

carried out was a study of the extensive material excavated by A. V. Kidder at Pecos Pueblo in New Mexico. This appeared as the *Indians of Pecos* in 1930 and gave him an opportunity to address himself to the broad question of American Indian origins and affiliations. Like his other work of this order, it is marked by an unusual combination of meticulous detail and a broad sweeping view.

This predilection for speculation, a trait that enlivened his lectures and breathed life into the solid facts and figures he never failed to set forth for his students, induced him, in a measure, to embark on the writing of perhaps his best known work, *Up from the Ape*, which appeared in 1931, was revised in 1946, and went through a number of printings in both editions. He used to say when he was writing this book that it was a relief to get away from the tables of data that required a restricting and conventionalized type of analysis. Here, at any rate, the Hootonian style opened into full blossom. The writing is witty, gay, sometimes a little irreverent, always respectful of the facts, and teeming with stimulating ideas. It was unprofessorial and shocked the more conventional a little, but it has weathered extraordinarily well and is still read with delight.

There now followed a succession of books written with a minimum of scientific jargon and designed to reach the general intelligent reader and to be of significance to the professional reader as well—surely a difficult task, but one in which Hooton succeeded. These were *Apes, Men and Morons*, 1937; *The Twilight of Man*, 1939; *Why Men Behave Like Apes and Vice Versa*, 1940; *Man's Poor Relations*, 1942; *Young Man, You are Normal*, 1945. In these books, he ranged widely over the field of physical anthropology, bringing its lessons home in pungent language. But through them all ran a deeply serious concern with the welfare of society and human population. He saw various

dysgenic trends operating unchecked and threatening the health and future of mankind. And these he signalled out for attack and challenge. Often he took a rather unpopular line, but he had a transcendent moral courage that gave him strong support in the face of criticism.

Perhaps in this brief account, there is space to mention only two other lines of investigation that engaged Hooton deeply. One was his study of the American criminal, on which he published two books: *Crime and the Man* and *The American Criminal*, volume 1. This was intended to be a biological and constitutional study of the criminal population of the United States and was executed with great pains. The premises of the study were severely attacked and, to some extent, its impact has been discounted, but in spite of this there is much of great value in these two volumes, which may someday be more fully recognized.

The last years of Hooton's career of research were devoted to constitutional studies. His work in this area is now mainly hidden in reports to government agencies and is, unfortunately, not generally available. As a corpus it is enormous and represents years of devoted labor.

Professionally Hooton was a leading figure. He was a member of a number of scientific societies; he was honored by election to the National Academy of Sciences, the American Philosophical Society, the American Academy of Arts and Sciences. He held only as many offices as he could be induced to accept, for he disliked office-holding. He was a Viking medalist for 1947 and received honorary degrees from Lawrence College and the University of Wisconsin, his alma maters.

Great as he was as a teacher, as a scientist, and as a writer, there was something greater still for those who knew him well. For them the finest thing about Hooton was himself.

News and Notes

Association of Southeastern Biologists

The 15th annual meeting of the Association of Southeastern Biologists was held at Louisiana State University, Apr. 15–17. The Southeastern Section of the Botanical Society of America and the Southern Appalachian Botanical Club met with the Association. There were 234 biologists from 16 states in attendance.

In addition to 60 papers presented by members, there were two symposiums. In the one dealing with marine biology in the Southeast, Harold J. Humm and Charles B. Metz of Florida State University discussed the 23 marine stations along the Atlantic and Gulf Coasts of the region. They pointed out that excellent facilities and abundant biological materials are available to investigators throughout the year. A symposium on biology teaching focused attention on the present problems in that field. Speakers were J.

Harvey Roberts of Louisiana State University, John A. Behnke of the AAAS, and Karl A. Stiles of Michigan State College. The annual address was delivered by Edgar Anderson, Director of the Missouri Botanic Garden. His topic was "*Rosa alba*, the white rose of the Renaissance."

The ASB Research Prize of \$100, offered annually by the Carolina Biological Supply Company for the outstanding paper at the meeting, was awarded to William J. Brett of Millsaps College for his paper, "Persistent diurnal rhythmicity in *Drosophila* emergence." Honorable mention went to James H. Gregg, Alice L. Hackney, and Jerome O. Knivaneck of the University of Florida for their paper, "Nitrogen metabolism of whole and fragments of the slime mold, *Dictyostelium discoideum*, during growth and morphogenesis."

