanography, 85 papers were presented in 6 symposia entitled Exploitation and Utilization of Marine Products, Marine Provinces, General Circulation, Pondfish Culture, Coral Atolls, and Productivity in Temperate and Tropical Waters. Characteristic of the Oceanography sessions were the joint participations with other groups such as Meteorology, Geology, Nutrition, Zoology, Botany, and Soil Science. The inclusion of papers having such general interest led to audience reactions that were limited only by lack of time, especially for the symposia on Coral Reefs and Biogeography.

Meteorology sessions were mostly organized in informal discussions. Nine such meetings were arranged around the following subjects: Current Research Projects of Pacific Meteorology, Research Needs and Techniques, General Meteorology, Problems of Forecasting, Cloud Physics, Typhoons, Easterly Waves and Intertropical Convergence, Microseismology, and Climatology. The informal presentations aroused more interest and audience participation than would formal papers, and it is recommended that the method be considered for subsequent meetings of other groups at future Pacific Science Congresses.

There were excursions to Tagaytay Ridge overlooking Taal Volcano and Typhoon Cora, which the meteorologists followed with great interest. Through the aid of UNESCO, a preliminary meeting of oceanographers was held to formulate plans for the organization of an oceanographic research body to develop and coordinate research in the Indo-Pacific region. Public lectures were given by Anton Fr. Bruun, on "Life and Life Conditions of the Deepest Deep-Sea"; Gordon A. MacDonald on "Hawaiian Volcanoes"; and Pierre Auger, on "Cosmic Rays."

The biological science papers were subdivided among a number of categories that included Oceanography (in part), Zoology, Botany, Soil Resources, Forestry, Agriculture, Animal Improvement, Crop Improvement, Public Health, Nutrition, Pacific Conservation, and Management and Utilization of Natural Resources, in addition to special sessions devoted to Nutritional Enrichment of Rice, Fuels and Lubricants, and Problems of the Coconut Industry. The bulk of the papers and symposia were concentrated in this group and there was a strong emphasis on applied science, as well as on new findings.

The Zoology Section centered its attention on Pacific entomology under the chairmanship of L. B. Uichanco, and emphasized ecological studies, classification, and technics of control. Botany, with Eduardo Quisumbing as chairman, held symposia on Vegetation Provinces, Floristic Trends, Alien Plants, Ethnobotany in the Pacific (with anthropology), and Medicinal Plants. Forestry, under the chairmanship of Florencio Tamesis, held a separate series of sessions in which emphasis was placed on the management and utilization of forests and forest products, and on the status of the protection of rare and vanishing species of plants and animals.

The program in Agriculture, under the chairmanship of Jose S. Camus, centered around a series of joint symposia with related sections and a symposium on Rice, and it included trips to the Quezon Coconut Experiment Station and to the College of Agriculture at Los Baños. Special attention was given in Soil Resources to the symposia on Land Classification and on Soil Classification in the Pacific Area; the chairman was Marcos M. Alicante. A large number of symposia were scheduled on animal and crop improvement and on animal and plant diseases.

The Public Health Section, under the chairmanship of Hilario Lara, held a series of panel discussions on: Problems of Rural Health and Disease; Health Education and Training; and specific problems such as schistosomiasis, malaria, filariasis, yaws, and other disease. A successful field trip involved a visit to Leyte to see the Schistosomiasis Control Pilot Project. A joint symposium was held on Rats and Rat Control and its importance to public health and agriculture. Special symposia were also arranged in nutritional problems of the Pacific Area and on the nutritional improvement of rice with special reference to enrichment and parboiling. In this meeting the Bataan Rice Enrichment Experiment to combat beriberi, aided by grants from the Williams-Waterman Fund, aroused great interest.

A number of public lectures were given relating to these sections, including "Cultivated Plants from Kebun Raya, Indonesia," by C. G. G. J. Van Steenis; "Development of the FOA—PHILCUSA—Assisted Public Health Program in the Philippines," by Juan Salcedo, Jr.; "Polymorphism in Relation to Evolution," by Julian Huxley; "Environmental Control, Ecological Divergence, and Physiological Rhythm among Oceanic Birds," by Robert C. Murphy; and "The Biology of Oyster, Pearl, and Mother of Pearl of the Tuomotus," (in French), by Gilbert Ranson.

The Social Science Section, under the chairmanship of Amando M. Dalisay, held a series of important symposia devoted to the problems of land tenure, population, education, and ethnic interrelationships and administration in the Pacific region. It participated in a number of joint symposia on Economic and Power Resources in the Pacific Area, Rural Community Organization, and The Role of Social Sciences and Applied Anthropology in the welfare of Pacific Peoples. The great amount of interest in these sessions, particularly on population, land tenure, and social sciences in relation to welfare, should stimulate the development of social science in the Philip-

pines very considerably, particularly at the University of the Philippines where a Social Science Research Center is being organized with assistance from the Rockefeller Foundation.

The Fourth Far-Eastern Prehistory Congress, with H. O. Beyer as chairman, included a section on Anthropology, and held parallel sessions in Archaeology and Cultural Anthropology, the latter included Linguistics. The Prehistory Congress, originally begun as an offshoot of the Fourth Pacific Science Congress held in Batavia in 1929, has held 3 independent meetings. This present meeting was the largest and most successful, and was attended by some 63 archaeologists and anthropologists from 19 countries.

The Prehistory Section, with some 36 members, discussed the developments in the past 15 years in East Asian and Oceanic archaeology. The discovery of Paleolithic sites in the Celebes, Timor, and Japan, the clarification of the relations of painted pottery and black wares in China, the discovery of new remains of fossil animals in the Philippines and Celebes, the discovery of the ancient site of Funan in Indochina by aerial photography and the clarification of Oceanic cultural movements are some of the major achievements reported on.

