News Notes

Committees of Scholars Support Candidates: Scientists Joining

The two presidential aspirants, Senator John F. Kennedy (D-Mass.) and Vice President Richard M. Nixon (R-Calif.), are being aided in their campaigns by volunteer committees of scholars that include a number of well-known scientists.

A National Committee of Arts, Letters and Sciences has been organized to provide support for Senator Kennedy. The membership consists of more than 250 well-known figures in American art, music, architecture, education, literature, and the social and natural sciences. Included are five Nobel laureates and 19 Pulitzer Prize winners. The committee, which has headquarters in Boston, was organized by John L. Saltonstall, Jr., Massachusetts lawyer and long-time political associate of Senator Kennedy.

Among the scientist members of the committee are the following Nobel prize winners: Arthur Kornberg, Polykarp Kusch, Fritz Lipmann, Edward M. Purcell, and Selman A. Waksman.

The list of the other scientists who have joined—the committee is still in the process of being formed—includes: Samuel K. Allison, Marston Bates, Hans A. Bethe, Harrison S. Brown, Martin Deutsch, Paul M. Doty, William A. Fowler, David Frisch, George A. Gamow, Trevor Gardner, Bentley Glass, Arthur Kantrowitz, Charles C. Lauritsen, Donald H. Menzel, John C. Sheehan, Kenneth V. Thimann, Stanislaw M. Ulam, Harold C. Urey, George Wald, Jerome B. Wiesner, Robert Woodward, and Jerrold R. Zacharias.

Republican Group Formed Earlier

The Republican committee, Scholars for Nixon-Lodge, was formed at a mid-August meeting in Washington of academic people called together by Professor Lon L. Fuller of Harvard University, committee chairman. The scientists in the organizational group were L. M. N. Bach, Gordon S. Brown, Edwin Crabtree, Robert A. Ellis, Raymond M. Fuoss, H. Tracy Hall, August de Belmont Hollingshead, Joseph Kaplan, Donald R. Korts, James C. Miller, Robert S. Mulliken, Milo J. Peterson, Wendell M. Stanley, Raymond W. Waggoner, and Robert A. Winters.

Last month the committee became a part of the arts and sciences division of the Republican National Committee in Washington. Three weeks ago 110,000 faculty members in universities all over the country were sent invitations to join the Nixon campaign. So far 1200 have responded, including a number of scientists. Among these are C. Raymond Adams, Garrett Birkhoff, P. Debye, F. L. Fitzpatrick, Helgi Johnson, Victor K. La Mer, Robert R. McMath, and David A. Wood.

Water Pollution and Public Health Topic of Special Federal Meeting

The need for more sewage and waste-treatment plants to control the increasing volume of pollution in the nation's rivers and streams will be a principal concern of the National Conference on Water Pollution, to be held 12–14 December in Washington, D.C. More than 1000 representatives of government, industry, and civic groups will participate in the conference, which has been called by Surgeon General Leroy E. Burney of the Public Health Service at the request of President Eisenhower and Arthur S. Flemming, Secretary of Health, Education, and Welfare. This is the first federally sponsored meeting to consider water pollution in relation to public health and to the present and future water needs of the national economy.

The agenda will include four day-long panel sessions which will cover (i) the impact of water pollution on public health and economic development; (ii) water resource management; (iii) the legal, financial, and public responsibilities of government and industry; and (iv) research and training needs. Recommendations from each panel will be discussed in a final general session. At a banquet on 12 December, national water pollution problems will be outlined in a round-table discussion by Senators Robert S. Kerr (D-Okla.) and Francis Case (R-S.D.), and Representatives John A. Blatnik (D-Minn.) and William C. Cramer (R-Fla.)

In calling the conference, Burney said that the nation is headed for a water crisis in the current decade unless a better job can be done to clean up the country's water resources. He commented:

"Since the start of World War II, construction of water supply and pollution control facilities has lagged far behind national needs. These needs will continue to grow during the 1960's as the result of population increases, the further concentration of people in metropolitan centers, and sharp increases in the use of water by households, farms, and industry."