W. B. Baker of Emory University was presented the \$100 merit award, given each year to a member

of ASB by the Southern Scientific Company for outstanding contributions to the biological sciences, especially in service to young people through teaching.

Benjamin I. Johns of Alexandria, Va., was announced as recipient of the \$200 Phipps and Bird Research Fellowship for study at the Mountain Lake Biological Station.

The Association will meet with the American Institute of Biological Sciences in Gainesville, Fla., in Sept. 1954. Members voted to hold the next annual meeting at The Citadel in Charleston, S. C., Apr. 21-23, 1955.

Officers elected were pres., H. R. Trotter, University of North Carolina; pres.-elect, Alvin V. Beatty, Emory University; and v. pres., Fred T. Wolf, Vanderbilt University. Ruth M. Jones of Winthrop College and Harold J. Humm of Florida State University were elected to 3-year terms on the Executive Committee. Mary Esther Gauden of Oak Ridge National Laboratory will continue as secretary, J. Paul Reynolds of Florida State University as treasurer, and Victor A. Greulich of University of North Carolina as editor of the *ASB Bulletin*.

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Science News

With the award of two grants for registration of chemists and engineers in the United States, the National Science Foundation has launched the first phase of its program to establish a **National Register of Scientific and Technical Personnel**. Registration of chemists will be undertaken by the American Chemical Society, and during the next few weeks, the Society will send out questionnaires to an initial list of 50,000 chemists. Information will be kept current by the Society. Duplicate copies of the information will be made available to the Foundation for statistical studies and to assist in the mobilization of scientists in time of war. The information will not normally be used for employment or placement of scientists.

The registration of engineers will be conducted by the Engineers Joint Council. At present an attempt will be made to obtain information, not on all of the estimated 500,000 engineers in the United States, but on about 20,000 leaders in engineering fields. This selection will be based on *Who's Who in Engineering* and other sources. Experience during World War II indicated that such a "finder's list" of leaders may provide an effective means for locating engineers for special projects. The engineers list will be maintained on a current basis by the Engineers Joint Council.

At the present time 10 professional societies or groups are collecting registration information for the National Register of Scientific and Technical Personnel. The list and the estimated number of registrants to be gathered by each follows: American Institute of Biological Sciences, 40,000; Federation of American Societies for Experimental Biology, 10,000; American

Veterinary Medical Association, 14,000; American Geological Institute, 18,000; American Psychological Association, 11,000; American Institute of Physics, 15,000; American Meteorological Society, 10,000; American Mathematical Society, 12,000; American Chemical Society, 65,000; Engineers Joint Council, 20,000.

The decentralized nature of the Register has led to duplication of names in some cases, and individuals who are competent in more than one field may receive questionnaires from two or more societies. Elimination of duplication will be possible after the Register is in operation; then only one copy of the periodic follow-up questionnaire will be mailed to each registrant.

Estimates of the **geologic age of the Australopithecinae**, the so-called "man-apes" of South Africa, have varied from Upper Pleistocene to Upper or even Middle Pliocene. Kenneth P. Oakley [*Am. J. Phys. Anthropol.* n.s. 12, 9 (1954)] has recently reassessed all lines of available evidence and concluded that the known species range from the middle of the Kageran (Upper Villafranchian) into the Lower Kamasian stage; that none is certainly older than the earliest recognized pebble-tools (found, for example, in early Kageran gravels in Uganda); and that some were undoubtedly contemporary with toolmakers in South Africa. The known specimens fall into an older group (Makapan, Taung, and Sterkfontein) and a younger group (Swartkans and Kromdraai). The older specimens are thus broadly contemporary with the large-brained hominids of the *Pithecanthropus modjokertensis* group recovered from the Djetis Beds of Upper Villafranchian age in Java. Oakley concludes that the Australopithecines were not the pebble-tool makers; rather, they lived contemporaneously with the more advanced hominids that made them. Nor does the evidence support claims that the Australopithecines made any sort of tools, although they may have used ready-to-hand tools and weapons or may have been fire-users. Thus it appears that the earliest known Australopithecines are not old enough geologically to have been ancestors of the first tool-making hominids. If Oakley's interpretation is correct, the claims of some workers that the Australopithecines were the direct ancestors of man will have to be abandoned. At most, they would constitute a line collateral to the immediate forerunners of the genus *Homo*.—W.L.S.