The section on Cultural Anthropology and Linguistics had an unusually interesting program that covered field research on social organization and religion in Japan, the Ryukyus, Formosa, the Philippines, Borneo, Australia, and Micronesia, and that reported on the findings of modern linguistic research in the Philippines. The linguistic papers had an enthusiastic reception and resulted in an informal organization to coordinate and facilitate research on Philippine languages in particular, and Malayo-Polynesian languages in general.

In addition to archaeological tours to nearby sites, a series of post-Congress tours was organized to visit the Ifugao rice terraces at Banawe and various native groups in the Mountain Province. Several public lectures were given: "The Discovery and Study of the Earliest Known Human Fossils and their Place in the History of Man's Development," by G. H. R. von Koenigswald, one of the distinguished guests of the Congress; "The History and Characteristics of the Stone-Walled Rice Terraces of Luzon," by H. O. Beyer; "Islands and Men—Malayo-Polynesian Peoples of Oceania," by Alexander Spoehr; and "The Importance of the Anyang Discoveries on Prefacing Known Chinese History with a New Chapter," by Li Chi.

One full day was devoted to museums and their problems, under the chairmanship of Eduardo Quisumbing. The almost total destruction of the Bureau of Science during the war and the loss of almost all the botanical, zoological, geological, and anthropological collections housed in the Bureau led to efforts to secure a new museum building and to bring about the rehabilitation of the collections. The Congress passed a resolution strongly urging the government to give priority to the construction of a national museum.

A day was devoted to the problems of international organizations, under the chairmanship of Manuel L. Carreon. Representatives of UNESCO, the South Pacific Commission, WHO, FAO, and other agencies reported on their activities and interests.

One of the highlights was the visit of a group of some 20 scientists, under the leadership of Julian Huxley, to the Ambuklao Power Dam Project. The symposium on Conservation Planning in Relation to Power Developments held at Baguio, jointly sponsored by the sections on Pacific Conservation and the Management and Utilization of National Resources, reported that it was favorably impressed by the plans which had been developed by the N.P.C. for power production, resettlement of displaced persons, and protection of natural resources.

Another highlight was the first color film of the Kouprey (a recently discovered new form of primitive wild cattle [Novibos] in northern Cambodia) taken by Charles Wharton and presented by Harold J. Coolidge, who raised this animal from a sub-species to a new genus in 1940. The Cambodian government has been requested to protect this new and exceedingly important find. An added attraction was the showing of a documentary film of native life on the coral atoll of Kapingamarangi taken by Kenneth Emory and the late Sir Peter Buck, and with a commentary by E. H. Bryan, Jr.

The Pacific Science Council received invitations for the Ninth Pacific Science Congress from Thailand, Vietnam, Indonesia, and Hong Kong (in itself a measure of the great interest in science in the Far East), and elected to meet in Bangkok, Thailand, in January, 1958.

The Far-Eastern Prehistory Congress, in the meantime, had established a permanent standing committee with B. P. Groslier as chairman and Roger Duff as secretary, and had tentatively agreed to meet a week ahead of the Ninth Pacific Science Congress so that its members might participate more fully in both sessions. H. O. Beyer was elected honorary chairman of the Prehistory Congress standing committee in honor of his work in organizing the present Congress.

The closing plenary session was devoted to business matters and reports, under the chairmanship of Vidal A. Tan. Some forty resolutions were adopted by the Congress, including resolutions to set up a standing committee on Pacific Botany, to conserve vanishing species, to make special studies of nutrition in Pacific countries, to improve meteorological studies, to establish an oceanographic society, and to increase the participation of South American countries in the next Congress. The establishment of a permanent Secretariat for the Pacific Science Council was approved. This secretariat is to be supported by participating countries, and located at the Bishop Museum in Honolulu under the secretaryship of Brenda Bishop.

The smooth operation of the Eighth Pacific Science Congress was largely the result of the work of Patrocinio Valenzuela, secretary-general of the Congress, and his able staff, assisted by the members of the Or-

ganizing Committee, who were the chairmen of the various sections, and the Secretariat of the Pacific Science Council. The proceedings will be published in several volumes in the near future.

The visiting scientists will remember Philippine hospitality. The excursions to Bataan and to Los Baños furnished welcome interludes in the program and gave scientists of different sections a chance to compare notes and get acquainted. The official hospitality, evidenced in President Quirino's cocktail party, in the dinners given by the National Research Council, the Philippine Columbian Club, and President Tan, was matched by the private hospitality of Philippine scientists and scholars. The newspapers said that the visitors had made the Philippines "science minded," and we hope it is true. We learned a great deal about the Philippines and will welcome an invitation to return.

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Science News

At an estimated cost of $20,000,000, the U.S. will build a **25-billion-volt atom smasher** at Brookhaven National Laboratory. The machine, known as an alternating gradient synchrotron, will use the strong-focusing idea worked out nearly two years ago. The strong focus is developed by using many small magnet sections, rather than the larger ones now common, to focus the whirling atomic particles. The new accelerator will develop more than eight times as much energy as Brookhaven's present cosmotron, which has operated at 2.3 billion electron volts and is expected some day to reach 3 bev, at the very lowest level of cosmic ray energies.

The bevatron under construction at the University of California's Radiation Laboratory, Berkeley, is expected to accelerate particles into the 5- to 7-bev range. A European group known as the Council for European Research, Nuclear, or CERN, is making plans for a 30-bev accelerator, also using the strong focusing principle.

The latest step taken by the American Psychiatric Association to raise standards of treatment and **care of mentally sick** persons is to set up a committee to certify "qualified mental hospital administrators." The committee will conduct examinations periodically and issue qualification certificates to successful applicants. The object is to help insure that the chief executives of mental hospitals shall not only be physicians adequately trained in psychiatry, but that they shall also be skilled in business and personnel management, community relations, budget control, procurement, and other essential administrative techniques.