The Public Health Service estimates that the construction of 4000 new sewage-treatment plants and the modernization of 1700 more is needed to handle the municipal sewage now dumped into rivers and streams. The service further estimates that it will take $4.6 billion worth of construction if municipalities are to catch up with treatment needs by 1968. This needed construction includes $1.9 billion to eliminate the present backlog, $1.8 billion to provide new facilities for population growth, and $900 million to replace obsolete plants.

Requirements for treatment facilities for industrial waste are more difficult to project than requirements of municipalities. However, the Public Health Service estimates that right now more than 6000 new projects are required for handling waste discharges. If built in today's construction market, these treatment facilities would cost about $2 billion, including in-plant changes. To wipe out the backlog of needed construction and to provide for growth, industry will have to spend between $575 million and $600 million annually if it is to catch up with needs by 1968.

For the past 4 years the federal government has been assisting localities in their efforts to control water pollution. Under Public Law 660, passed in 1956, the Public Health Service has provided $194 million in financial aid to communities for the construction of municipal sewage-treatment facilities. To this sum, cities and towns have added $925 million of their own, or about five times as much.

New Series of Oceanic Atlases

A new series of oceanic atlases was launched a month ago by the Woods Hole Oceanographic Institution with the publication of *The Atlantic Ocean Atlas of Temperature and Salinity*. The atlas was prepared by Frederick C. Fuglister and his associates as part of the institution's contribution to the International Geophysical Year. It represents many months of labor—making measurements at sea, compiling the data, and carefully preparing the final charts.

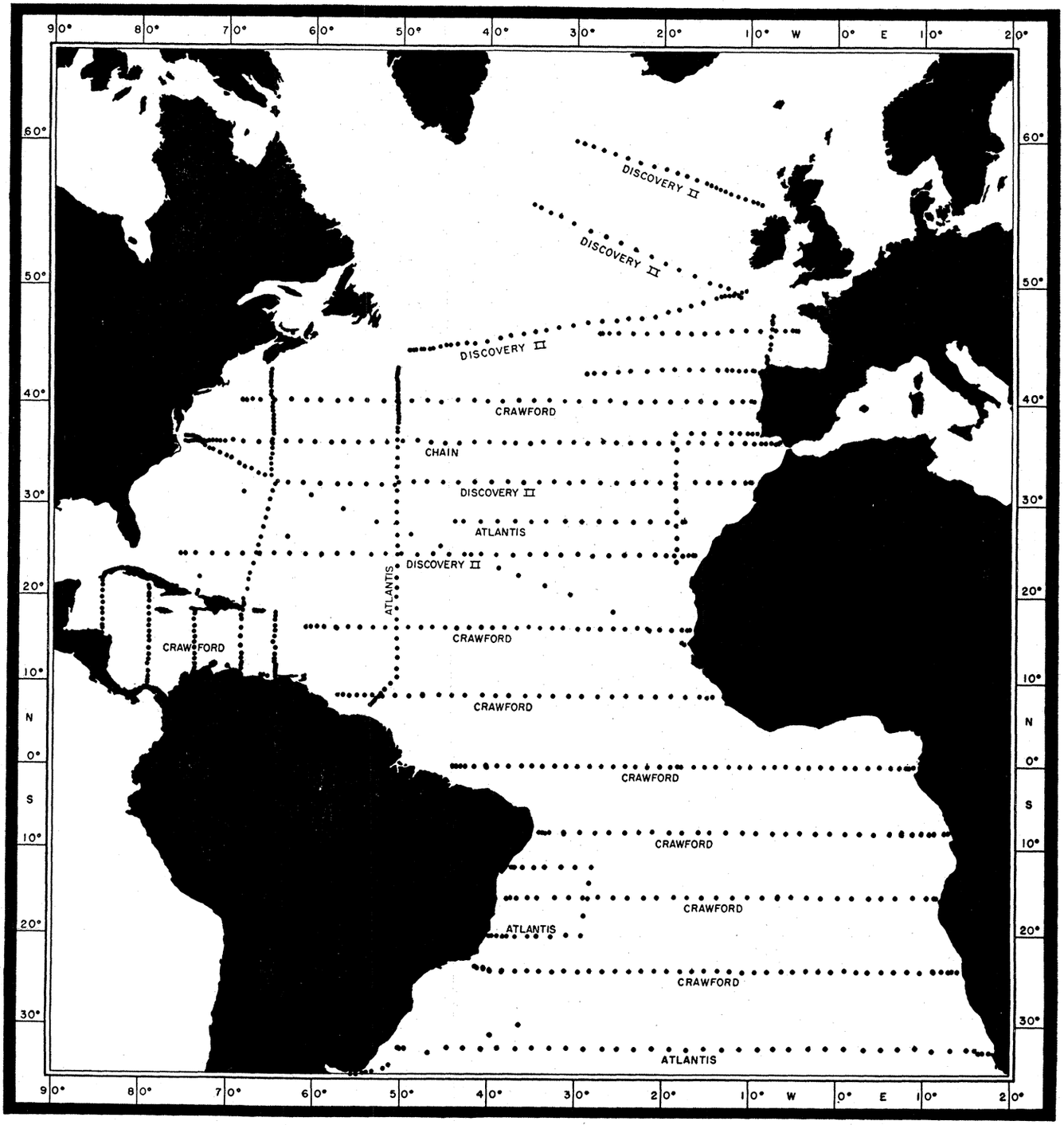
The core of the book is a section of 46 large colored charts, or profiles,