Laying of the first **transatlantic submarine telephone cable** is scheduled to begin fairly soon. The cable, 2000 nautical miles long, will run between Oban in the West of Scotland and Newfoundland, where it will connect with another submarine cable to Nova Scotia. From there the line will go overland to the U.S. border.

In the existing system of transatlantic telephone communication, a radio system dating back to 1927, there are 12 circuits between Britain and the U.S., and 2 more between Britain and Canada. Because of its dependence on good radio conditions, this is estimated to be no more than 60 percent efficient. Under the new

system, there will be 29 telephone circuits to the U.S. and 6 to Canada—also some additional ones to Canada for telegraph purposes. Since there will be no atmospheric interference, 100 percent efficiency is expected.

That there is an urgent need for improved and enlarged facilities is shown by the increase in the number of transatlantic calls: in 1927, 2000; in 1951, approximately 100,000. The project probably will take about 3 yr to complete, and will cost \$35 million—50 percent to be borne by the U.S., 41 percent by Britain, and 9 percent by Canada.

The National Geographic Society and California Institute of Technology have announced that the first section of an **atlas of the universe**, 6 yr in the making at Palomar Observatory, will be published in 1955. To be issued in three of four annual sections, the atlas fulfills a task assumed by the National Geographic Society-Palomar Sky Survey in 1949. By its very nature, the atlas will be one of the most expensive ever produced. Its price, covering only publication costs, is expected to be between \$1600 and \$2000 per copy, depending upon the number of advance subscribers. Necessarily these will constitute a limited list—perhaps not more than 100 universities, observatories, and other institutions.

The work will include a total of 1758 photographs, each 14 by 14 in., covering all the sky visible from Palomar Mountain—about three-quarters of the entire sky. Negative prints on double-weight photographic paper will be precise copies of the original glass plates exposed with the Schmidt telescope. This instrument penetrates the heavens to a depth of more than 500 million light-years, or 3×10^{21} mi. Each print covers an area about as large as the bowl of the Big Dipper and slightly overlaps adjoining areas. Also, each area is photographed twice, on blue-sensitive and red-sensitive plates in immediate succession. Only one printing of the atlas is planned. It will be confined to the number of copies for which orders have been received by the Mount Wilson and Palomar Observatories, Pasadena, Calif., *before Oct. 1, 1954*.

A new **electronic machine to aid in cancer research** has been designed by two Swedish scientists, Holger Hydén and Sven Bourghardt, both professors at the Medical College of Gothenburg. With it, structures and internal changes of cells can be studied with greater precision than before. Thin shavings of cellular growth consisting of up to 200 cells are divided into 12,000 "control points," the machine measuring and tabulating every point. The entire process takes but 4 min. Grants from the Swedish Government and the Rockefeller Foundation have paid for the apparatus.

Yaws, dread tropical disease that until 1950 affected approximately one-third of the rural population of Haiti, reaching 50 percent of the inhabitants in some areas, has been all but wiped out by the Haitian Government in cooperation with the Pan American Sanitary Bureau, Regional Office of the World Health Organization, and with substantial assistance from the

United Nations Childrens Fund. This establishes a **landmark in public health** annals. In 1949 the Haitian Government requested international help to combat yaws, a major public health problem at that time. The disease was then estimated to affect nearly 1 million Haitians, out of a population of a little more than 3 million, incapacitating many persons and causing untold suffering.

One injection of penicillin is sufficient to cure the disease or to render it noncontagious. In 1950 crews of Haitians were recruited into teams to cover the whole Republic, district by district and community by community, with house-to-house visits. By the end of 1953, 2,623,141 persons had been treated at a cost of 30 ct per capita. Observations in the southern region of Haiti, where the campaign was first initiated, show that less than 1 percent of the population now has contagious yaws. In the northern region, where the project was conducted entirely by means of the house-to-house campaign, yaws incidence is less than one-third of 1 percent. The disease has been practically eradicated in a once highly infected zone, demonstrating the practicality of the total eradication in other tropical areas of the world. Many millions still suffer from this disease in Africa, in Asia, and in the islands of the western Pacific. Because of the close etiological resemblance of syphilis to yaws, the experience in Haiti also points the way to the possibility of eradicating that disease.