Ever since 1844, the Association has maintained that the chief executives of mental hospitals must be physicians specialized in psychiatry. The Association regards as unsound, proposals to separate "administrative" from "medical" reponsibility in the hospital, with corollary suggestions that doctors should confine themselves to medical matters only. It believes that all mental hospital operations bear a direct relation to the progress of a patient, and accordingly that only a physician may assume total responsibility for them.

A new **method for studying fluid flow** has been devised by S. Koncar-Djurdjevic of the Institute of Inorganic Technology, Belgrade, Yugoslavia. Flow is investigated by placing objects coated with silica gel in a water stream containing a very small amount of blue dye. The amount of dye that coats different parts of the object's surface is a measure of how the water passed over it and how it forms eddies. This adsorption technique is said to have several advantages over those methods now in use. It gives permanent records without need for photography, it is simple, and it can be applied to large surfaces.

At a recent conference on radio astronomy sponsored by the National Science Foundation, the Carnegie Institution of Washington, and the California Institute of Technology, J. D. Kraus reported that the positions of about a dozen **radio "stars"** have been confirmed with the new radio telescope at Ohio State University. The instrument, twice as large as its predecessor, has 96 antenna, each in the form of a helix. It was first put in operation on Jan. 1.

Element 43 in the periodic table, **technetium,** which is found in the debris of atomic bombs, becomes superconductive at the relatively high temperature of 11.2° on the absolute scale. The discovery was made by J. G. Daunt of Ohio State University and J. W. Cobble, formerly at Oak Ridge National Laboratory and now at the University of California's Radiation Laboratory.

Within six to nine months the largest telescope in the **U. S. Naval Observatory** in Washington, D.C., will be moved to Flagstaff, Ariz. Sky brightness over Washington and smog conditions now give the instrument low operating efficiency. It is proposed to staff the new laboratory with two or three permanent civilian employees.

Scientists in the News

Pier A. Abetti, an employee of the General Electric Company and an Italian-born citizen who has been in this country only seven years, has been selected as the nation's outstanding young electrical engineer for 1953 by Eta Kappa Nu Association. He was honored for "his original approach to power transformer design through the creation of unique electro-magnetic models and his exceptional civic and cultural attainments." Eta Kappa Nu also awarded honorable mentions to **John E. Jacobs** of the General Electric Company, and **Adam G. Kegel,** an engineer in the Air Arms Division of the Westinghouse Electric Corp., Baltimore.

Herbert K. Abrams, medical director of Union Health Service, Inc., Chicago, has been appointed clinical assistant professor of public health at the University of Illinois College of Medicine.

Bernard Belleau has joined the staff of the research department of Reed and Carnrick, Jersey City. His work in organic syntheses will be directed towards the development of new chemotherapeutics. Dr. Belleau has previously been connected with the Case Institute of Technology, the Sloan-Kettering Institute, and Laval University in Quebec.

Rear Admiral Calvin M. Bolster, USN, who has served as Chief of Naval Research since August, 1951, retired on January 1 after 37½ years of active service. Graduated from the U.S. Naval Academy in 1919, he attended the Post Graduate School at Annapolis, and then the Massachusetts Institute of Technology where he was awarded an M.S. degree in naval architecture in 1922. He later studied at the California Institute of Technology and in 1936 earned an M.S. degree in aeronautical engineering.

Admiral Bolster has had broad experience in naval research and development work throughout his career, and worked in such varied fields as helium repurification, operation of airplanes from airships, airplane and helicopter development, aircraft carrier design, and rocket and jet propulsion. As Chief of Naval Research, Admiral Bolster has been the principal liaison officer between the Navy Department and scientists throughout the country. With his extensive background and broad personal understanding of research problems, he has been responsible for increasing and strengthening the interest of top civilian scientists in undertaking research to meet the needs of the Navy.

For his war work, Admiral Bolster was awarded the Legion of Merit and was made Honorary Commander of the Military Order of the British Empire by King George VI. In 1949 he received the American Rocket Society Gold Medal Award for rocket research and the National Air Council Annual Award in 1950 for "Outstanding Work in Aeronautical Research and Development." Admiral Bolster plans to join the research organization of the General Tire and Rubber Company, Akron, in an administrative capacity.

The 26th award of the AAAS $1000 prize, now known as the Newcomb Cleveland Prize, was made to **Barry Commoner,** professor of plant physiology at the Henry Shaw School of Botany, Washington University, St. Louis. The prize is awarded at the annual meeting of the Association to the author of a paper that has been presented on a regular program and that describes an outstanding contribution to science.

Dr. Commoner's paper, entitled "Studies on the Biosynthesis of Tobacco Virus," reported the results of experiments utilizing isotopic nitrogen as a tracer to determine the steps in the production of virus in a cell. By detailed quantitative comparisons of the biochemical processes in otherwise identical pieces of infected and uninfected tobacco leaf, it was possible to sort out those specific reactions that are linked to the reproduction of the virus.

The Prize Committee for the 120th Meeting of the AAAS included: John R. Dunning, Columbia University, chairman; Francis O. Schmitt, Massachusetts Institute of Technology; Laurence H. Snyder, University of Oklahoma; Frederick J. Stare, Harvard School of Public Health; and George B. Wislocki, Harvard School of Medicine.

At the 40th annual meeting of the Chemical Specialties Manufacturers Association, **F. B. LaForge** and **Milton S. Schechter** received the 2nd annual Achievement Award for their work on insecticides as scientists with the U.S. Department of Agriculture. They synthesized Allethrin, one of the active principles of pyrethrum. They have also made major contributions to the development of other important synthetic organic chemical insecticides.

The 9th Theobald Smith Award in Medical Sciences, established in 1936 by Eli Lilly and Company and consisting of $1000 and a bronze medal, was awarded to **Irving M. London** of the College of Physicians and Surgeons, Columbia University, during a session of Section N at the 120th Meeting of the AAAS in Boston, Dec. 28.