which show the salinity and temperature of the North and South Atlantic oceans from the surface to the bottom. Eight other profiles in color, the first of their kind to be published, give more detailed temperature information for the top 500 feet of water all the way across the ocean at different latitudes. In addition, all the data from which the profiles were drawn are included in the 210-page volume.

Printed on paper which was especially made for durability at sea, the publication is designed as both a reference book and a working tool for oceanographers, fishery scientists, submarine warfare specialists, and other students of the sea. Temperature and salinity information is basic to oceanic research for calculating water density and the distribution and movement of large masses of water.

The new atlas is the most complete collection of such data since the publication of the results of the expedition of the German ship *Meteor*, 1925–27; however, the *Meteor* concentrated on the South Atlantic and the Woods Hole work covers both the North and the South Atlantic.

The observations for the atlas were taken between September 1954 and July 1959 by scientists aboard the research vessels *Crawford, Atlantis,* and *Chain* of the Woods Hole Oceanographic Institution and *Discovery II* of the Na-



The area covered by the Woods Hole Oceanographic Institution's *Atlantic Ocean Atlas.* The dots represent stations where water samples were obtained.

tional Institute of Oceanography in England. In a methodical survey these vessels made 11 transatlantic passages between 32°S and 48°N and 12 shorter cruises in the North Atlantic and the Caribbean Sea. Some of the profiles, purposely made along the track of the *Meteor*, show a distribution of temperature and salinity in the deep water virtually identical with that of 30 years ago, indicating a basic stability of deep oceanic structure.

The chief scientists for the data-gathering cruises were Fuglister, L. Valentine Worthington, William G. Metcalf, and Arthur R. Miller, all physical oceanographers at Woods Hole. The work was supported by the National Science Foundation and the Office of Naval Research.

The first edition of the atlas (3000 copies) was financed by NSF in support of its IGY Interdisciplinary Research Program. Copies may be purchased from the Woods Hole Oceanographic Institution. Work is now in progress on a second volume, which will present data from world-wide study of the deep ocean.