The Cooperative Research Foundation is establishing 11 **international science centers** in the United States to serve visiting scientists and engineers, and to stimulate direct working relationships between U.S. scientists and their colleagues in other parts of the world. The first of these centers was opened recently in San Francisco, and there will soon be a second in New York City. Scientists visiting the San Francisco Bay region are invited to call at the Center, Morrison Planetarium, California Academy of Sciences, Golden Gate Park.

The Armed Forces Institute of Pathology will collaborate with a group of Japanese pathologists headed by Toru Miyaji, professor of pathology at the Osaka University Medical School, in preparing a **Japanese textbook on histopathology**. The AFIP will contribute approximately 300 standard photomicrographs of typical pathologic states of various diseases.

Clara Raven, a lieutenant colonel and the Army's highest ranking woman physician on active duty, will select the illustrative material for the book and will write the legends for the prints as well as a part of the text. She was associated with the National Japanese Pathological Society and Japanese pathologists during her tour of duty in the Far East, 1951–53. Dr. Miyaji recently spent 3 yr on a fellowship at the University of Chicago and at the National Institutes of Health in Bethesda.

The 1954 expedition of the American Geographical Society—supported by the Office of Naval Research,

the Army, and the Air Force—has left for Lemon Creek Glacier in Alaska to study relations between **weather and the movement of glaciers**. Seven scientists, led by Edward R. LaChapelle of the U.S. Forest Service and Richard C. Hubley from the University of Washington, will study the glacier's present state and past history in an effort to predict whether or not this and other glaciers in the area will recede or advance in the future. Until last summer, no observations had been made of Lemon Creek, which is now receding as are all but a few of the world's glaciers.

A 3-yr study of **land and resources use in the American tropics** will be undertaken by the Instituto Mexicano de Recursos Naturales Renovables, A.C., in cooperation with the Charles Lathrop Pack Forestry Foundation of Washington, D.C. It will be headed by the director of the Instituto, Enrique Beltrán. The purpose of the study is to determine the effect of generations of human use on the natural resources, with the hope of learning what patterns of use may lead to better methods of soil and resource conservation.

The Peninsula of Yucatan, in Mexico, has been selected as the site for the work, which will be conducted by teams of Mexican and North American experts chosen from many disciplines in order to secure an integrated viewpoint. So far as is known, this is the first study of its kind ever made in the American tropics, and the techniques that are developed will in themselves constitute a research project. The Instituto and the Foundation officials hope that both in methods and results the study may serve as a guide for future population-resource projects in the tropics.

Scientists in the News

Edgar Anderson, formerly assistant director of the Missouri Botanical Garden, St. Louis, has been appointed director to succeed **George T. Moore**, now emeritus director, who held the position from 1912 until February 1953. Dr. Anderson will continue as professor of botany at Washington University. **Hugh Carson Cutler**, who has been serving as curator of the Garden's Museum of Economic Plants, will become assistant director.

Lester R. Aronson, chairman of the department of animal behavior of the American Museum of Natural History, has recently returned from Nigeria, where he spent a year studying the West African mouth-breeding fish in its natural environment. His trip was sponsored by the Fulbright exchange program.

Woolford B. Baker, professor of biology at Emory University, recently received a \$100 meritorious teaching award from the Association of Southeastern Biologists.

Robert W. Berliner, has been appointed associate director in charge of research at the National Heart Institute, National Institutes of Health, U.S. Department of Health, Education, and Welfare. Dr. Berliner

will occupy the position formerly held by **James A. Shannon**, who now is associate director of NIH.

Charles C. Bramble, former director of research at the Naval Proving Ground, Dahlgren, Va., has been appointed to the technical staff of the Research and Development Division, Norden Laboratories Corp., White Plains, N.Y., and Milford, Conn.

Vincent du Vigneaud, chairman of the Department of Biochemistry in the Cornell University Medical College, recently presented the 1954 Remsen memorial lecture of the American Chemical Society's Maryland Section in Remsen Hall, on the Homewood campus of The Johns Hopkins University.