Dr. London received the award for his significant contributions in the fields of porphyrin, cholesterol, and protein metabolism. He studied the life span of the red blood cell in normal and pathologic states such as sickle anemia, polyeythemia vera, and pernicious anemia and, using isotopic tracers, he developed a technique for observing antibody formation in surviving tissue. This provides not only a method for studying the capacity of individual tissues to form antibodies, but also a controlled system for the study of protein synthesis *in vitro*.

The 18th William H. Walker Award, granted annually by the American Institute of Chemical Engineers for distinguished contribution to chemical engineering literature, has been presented to **William Robert Marshall, Jr.,** professor of chemical engineering and associate dean of the College of Engineering, University of Wisconsin. Prof. Marshall received the award in recognition of his publication record over the years, and particularly in recongnition of his contribution of nine papers to *Chemical Engineering Progress* during the period 1950–52. The papers cover various aspects of the field of drying.

Albert Schweitzer is erecting new leper colony buildings at Lambarene in Gabon, French Equatorial Africa, with the $33,000 that he received as a Nobel Prize winner. Dr. Schweitzer founded his hospital in Lambarene in 1913. It has since expanded to 40 wood and corrugated iron buildings, housing 500 patients and serving scores of jungle villages. The hospital is simple and patients live much as they do in their

homes. "The work is more desperately needed now than when I came," Dr. Schweitzer said recently.

Arne J. Suomela, who has been Oregon State Director of Fisheries since 1945, has been appointed Assistant Director of the Fish and Wildlife Service. Mr. Suomela is an authority on salmon fisheries and has done extensive research in Alaska and the Pacific Northwest.

James L. Thomas, former chief of the Resistance Measurement Section of the National Bureau of Standards, has been made chief of the newly organized Resistance and Reactance Section of the Bureau's Electricity Division. The new section is concerned with precision resistance, capacitance, and inductance measurements. Dr. Thomas has been with NBS since 1927 and has made many contributions to the field of electrical measurements. He developed the special type of precision standard used by most laboratories for maintaining the unit of electrical resistance.

Alexander R. Troiano has been named head of the Department of Metallurgy at Case Institute of Technology. He has been serving as acting head since the death of Prof. Kenneth H. Donaldson in September.

At the 13th annual meeting of the Cleveland Health Museum's National Advisory Council, held during the American Public Health Association convention, **Clair Elsmere Turner** received the 1953 Elisabeth S. Prentiss National Award in Health Education. The citation read: "A True Professor, Master Architect of School and Adult Health Education, Respected Author, World-Wide Lecturer and Consultant." Dr. Turner, professor emeritus of public health of Massachusetts Institute of Technology, has been assistant to the president of the National Foundation for Infantile Paralysis since 1946. He has also been health education consultant with the World Health Organization for four years.

Thomas H. Vaughn recently resigned from the Wyandotte Chemicals Corporation to accept appointment as vice president in charge of research and development for the Colgate-Palmolive Company.

Felix A. Vening-Meinesz, a professor of geodesy and geophysics at the universities of Utrecht and Delft, The Netherlands, is now serving as a research consultant and lecturer at Ohio State University. He will assist on the Gravity Project of the Mapping and Charting Research Laboratory. Dr. Vening-Meinesz has been occupied for the past 30 years with the study of the earth's gravity at sea by means of measurements taken in submarines. In his underwater laboratory he has traveled approximately 125,000 miles.

Charles C. Wilson, professor of education and public health at Yale University, recently received the William A. Howe Honor Award from the American School Health Association in recognition of his contribution to school health. Among many other significant activities, Dr. Wilson was a member of the Yearbook Commission of the American Association of School Administrators which wrote the book, *Health in Schools.* He is author of a number of health textbooks for school pupils.

John H. Yoe, professor of chemistry at the University of Virginia since 1919, has succeeded **Robert E. Lutz** as chairman of the department. Prof. Yoe will continue as director of the John Lee Pratt Trace Analysis Laboratory.

Grants and Fellowships

Applications for **Atomic Energy Commission fellowships** in radiological physics and industrial hygiene for 1954–55 are now being accepted by the Oak Ridge Institute of Nuclear Studies. These fellowships, designed to provide training in these two specialized fields closely related to the atomic energy program, are administered for the AEC by the Institute, and awarded to selected college graduates with degrees in basic science or engineering.

The radiological physics program provides for fellows to spend an academic year taking formal courses at one of three universities to which they may be assigned, and then to transfer to a corresponding cooperating AEC installation where they work approximately three months in applied health physics. The following three training programs are offered: University of Rochester in cooperation with Brookhaven National Laboratory; University of Washington in cooperation with the Hanford Works; Vanderbilt University in cooperation with the Oak Ridge National Laboratory.

Industrial hygiene fellows receive training at Harvard University or the University of Pittsburgh. Course work varies with the university selected and with the interests and background of the individual. Courses in public health and statistics are required for fellows, and electives include courses dealing with engineering, radiological physics, toxicology, industrial medicine, and related fields. All AEC fellowship applicants may designate their choice of institution assignment, and, when possible, assignments will be made accordingly; however, the Institute cannot guarantee compliance with the choice.

Basic stipend for AEC fellows is $1600, with an additional $350 allowed for spouse and $350 for each dependent child. Fellowship awards include payment of normal tuition and fees required by the university, and a travel allowance for the fellow (not dependents) from the place of application to his assigned university.

Additional information concerning the program may be obtained from the Fellowship Office of the University Relations Division of the Institute, P. O. Box 117, Oak Ridge, Tenn. Applications have been available from university deans and department heads since Jan. 1, as well as from the Fellowship Office. *Completed applications, supporting letters of refer-*

ence, and transcripts must reach the Institute not later than Mar. 1. Appointments will be subject to security clearance.