News Briefs

South African radiotelescope. South Africa and the United States will cooperate in construction of a giant radiotelescope in a valley 20 miles west of Pretoria. The research center, to be designed primarily to follow space vehicles, is being sponsored by the U.S. National Aeronautics and Space Administration, which will provide a nucleus of trained personnel that will be gradually replaced by South African scientists and technicians. When it is completed, early next year, the telescope will have a main antenna 110 feet high and weighing 300 tons.

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American Men of Science. The F–K volume of the 10th edition of the Physical and Biological Sciences series of *American Men of Sciences* was published in September. It is the second in the series, for which two remaining volumes will be released at approximately 8-month intervals. The four volumes together will contain the biographies of approximately 100,000 scientists.

Some 70,000 of these biographies were used to formulate the following percentage breakdown by field (the percentages total more than 100 because scientists in overlapping fields are listed in both): agriculture, 2.9 percent; animal husbandry, 1.3; astronomy, 0.5; biochemistry, 6.4; botany, 4.0; chemical engineering, 4.4; chemistry, 35.5; engineering, 13.9; forestry, 1.0; genetics, 1.0; geology, 4.1; mathematics, 4.9; medicine, 9.8; metallurgy, 1.4; nucleonics, 1.5; pathology, 2.9; pharmacology, 1.8; physics, 10.3; physiology, 2.2; public health, 0.9; surgery, 1.2; and zoology, 5.7.

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Fishery nutrition. The United States Government will serve as host to a world conference on the nutritional value of fishery products during the last two weeks in September of 1961, according to an announcement by the U.S. Department of the Interior. The conference will be sponsored by the Food and Agriculture Organization of the United Nations. Approximately 400 authorities on nutrition, representing some 80 nations, are expected to attend the meeting, which will be held in Washington.

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Animal behavior center. An unusual field station, the University of California Field Station for Research in Animal Behavior, is soon to be erected in the hills east of Berkeley. Construction funds of $367,700 have been provided by the National Science Foundation. The station, which is expected to be ready for occupancy in 1962, will be staffed by professors from the departments of psychology, zoology, and anthropology. Frank A. Beach, professor of psychology, is largely responsible for planning the new center, which will have ten or so structures and facilities, including tanks intended for fish, amphibians, or reptiles but drainable for use by small animals; bird observation cages expressly designed for photography, tape recording, and observation; a mammal enclosure, of about an acre, for group studies of dogs, sheep, or goats; and a monkey facility with observation platforms.

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Cellular biology institute. The University of Connecticut has established an Institute of Cellular Biology to integrate and coordinate research and graduate training in the field. The new unit draws its membership from the departments of bacteriology, botany, animal genetics, and zoology. The institute will be guided by a faculty executive committee and an advisory council that includes the university's graduate deans and the following scientists from other institutions: J. Walter Wilson, professor emeritus, Brown University; Keith R. Porter, Rockefeller Institute for Medical Research; and Arthur Chovnick, director, Long Island Biological Laboratory.

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Ford aids engineering. A series of grants to strengthen and expand engineering education at the doctoral level in Southern universities was announced on 27 October by the Ford Foundation. The awards, which amount to $3,110,000, will go to the University of Florida, Georgia Institute of Technology, North Carolina State College, and the University of Texas. These new grants bring to $29,235,000 the total of foundation assistance in the field of engineering education at colleges and universities since the first large-scale series of grants for this purpose was announced a year ago.

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Council on the Aging. The National Council on the Aging, a nonprofit national organization, is being established and will be formally launched on 1 January. The organization grew out of the National Committee on the Aging, which since 1950 has been a standing committee of the National Social Welfare Assembly (345 E. 46 St., New York 17, N.Y.). The committee, which will become the council, has received appropriations from the Ford Foundation. The council will be an affiliate organization of the Welfare Assembly.

Grants, Fellowships, and Awards

NATO institute support. Short courses in which scientific topics are discussed at an advanced level may be eligible for financial support under the NATO Advanced Study Institutes Program. Courses should last for 2 weeks or longer, and participants should be drawn from several countries.