Harold Elishewitz, assistant professor of parasitology at the Chicago Medical School, was recently elected a fellow of the Société Pathologie Exotique, Paris.

William Esty has been appointed research administrator of the Dickinson Research Memorial of the Planned Parenthood Federation of America. He succeeds **Paul S. Henshaw**.

Clifford C. Furnas, director of the Cornell Aeronautical Laboratory, is the new Chancellor of the University of Buffalo, effective Sept. 1. Dr. Furnas replaces T. R. McConnell, who on Feb. 1. announced that he would resign to conduct a survey of higher education in California and to become a professor of higher education at the University of California.

Marion A. Johnson, chairman of the Botany Department in the College of Arts and Sciences, Rutgers University, has been named dean of the Graduate School, effective July 1. He succeeds the late **Walter C. Russell**. Dr. Johnson will be relieved of all undergraduate teaching and administrative chores within the Department of Botany but will continue graduate teaching and research.

Thomas F. Keliher, clinical associate professor of medicine at the Georgetown University Medical Center, has received the Bene Merenti medal, the university's annual award of merit.

Arnold J. Kremen, associate professor of surgery at the University of Minnesota, has been appointed chief of the surgical service in the Francis Delafield Cancer Hospital in New York and professor of surgery in the Columbia University College of Physicians and Surgeons, effective July 1. He also will serve as attending surgeon at Presbyterian Hospital in New York City; both the Delafield and Presbyterian hospitals are units of the Columbia-Presbyterian Medical Center.

Ralph A. Lamm has been appointed technical director of the Naval Ordnance Laboratory, Corona, Calif., succeeding **R. D. Huntoon**, who is now associate director for physics at the National Bureau of Standards in Washington. Other promotions at NOL-Corona in-

clude the designation of four division chiefs: **H. K. Skramstad**, missile systems division; **F. S. Atchison**, physical science division; **H. A. Thomas**, fuse division; and **G. R. Sams**, missile evaluation division.

N. F. Mott, Henry Overton Wills professor of physics and director of the Henry Herbert Wills Physical Laboratories at Bristol University in England, has succeeded Sir Lawrence Bragg as Cavendish professor of experimental physics at Cambridge. Sir Lawrence is now director of the Royal Institution.

Nine American engineers have been selected to work in India during the next 2 yr under a Foreign Operations Administration contract between the University of Wisconsin and the governments of the United States and India. The men and their destinations are as follows, with the first five named coming from the University of Wisconsin: **James R. Villemonte**, civil engineering, hydraulic engineering at Bengal Engineering College of Sibpur, West Bengal; **Gerard A. Rohlich**, civil engineering, municipal engineering at Roorkee University, Roorkee; **R. R. Benedict**, electrical engineering, Bengal Engineering College; **Vincent C. Rideout**, electrical engineering, communications engineering at the Indian Institute of Science at Bangalore, Mysore; **Gerald Pickett**, mechanics, Bengal Engineering College; **John C. Georgian**, mechanical engineering, Washington University, Bengal Engineering College; **Thomas L. Hansen**, architecture and city planning, University of Colorado, Bengal Engineering College; **Clarence H. Kent**, mechanical engineering, City College of New York, Indian Institute of Science; **Harold L. Walker**, mining and metallurgical engineering, formerly on faculty at the University of Illinois and now a consulting engineer, Indian Institute of Science.

This group is leaving the country during the current month; seven selections for the second year of the project will be announced later.

George Stafford Whitby, director of rubber research at the University of Akron, is to receive the 1954 Charles Goodyear Medal next September at the 126th national meeting of the American Chemical Society in New York.

Education

In response to a growing demand for increased part-time engineering training, a full undergraduate course of study leading to a B.S. degree in industrial and management engineering will be given at night at **Columbia University School of Engineering**, starting with the 1954-55 academic year. While the School of Engineering has been offering graduate work at night for several years, the industrial and management engineering curriculum is the first such program to be offered on an undergraduate level.