Fellowships for training in clinical investigation in the field of cancer in children, including chemotherapy, have been created at the **Children's Cancer Research Foundation.** Stipends range from $2400 to $5000. Application blanks may be secured from Dr. Sidney Farber, Children's Cancer Research Foundation, Boston, Mass.

In January the **Eli Lilly Company** announced the following research grants:

The Bronx Hospital. A. J. Weil, Dept. of Bacteriology. Antibiotics.

Childrens Hospital of Los Angeles. M. J. Carson, medical director. Oral suspension of erythromycin.

Columbia University. L. J. Doshay, Presbyterian Medical Center. Evaluation of Compound 08958 in Parkinsonism.

Harvard University. R. B. Woodward, Dept. of Chemistry. Strychnine synthesis.

University of Liége. E. Fredericq. Insulin studies.

University of Louisville. M. M. Best, School of Medicine. Research at Louisville General Hospital.

Oklahoma Agricultural and Mechanical College. R. J. Sirny, School of Agriculture. Possible new factors in liver products.

Polytechnic Institute of Brooklyn. H. Morawetz, Dept. of Chemistry. Synthetic polyelectrolytes.

Medical College of South Carolina. L. Banov. Effects of antibiotics on common anorectal inflammatory lesions.

Medical College of South Carolina. M. W. Beach, Dept. of Pediatrics. Effectiveness of "Ilotycin" in the treatment of diphtheria and diphtheria carrier state.

University of Washington College of Pharmacy. H. W. Youngken, Jr., Dept. of Pharmacognosy. Drug-plant investigations.

The **National Council to Combat Blindness, Inc.,** 30 W. 59 St., New York 19, has announced the launching of its fellowship program. This facet of the Council's activities was initiated under the direction of its Scientific Advisory Committee with the objective of meeting the existing shortage of trained research manpower in the field of ophthalmology and its related sciences and to encourage individuals who have training in ophthalmology or the various branches of biological, chemical and physical sciences, and investigative medicine to undertake specialized research study. Applicants are required to make their own arrangements for suitable research facilities with recognized institutions. The first three candidates awarded fellowships and the institutions at which they will work are:

State University of Iowa. E. Auerbach, University Hospitals. Retinal physiology.

Massachusetts Eye and Ear Infirmary. T. Laurent, Retina Foundation. Influence of ascorbic acid on the shape and size of the hyaluronic acid molecule in the presence of different inorganic ions and at different hydrogen ion concentration.

Eye and Ear Hospital. Pittsburgh. S. J. Solomon. Fine structure of photoreceptors.

Grants-in-aid awards approved for the fiscal year 1953–54 are as follows:

New York University. G. M. Breinin. Neotetrazolium studies in the eye, $1620.

State University of Iowa. H. M. Burian. Studies in electroretinography, $3000.

University of Pittsburgh. T. S. Danowski and L. Greenman, School of Medicine. Studies of factors affecting the development of galactose cataracts, $2500.

Presbyterian Hospital Medical Center. W. G. Everett, Institute of Ophthalmology. Mensuration of living eye by x-ray and relation of measurements to pathologic states, $1000.

Wills Eye Hospital. H. Green and I. H. Leopold. Investigation of the intermediary reactions and the enzyme systems involved in lens metabolism, $3000.

University of Chicago. A. C. Krause, School of Medicine. Toxoplasma in domestic animals, $950.

Government Hospital, Haifa, Israel. I. C. Michaelson. Factors affecting new vessel growth, particularly in the cornea, $3000.

Tulane University Medical School. J. W. Rosenthal. Genetic study of the spheroplakia, glaucoma, brachydactyliasyndrome, $400.

Cerrahpasa Hospital, Istanbul. N. Sezer. Characterization of the virus of Behcet's disease, $2000.

Indiana University. F. M. Wilson, Medical Center. Experimental study of effects of beta irradiation, $1500.

Eye and Ear Hospital, Pittsburgh. J. J. Wolken. Fine structure of photoreceptors, $1200.

Stanford University. M. Fine, School of Medicine. Inhibiting effect in serum of patients with sarcoidosis (ocular and other) upon the hemoagglutination test for tuberculosis and other agglutination reactions, $2500.

The **National Muscular Dystrophy Research Foundation, Inc.** has announced that those wishing to apply for moderate grants-in-aid should write to the Executive Secretaries, National Muscular Dystrophy Research Foundation, Inc., 709 Main St., Liberty, Tex. The Foundation has recently awarded the following grant:

Southwest Foundation for Research and Education. R. B. Mefferd. Individual metabolic patterns for families having a history of muscular dystrophy, $5000.

United Cerebral Palsy has made the following research grants for the year preceding Sept. 30, 1953:

University of California, Los Angeles. H. W. Magoun, School of Medicine. Factors promoting regeneration of nerve fibers in the central nervous system.

Stanford University. J. A. Anderson, School of Medicine. Effect of growth on certain physiologic and biochemical aspects of the central nervous system of monkeys.

Instituto N. de Cardiologia, Mexico City. A. Rosenbleuth. Neuro-physiology in cerebral palsy.

University of Cincinnati. G. H. Acheson, College of Medicine. Changes in ganglionic transmission resulting from section of postganglionic axons.

Columbia-Presbyterian Medical Center. H. H. Merritt. Neurophysiology of the basal ganglia, and fundamental neurological research of importance to cerebral palsy.

University of California, Los Angeles. H. W. Magoun, School of Medicine. Physiology of the cerebral cortex and basal ganglia in relation to cerebral palsy.

New England Deaconess Hospital. S. P. Hicks. Mechanism of development of malformations of the nervous system with special reference to cerebral palsy.

University of Arkansas. W. K. Jordan, School of Medicine. Nucleic acid chemistry of nervous tissues.

St. Christopher's Hospital for Children. J. B. Arey and H. Baird. Genesis and nature of cerebral palsy with a diagnostic service for neuropathologic studies in cerebral palsy.