A NATO grant may be used for administrative expenses, for publication of proceedings, and to cover the expenses of foreign visitors. Courses in any of the sciences, including mathematics, are eligible for support. Meetings may consist of experimental classes, as well as the more usual lectures and discussions.

Persons interested in organizing such courses, and requiring financial assistance from NATO, should write *before 15 December* to the Office of the Science Adviser, NATO, Place du Maréchal de Lattre de Tassigny, Paris 16e, France.

Nutrition. Ten medical student fel-

lowships for research in clinical nutrition will be awarded in 1961 by the Nutrition Foundation, Inc., in honor of Richard W. Vilter, 1960 winner of the Joseph Goldberger Award in Clinical Nutrition. The fellowships, worth $200 a month for 3 months, will go to students who are recommended by senior investigators. Recipients will be selected by the Council on Foods and Nutrition of the American Medical Association. Applications should be made in writing by the senior investigator to the Council, AMA, 535 N. Dearborn St., Chicago 10, Ill., on or before *15 December*.

Radiological research. The James Picker Foundation has announced its program of awards in radiological research and nuclear medicine for 1961–62. The program is administered by the Division of Medical Sciences of the National Academy of Sciences–National Research Council. Applications for grants, scholar grants, and fellowships must be sent on or before *1 December* to the division's Committee on Radiology (NAS–NRC, 2101 Constitution Ave., NW, Washington 25, D.C.), which will provide detailed information on request.

The National Research Council of Canada serves as scientific adviser to the foundation with respect to its Canadian program. Inquiries and applications for support of studies to be carried out in Canada should therefore be directed to the Awards Office, National Research Council of Canada, Ottawa 2.

The Picker Program is divided into several categories.

Advanced fellowships in academic radiology. This new series of awards is open to the doctor of medicine who wishes to prepare himself for a faculty post in a medical-school department of radiology. While there are no rigid age limitations, candidates under 34 years of age will receive preference. Stipends will be determined on an individual basis.

Research fellowships. These fellowships are designed to provide an opportunity for young medical scientists who are not yet professionally established to gain insight into scientific investigation and to develop competence in its techniques and methods. Most of these awards will go to candidates who are not more than 30 years of age. The basic annual stipend is $4500. An additional allowance of $500 is made for a married recipient, plus an increment of $500 per child, to a maximum of $6000 annually. Travel expenses will be paid at the rate of 7 cents per mile, within the fellow's home country, from the location at the time of application to the institution of study. Should overseas travel be involved, a special allowance will be granted.

Grants for scholars. Grants for scholars in radiological research are a transitional form of support, designed to bridge the gap between the completion of the conventional type of postdoctoral research fellowship and the time when the young scientist has thoroughly demonstrated his competence as an independent investigator and is able to command research grant support. These grants are made to institutions for the support of specific individuals or their research, or both, during this critical initial period of their careers. The selection of the candidate is wholly the responsibility of the institution making the nomination. A grant of $6000 will be made directly to the institution to pay the salary of the scholar, or to defray the expenses of his research, or both.

Grants in aid of research. In this category, any project offering promise of improvement in radiological methods of diagnosis or treatment of disease is eligible for assistance. In line with the interests of the foundation, the program is oriented toward, but not necessarily limited to, the diagnostic aspects of radiology. In general, preference will be given to projects upon which some pilot studies have been made.