The long-range development of **Cornell University** will progress this year through a \$22,000,000 building program. The largest in the institution's history, the program involves 10 building projects and affects the

campus and Cornell's chief off-campus centers in Buffalo, Geneva, and New York. Both the privately endowed divisions and the state-supported contract units are included.

The biggest of the Ithaca projects will provide a modern laboratory-teaching center for the Veterinary College. Financed by legislative appropriation, the \$5,500,000 installation will consist of 19 new buildings, scheduled for completion in 1956. Six dormitories will also be built at a cost of \$4,200,000.

At the Cornell Aeronautical Laboratory in Buffalo, work will begin soon on a \$1,750,000 addition that will virtually double the laboratory-owned space.

At the Cornell Medical College in New York, a \$2,250,000 student residence is nearing completion.

In Geneva, plans are under way for a \$1,800,000 food science laboratory for the Cornell-operated State Agricultural Experiment Station.

The **Institute for Numerical Analysis**, operated on the Los Angeles campus of the University of California for the past 6 yr by the U.S. Bureau of Standards, is being transferred to the University. All facilities of the Institute, including SWAC, the half-million dollar "electronic brain," will be lent to the University. The research staff will join the University's staff. The Institute will be administered by U.C.L.A.'s mathematics department under the direction of Magnus R. Hestenes. It will continue to receive governmental support through contracts with the Office of Naval Research and perhaps other agencies.

The mission of the organization is pertinent fundamental research in mathematics and science, including development and application of high-speed computers for such research. The Institute was established on the Los Angeles campus in 1947. Since that time it has been an aid to research and industry in the West, handling urgent computational problems in such diverse fields as aircraft design, weather, nuclear physics, and gunfire control.

The University of Pennsylvania's new **Institute of Neurological Sciences** is to be administered by a staff of six members of the School of Medicine. Louis B. Flexner, professor and chairman of the Department of Anatomy, has been named director, and his associates include John R. Brobeck, professor and chairman of the Department of Physiology; William W. Chambers, associate professor of anatomy; James M. Sprague, associate professor of anatomy; Eliot R. Stellar, associate professor of physiological psychology, and Per-Olof Therman, assistant professor of neurophysiology in psychiatry. Consulting members of the Institute include a group of 17 physicians who are members of the faculty of the medical school and college.

An educational and research laboratory in oil hydraulics has been established at Illinois Institute of Technology. It offers a broad educational program ranging from intensive short courses (the first of these will be given this summer) to graduate-level

research. Equipment for the laboratory has been donated by companies in the hydraulics field.

Some 300 acres of the Valhalla, N.Y., property of the John A. Hartford Foundation, has been leased to the Yale University School of Forestry for a new program of research and education in forest biology. The Foundation, founded by the late John A. Hartford who was President of the Great Atlantic & Pacific Tea Co., will also support the project with annual grants to Yale for the next 15 yr. The grants will be used to add nine new scientists to the forestry faculty, and to provide for research and training of graduate students. Headquarters for the research section will be at Valhalla, while the instructional program will be in New Haven, where the School of Forestry will take over additional quarters in Marsh Hall.

Grants and Fellowships

Applications for research awards to be made during the coming year by the American Heart Association and its affiliates throughout the country are now being accepted. Applications for research fellowships and established investigatorships may be filed until *Sept. 15*, and applications for research grants-in-aid will be accepted until *Dec. 1*. Information and forms may be obtained from the Medical Director, American Heart Association, 44 E. 23rd St., New York 10.

The research awards will be available for studies to be conducted during the year beginning July 1, 1955. Funds to support the research program are provided by the 1954 Heart Fund campaign conducted by the Heart Association and its affiliated associations and chapters. Established investigatorships, awarded for one to five-year periods subject to annual review, range from \$6000 to \$9000. They are available to scientists of proved ability who are engaged in a research career. Research fellowships, awarded for one or two-year periods, range from \$3500 to \$5500 and enable younger scientists to train for research careers under experienced supervision. Grants-in-aid are awarded in varying amounts, usually not exceeding \$10,000, for periods of one to three years, to experienced scientists working in nonprofit institutions on specified programs of research.

The Arthritis and Rheumatism Foundation, New York, has awarded 20 basic research fellowships totaling \$109,400 and representing a 17-percent increase over the previous year's allocations. The awards include, for the first time, two 5-yr senior fellowships.