Armed Forces Institute of Pathology. E. Gyori. Study and research on the pathology of disease in the nervous system.

University of Utah. R. W. Doty, College of Medicine. Functional reorganization of the nervous system after hemispherectomies with particular reference to the surgical treatment of CP.

Harvard University. P. I. Yakovlev, Medical School. Developmental anomalies of finer structure and fiber connections of the central nervous system in malformations of the cerebral mantle.

University of Michigan. R. Allen. Work in neurology and some basic science techniques.

Gallinger Municipal Hospital, Washington, D.C. J. F. Fazekas. Influence of traumatic head injuries and hypoxia on cerebral hemodynamics and metabolism.

University of Tennessee. J. G. Hughes. Relationship of birth injury to subsequent cerebral palsy utilizing electroencephalography through the newborn period and throughout childhood.

University of Utah. C. A. Swinyard and C. H. U. Chu.

Effect of anoxia and lead poisoning on brain water and electroshock seizure threshold.

Children's Medical Center, Boston. S. Farber. Diagnosis, research, and training of personnel in cerebral palsy.

Orthopedic Hospital, Los Angeles. R. Harrington. Breathing movements in a selected cerebral palsy population.

Children's Medical Center, Boston. B. Crothers. Natural history of cerebral palsy.

University of Rochester, Strong Memorial Hospital. R. P. Schwartz. Drug research.

University of Illinois. K. Unna, College of Medicine. Neuropharmacologic approach to the treatment of cerebral palsy.

Meetings and Elections

The **American Orthopsychiatric Association** has elected the following officers for 1954: pres., Hyman S. Lippman, St. Paul, Minn.; pres.-elect, Simon H. Tulchin, New York, N.Y.; v. pres., Jean W. MacFarlane, Berkeley, Calif.; sec., Exie E. Welsch, New York, N.Y.; treas., William S. Langford, New York, N.Y.

The University of Illinois will be host to the 62nd annual meeting of the **American Society for Engineering Education,** June 14-18. More than 2000 participants are expected. The theme of the meeting, "Evaluation of Engineering Education," will be presented by the Society's president, Dean L. E. Grinter of the University of Florida. Special sessions, sponsored jointly by various divisions of the Society, will be devoted to improvement and recognition of good teaching, presentation of prize winning papers from the Young Engineering Teachers Group, and discussion of common problems of universities, industry, and government.

The meeting will also mark the golden anniversary of America's first engineering experiment station, which was established late in 1903 at the University of Illinois. Six summer schools concerning special educational areas of engineering will be held before and after the annual meeting.

The **American Society of Human Genetics** has elected the following officers for 1954: pres., James V. Neel, Heredity Clinic, Univ. of Michigan; v. pres., Alfred F. Blakeslee, Smith College; treas., Nash Herndon, Dept. of Medical Genetics, Bowman Gray School of Medicine; sec., Sheldon C. Reed, Dight Institute for Human Genetics, Univ. of Michigan.

Lewis K. Sillcox, of the New York Air Brake Co., has been elected president of the **American Society of Mechanical Engineers.** Named as regional vice presidents are: Willis F. Thompson, Westcott & Mapes, New Haven, Conn.; William G. McLean, Lafayette College, Easton, Pa.; Thompson Chandler, Carbide & Carbon Chemical Corp., South Charleston, W. Va.; Vernon A. Peterson, Elliott Co., Los Angeles, Calif.; and Clifford H. Shumaker, Southern Methodist University, Dallas, Tex.

The **6th Annual Symposium on Recent Advances in the Study of Venereal Diseases** will be held at the Department of Health, Education, and Welfare, Washington, D.C., on Apr. 29–30. The sessions are open to all physicians and workers in allied professions who are interested in participating. These symposia usually draw hundreds from all parts of the country and are the occasion for exchange of the latest available information by the outstanding authorities. The topics for discussion will cover many aspects of venereal disease control, including basic and clinical research, serology, epidemiology, treatment, program operation, and professional education.

The **Arctic Branch, Alaska Division of the AAAS,** has elected the following officers: pres., Willibald Weniger, Dept. of Physics, Univ. of Alaska; v. pres., John L. Buckley, Dept. of Wildlife Management, Univ. of Alaska; sec.-treas., Galen Smith, Arctic Aeromedical Laboratory, Ladd Field, Fairbanks, Alaska.

At the Institute of Physics' **Conference on the Physics of Particle Size Analysis** to be held in Nottingham, England, from Apr. 6 to 9, the following sessions have been arranged: the motions of particles in fluids; the scattering of light by particles; the general phenomena encountered in particles size analysis; and the comparison of methods and the automatized methods of particle counting and sizing.

Preprints will be available beforehand and, together with a summary of the discussion, will in due course be issued as a supplement to the *British Journal of Applied Physics.* For further information, address the Secretary, The Institute of Physics, 47, Belgrave Square, London, S.W.1.

The **Gerontological Society** has elected the following officers for 1954: pres., Anton J. Carlson; pres.-elect, Ollie A. Randall; sec., Nathan W. Shock; treas., J. Esben Kirk.

The Netherlands Physical Society, with the support of the International Union of Pure and Applied Physics and UNESCO, will organize an **International Conference on Semiconductors** to be held at Amsterdam from June 29 to July 3. Lectures will be given by J. Bardeen, W. H. Brattain, H. B. G. Casimir, F. A. Kröger, D. Polder, M. Schön, W. Shockley, R. A. Smith, H. J. Vink, and H. Welker. Subjects to be covered will include: bulk recombination; surface conductivity, trapping, and recombination; intermetallic compounds, the band picture in polar and nonpolar semi-conductors; photoconductivity in semiconductors like PbS, PbTe, PbSe, ZnS, CdS; the application of general physical and chemical laws for the preparation of semiconductors with specific properties.