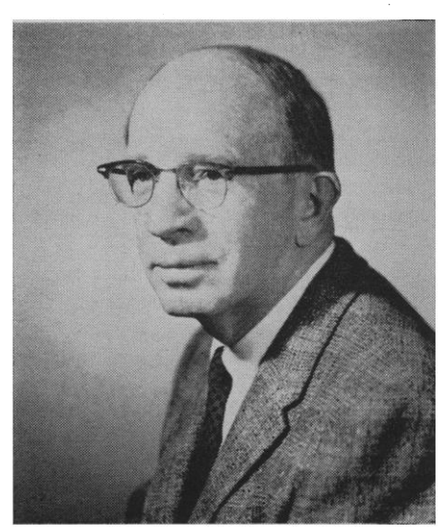
Social sciences. The Religious Education Association, a national organization, has recently received a substantial grant from the Lilly Endowment for the purpose of holding a Research-planning Workshop at Cornell University, 18–29 August 1961, in which approximately 25 social scientists and 25 religious educators will be invited to participate. The grant makes it possible for the workshop to pay travel expenses and the cost of room and board for all who attend. Stuart W. Cook, head of the psychology department at New York University, will be director of the workshop.

The workshop will be of interest to persons concerned with research on ethical values and religious ideas and practices of various populations. Those attending may explore the relation of such values to behavior. They may also explore the role of family, school, and church and synagogue and the impact of different cultures on religious thinking and character development. Underlying questions of personality theory and problems of communicating values and religious ideas will come within the scope of the workshop.

Further information may be obtained from the Research-planning Workshop of the Religious Education Association, P.O. Box 84, Cooper Station, New York 3, N.Y. Since *1 December* has been set as the deadline for applicants to furnish final data concerning themselves and their interests, persons wishing to attend the workshop are asked to write immediately. A limited number of scholarships to cover costs other than those of room, board, and travel, are available to applicants who would find it a hardship to meet such costs themselves. The Religious Education Association will assist workshop participants in finding sponsors or other means of support for research plans developed at the workshop.

Scientists in the News

I. Forest Huddleson, professor of microbiology and public health at Michigan State University, will receive the $1000 Kimble Methodology Award in San Francisco on 31 October during the Conference of State and Provincial Public Health Laboratory Directors. Huddleson developed the first satisfactory method for distinguishing the genus of bacteria known as *Brucella* in 1928. This bacteria is responsible for brucellosis (undulant fever) in human beings and Bang's disease in livestock. Recently he devised a simpler and more useful method for determining the presence of *Brucella* and other pathogenic bacteria in blood.



I. Forest Huddleson

Wallace O. Fenn, professor of physiology at the University of Rochester School of Medicine and Dentistry, will go to Paris on 4 November to receive an honorary degree from the University of Paris Faculty of Medicine. He retired as chairman of the physiology department a year ago but continues as professor.

Fenn, who has probably trained more outstanding physiologists than any other man of his time, has been a member of the Medical School faculty since 1924. He was one of the group of men that George H. Whipple, now dean emeritus, gathered around him to start the fledgling school. His scientific contributions may roughly be divided into three major areas: muscle mechanics and metabolism, electrolyte physiology, and the chemistry and mechanics of pulmonary ventilation. His recent research activities have been concentrated in the field of pulmonary gas exchange.

Miles D. McCarthy, formerly professor and chairman of the zoology department at Pomona College, is professor of biology and chairman of the division of science and mathematics at the newly established Orange County State College in Fullerton, Calif.

Other science appointments at the college, which has started its first full year, include:

Raymond V. Adams, formerly professor of physics and acting chairman of the physics department at Wayne State University, professor of physics and chairman of that department.

Dennis B. Ames, formerly professor and chairman of the department of mathematics at the University of New Hampshire, professor and chairman of the mathematics department.

Bayard H. Brattstrom, formerly of Adelphi College, assistant professor of zoology.

L. Clark Lay, formerly professor and chairman of the mathematics department at Pasadena City College, professor of mathematics.

James A. McCleary, formerly professor of botany at Arizona State University, professor of botany.

Donald D. Sutton, formerly research fellow at the Waksman Institute, associate professor of microbiology.

George C. Turner, formerly with the Claremont School District and the Claremont Graduate School, assistant professor of zoology in charge of science education.