Discussions will be held in connection with the main lectures and there will be opportunity to analyze special problems during sectional meetings. Those who would like to participate in the conference or who wish to submit 15-minute communications for the sectional meetings should write promptly to the secretary, Dr. H. J. Vink, Floralaan 142, Eindhoven, Holland.

Officers of the **Michigan Academy of Science, Arts, and Letters** are: pres., I. Leo Sharfman, Dept. of Economics, Univ. of Michigan; v. pres., Robert R. Dreisbach, Dow Chemical Co., Midland, Mich.; sec., Pierre Dansereau, Dept. of Botany, Univ. of Michigan; treas., Volney H. Jones, Dept. of Anthropology, Univ. of Michigan.

Elwood L. Demmon, director of the Southeastern Forest Experiment Station, Asheville, N.C., has been elected president of the **Society of American Foresters.** Elected vice president was DeWitt Nelson, director of the California Department of Natural Resources.

The **Soil Conservation Society of America** has elected the following officers for 1954: pres., R. Y. Bailey, Soil Conservation Service, Spartanburg, S.C.; 1st v. pres., Edward H. Graham, Soil Conservation Service, Washington, D.C.; 2nd v. pres., Austin L. Patrick, Soil Conservation Service, Upper Darby, Pa.; exec.-sec., H. Wayne Pritchard, Paramount Bldg., Des Moines, Iowa; treas., J. S. Russell, *Register* and *Tribune,* Des Moines, Iowa.

The **Western Regional Meeting of the the American Academy of Optometry** will be held Apr. 10–11 at the University of California, Berkeley. Headquarters will be in the Shattuck Hotel, and reservations may be made through Dr. Darrell B. Carter, School of Optometry, University of California, Berkeley. The two-day meeting will feature papers by Academy members on physiological optics and the clinical aspects of optometry. A question and discussion period will follow each paper.

The **Western Society of Naturalists** elected the following officers for 1954: pres., Arthur C. Giese, Stanford Univ.; v. pres., Gilbert M. Smith, Stanford Univ.; treas., Ivan Pratt, Oregon State College; sec., John L. Mohr, Univ. of Southern California.

Miscellaneous

Announcement has been made of the publication of ***Optica Acta,*** a new European journal of optics. Papers of moderate length will appear in English, French, or German, with a summary in each of these languages. A manuscript should be submitted to the editor for the language in which it is written, from whom instructions to authors may also be obtained: C. G. Wynne, 52 London Lane, Bromley, Kent, England; A. Marechal, 3, boulevard Pasteur, Paris (XV^e), France; and G. Franke, Laufdorfer Weg 2, Wetzlar, Germany.

The journal will appear on dates spaced according to the amount of material available for publication. Subscriptions, costing 3150 francs or the equivalent, may be sent to la Société de la Revue d'Optique, 3 boulevard Pasteur, Paris XV^e, or to the national optical committees in France, Great Britain, Italy, Netherlands, and Spain that have agreed to assist. There will be a 10-percent deduction if there are more than 10 subscriptions from one committee.

The National Research Council of Canada announces the publication of a ***Canadian Journal of Microbiology,*** with R. G. E. Murray, of the Department of Bacteriology, University of Western Ontario, as editor. The *Journal* will be issued every two months commencing in August. It will publish papers describing original research in all phases of microbiology; review papers will not be accepted. Papers will appear in either English or French, and equal consideration will be given to all manuscripts regardless of country of origin. *Manuscripts received by Apr. 1* will be considered for the first issue. The general instructions to authors given in recent issues of the *Canadian Journal of Botany* should be followed. The subscription rate is $3.00 per volume. Inquiries should be sent to: Accounts Officer, National Research Council, Sussex St., Ottawa 2, Canada.

Chemicals wanted by the Registry of Rare Chemicals, Armour Research Foundation of Illinois Institute of Technology, 35 W. 33 St., Chicago 16: β-chlorolactic acid; barium persulfate; titanium sulfide; dicacodyl; 2,4,6-trinitro-meta-xylene; 2,3,4-trinitrotoluene; 3,3,3-trifluoropropene; 3,3,3-triiodopropene; piperylene; 2-methyl-8-aminoquinoline; lactic aldehyde; 1,2-cyclohexanediamine tetraacetic acid; 2,3-dihydrofuran; 5-amino-1-pentene; ethylenesulfonic acid; melibiase; hedonal; laccase; pseudocholinesterase.

The U.S. Forest Service has spent nine years listing the 1027 species of trees in the United States and Alaska. Elbert L. Little, Jr., of the Forest Service has prepared a 450-page publication entitled "**Native and Naturalized Trees of the United States Including Alaska.**" The new listing replaces one made in 1927. It will be used as the standard reference on trees.

The Association of Research Libraries, an organization of representatives of 50 of the largest research libraries in the United States, has in progress a program for making promptly and inexpensively available all **doctoral dissertations** currently accepted by colleges and universities in this country. Forty-three institutions are now publishing all or part of their dissertations in cooperation with this plan. Librarians, constantly faced with slow but steady demand for dissertations through interlibrary loan channels, are generally agreed on the great need for better distribution of this useful material. The members of the ARL believe that the dissertation publishing plan outlined below will secure such distribution, and hope that all institutions granting doctoral degrees will participate.

1. All doctoral dissertations should be published immediately upon acceptance to facilitate more effectual communication of new research material than is possible through the existing costly, inefficient, and incomplete system of interlibrary lending of typescripts of dissertations.

2. A permanent central repository for doctoral dissertations, from which copies could be inexpensively procured at any time, would be maintained to simplify the distribution.

3. Uniform listing, indexing, and abstracting of these dissertations, in one central bibliographical source, should follow as soon as possible upon their acceptance.

To achieve these general objectives, the members of the ARL have endorsed publication of dissertations in microform. Use will be made of the services of University Microfilms, Ann Arbor, Mich. Any institution granting doctoral degrees may participate by writing directly to University Microfilms. Each participating university makes its own decision as to whether the university or the student pays the fee. Various levels of participation are possible.