Rudolf Florin, Bergius professor at the Royal Swedish Academy of Sciences in Stockholm and internationally known paleobotanist and expert on the living and extinct conifers, is serving as Hitchcock professor at the University of California. In five public lectures at Berkeley he is discussing aspects of the general theme "Conifer Distribution in Time and Space." The first lecture was delivered on 17 October; others will be heard on 1, 8, 15, and 21 November.

Harry E. Stockman, formerly professor and chairman of the department of electrical engineering at Merrimack College, has joined Lowell Technological Institute as professor in the division of physics and engineering science.

Paul J. Flory has resigned as executive director of research and as a trustee of the Mellon Institute, Pittsburgh; he will remain at the institute to devote full time to research in the field of polymer science.

Aurel O. Foster has been named director of the U.S. Department of Agriculture's Parasitological Research Laboratories at Beltsville, Md. In announcing the appointment to this new post, Byron T. Shaw, administrator of USDA's Agricultural Research Service, emphasized that the Service's parasite research programs at Beltsville will be equal in importance to the programs on domestic animal disease research at Ames, Iowa, and foreign animal disease research at Plum Island, N.Y. Foster has been in charge of ARS research on controlling animal parasites since 1941.

George R. Jenkins, associate professor of geology at Lehigh University and a member of the faculty for the past 12 years, has been named director of the Lehigh University Institute of Research. The institute, which administers a million-dollar program annually, was founded in 1924 to encourage and promote scientific research and scholarly achievement in every division of learning represented by the university.

The University of Maryland has appointed **Richard D. Richards**, for the past 2 years assistant professor of ophthalmology at the State University of Iowa, professor of ophthalmology and head of the department in the School of Medicine, in Baltimore. Richards is the university's first full-time professor of ophthalmology.

Recent Deaths

Grant I. Butterbaugh, Seattle, Wash.; 66; internationally known professor of statistics at the University of Washington; editor for 7 years of the *International Journal of Abstracts on Statistical Methods in Industry*; 21 Sept.

Pauline H. Dederer, New London, Conn.; 81; professor emeritus and former chairman of the department of zoology at Connecticut College in New London, 20 Aug.

George F. J. Kelly, Philadelphia, Pa.; 66; associate professor of ophthalmology at the University of Pennsylvania and senior consultant in ophthalmology at Children's Hospital; 6 Oct.

Frederick C. Lincoln, Washington, D.C.; 68; ornithologist and assistant to the director of the Bureau of Sport Fisheries and Wildlife, U.S. Fish and Wildlife Service; curator of ornithology at the Museum of Natural History in Colorado, 1913–19, and a federal employee since 1920; organized and directed the first government-sponsored bird-banding project in America; 16 Sept.

Benjamin Lipshultz, Philadelphia, Pa.; 72; assistant professor of neuroanatomy at Jefferson Medical College and former consultant in surgery at Einstein Medical Center; 9 Oct.

Herbert F. Schwarz, New York, N.Y.; entomologist associated with the department of entomology of the American Museum of Natural History for approximately 40 years; specialized in stingless bees; 1 Oct.

Alexander Skochinsky, Moscow, U.S.S.R.; 86; Soviet academician and scientist, who specialized in mining safety; conducted research on pit thermodynamics, the problems of gas and dust in coal mines, pit fires, and silicosis among miners; 6 Oct.

Paul K. Smith, Washington, D.C.; 52; professor of pharmacology and executive officer of the department of pharmacology at George Washington University's School of Medicine; pioneer in the search for drugs effective against poliomyelitis; conducted graduate work at Westminster College and at Yale University, where he also taught; 6 Oct.

Morris F. Weinrich, Irvington, Va.; 78; retired in 1952 as chairman of the Brooklyn College department of physics; specialist in various aspects of astronomy and meteorology, including artificial rain-making; taught at Columbia University and at Stevens Institute of Technology; 12 Oct.