Necrology

Paul G. Agnew, 72, physicist, author, and former vice president of the American Standards Association, New York, N.Y., Jan. 8; **Benjamin F. Bailey,** 78, inventor and chairman of the Department of Electrical Engineering, University of Michigan, Ann Arbor, Mich., Jan. 8; **Ralph Digman,** 34, assistant professor of geology at Harpur College of the State University of New York, New York, N.Y., Dec. 20; **Irving J. Eales,** 93, author and founder of the American Society for Physio-Medical Research, Dec. 23; **Albert S. Eisenstein,** 35, visiting professor of physics at Cornell University, Ithaca, N.Y., Dec. 16; **Everett I. Evans,** 44, surgeon and head of research in radiation burns at the Medical College of Virginia, Richmond, Va., Jan. 14; **Ellsworth Faris,** 79, former head of the Department of Sociology and Anthropology at the University of Chicago, Chicago, Ill., Dec. 19; **Lynn L. Fulkerson,** 72, inventor, author, and professor of gynecology at the New York Post-Graduate Medical School, New York, N.Y., Dec. 30; **Auckland C. Geddes,** 74, former professor of anatomy at McGill University, Montreal, Canada, Jan. 8; **Bienvenido Ma. Gonzalez,** 60, retired president of the University of the Philippines College of Agriculture, College, Laguna, Philippines, Dec. 30; **Nicholas H. Heck,** 71, former chief of the Division of Terrestrial Magnetism and Seismology of the Coast and Geodetic Survey, Washington, D.C., Dec. 21; **Ames B. Hettrick,** 49, chemical engineer and executive of American Cyanamid Co., Plainfield, N.J., Dec. 27; **George B. Hogaboom,** 79, engineer and authority on electroplating, New Britain, Conn., Dec. 31; **Scott Johnson,** 55, associate professor of medicine at the Cornell Medical College, New York, N.Y., Jan. 15; **Daniel B. Kirby,** 62, specialist in eye diseases and former director of the Department of Ophthalmology at New York University, New York, N.Y., Dec. 27.

Oscar E. Lademan, 78, retired professor of medicine at Marquette University, Milwaukee, Wis., Dec. 15; **Jesse E. Lapham,** 85, retired soil scientist of the Department of Agriculture, Washington, D.C., Jan. 9; **Louis B. Laplace,** 50, cardiologist, gerontologist, and author, Philadelphia, Pa., Dec. 27; **Montgomery E. Leary,** 85, specialist in the prevention and treatment of tuberculosis, and founder of Iola Sanatorium, Rochester, N.Y., Jan. 3; **Edward M. Lehnerts,** 80, founder and retired chairman of the Department of Geology and Geography at Hunter College, New York, N.Y., Dec. 21; **Ralph Linton,** 60, archeologist, author, and Sterling Professor of Anthropology at Yale University, New Haven, Conn., Dec. 24; **Charles H. Lutterloh,** 56, clinical professor of medicine, University of Arkansas School of Medicine, Hot Springs, Ark., Oct. 30; **J. S. Macdonald,** 60, construction engineer, New York, N.Y., Dec. 31; **R. A. Millikan,** 85, Nobel Prize physicist, authority on cosmic rays, and retired head of the California Institute of Technology, Pasadena, Calif., Dec. 19; **John H. Perry,** 58, chemical engineer, Wilmington, Del., Dec. 13; **Patrick T. L. Putnam,** 49, anthropologist, Mombasa, Belgian Congo, Dec. 12; **Emiro Quintero,** 45, director of the Public Health Department of the Ministry of Public Health, Bogota, Colombia, Jan. 2; **Leo F. Rettger,** 79, professor emeritus of bacteriology at Yale University, New Haven, Conn., Jan. 7; **Percival S. Ridsdale,** 81, founder of the American Nature Association and former editor of *Nature Magazine,* Johnstown, Pa., Dec. 23; **Henry P. Rusk,** 69, dean emeritus of the University of Illinois College of Agriculture, Urbana, Ill., Jan. 9; **George E. Russell,** 75, professor emeritus of hydraulics at Massachusetts Institute of Technology, Cambridge, Mass., Dec. 11; **Burrell F. Ruth,** 53, professor of chemical engineering at Iowa State College, Ames, Iowa, Jan. 1.

Erich Seligmann, 73, former professor, author, and senior bacteriologist at Beth Israel Hospital, New York, N.Y., Jan. 1; **Harold M. Shorr,** 36, assistant chief of medical service at the Camp Rucker Hospital, Camp Rucker, Ala., and formerly of New York University College of Medicine, Dec. 16; **James R. Slonaker,** 87, dietetics authority and emeritus professor of physiology at Stanford University, Stanford, Calif., Jan. 3; **Ralph E. Smith,** 79, retired chairman of the Department of Pathology at the University of California, Berkeley, Calif., Dec. 15; **Francis C. Sumner,** 58, head of the Department of Psychology at Howard University, Washington, D.C., Jan. 11; **Verne F. Swaim,** 68, physicist and chief civilian scientist at the Chincoteague Naval Aviation Ordnance Test Station, Chincoteague, Va., Jan. 5; **George H. H. Tate,** 59, Curator of Mammals at the American Museum of Natural History, New York, N.Y., Dec. 24; **Willard C. Thompson,** 63, head of the Poultry Department at Rutgers University, New Brunswick, N.J., Jan. 12; **Frederick Tice,** 82, former professor, author, and specialist on chest ailments, Chicago, Ill., Dec. 18; **Winsor M. Tyler,** 77, ornithologist and author, Brookline, Mass., Jan. 9; **Donald B. Wells,** 69, authority on the treatment of burns, West Hartford, Conn., Dec. 22; **Reinhard A. Wetzel,** 80, retired supervisor of secondary physics at City College, New York, N.Y., Dec. 23.