Five-year senior fellowships

W. E. Reynolds, Harvard University Medical School. Measurement and prediction of the clinical course of rheumatoid arthritis.

M. Ziff, New York University College of Medicine. Changes in connective tissues in the rheumatic diseases.

Fellowship awards for 1954

R. H. Abeles, Dept. of Biochemistry, University of Colorado School of Medicine. Isotope effects in biological oxidation.

V. H. Auerbach, Biochemistry Dept., Harvard University Medical School. Regulation of amino-acid metabolism by adrenal cortical hormones.

T. A. Good, Lockhart Memorial Laboratory, University of

Utah. Effects of anti-arthritis agents on production and blood levels of pituitary-adrenal hormones.

H. J. Gribetz, New York University College of Medicine. Proteolysis of collagen in abnormal connective tissue; effect of streptokinase and streptodornase in arthritic joints.

G. D. Pappas, Dept. of Pathology, Yale University School of Medicine. *In vitro* effect of various biological compounds on collagen morphogenesis.

A. I. Snyder, Dept. of Medicine, College of Physicians and Surgeons, Columbia University. Effect of sympathetic denervation on inflammation and repair.

Renewals of 1953 fellowships

B. S. Blumberg, College of Physicians and Surgeons, Columbia University. Application of physical measurements to polydispersity and end groups of hyaluronic acid and chondroitin sulfuric acid.

C. W. Denko, Dept. of Medicine, University of Chicago. Connective tissue, cartilage and bone; metabolism and biochemistry, radioactive tracers; relation of diseased tissue to normal tissue metabolism.

T. G. Kantor, Pathology and Chemistry Laboratory, New York University—Bellevue Medical Center. Separation of acellular elements of tissues in various inflammatory states, characterization and possible modification.

D. Platt, Biochemistry Dept., University of Alabama Medical Center. Occurrence of mucopolysaccharides and glycoproteins in synovial fluid and their role in arthritis.

W. C. Robbins, Dept. of Medicine, New York Hospital—Cornell Medical Center. Experimental studies in rheumatic fever.

R. Rowen, Dept. of Microbiology, New York University College of Medicine. Nature and significance of inhibitory substance produced in mice in response to injection of streptolysin O.

A. Volkman, Western Reserve University School of Medicine. Factors in production of mucopolysaccharide deposits of Kimmelstiel-Wilson kidney, and diabetic retinopathy.

V. W. Westermeyer, Endocrine Laboratories, New England Center Hospital. Chemistry, physiology, and clinical effects of the growth hormone.

A. S. J. Dixon, Massachusetts General Hospital. Red cell mass in rheumatoid arthritis employing chromium 50 red cell tagging technique to measure cell mass and plasma simultaneously.

Renewals of 1952 fellowships

C. C. Coolbaugh, Dept. of Anatomy, Wayne University College of Medicine. Effects of reduced blood supply on bone.

J. W. Hahn, Rheumatic Fever Institute, Northwestern University. Physical and chemical characteristics of type-specific M-antigen of group A streptococcus.

C. J. Imig, Dept. of Physiology, College of Medicine, University of Iowa. Circulation in skeletal muscle from experimental and clinical arthritic subjects.

The Glycerine Producers' Association, 295 Madison Ave., New York 17, has announced that 1954 Glycerine Research award nominations for outstanding research involving glycerine are now being sought. These awards are made annually to recognize and encourage research leading to new and improved applications of glycerine or glycerine derivatives to products or processes. First award is a plaque and \$1000; second, a certificate and \$300; and third, a certificate and \$200.

The work may concern itself with the chemical, physical, or physiological properties of glycerine, or with properties of glycerine-containing or glycerine-derived materials. It may deal with applications that of themselves are currently or potentially of value to industry or the general public, or with scientific principles or procedures likely to stimulate future applications. Originality in extending the application of glycerine into new fields of usefulness will receive special attention.

First consideration will be given to work brought to a successful conclusion or clear-cut point of accomplishment during the current year, regardless of the

date the work was initiated. Work carried on in previous years will be eligible if its significance has been confirmed by commercial application in 1954. The awards are open to any individual or research team in the United States and Canada that is not connected with member companies of the Glycerine Division, Association of American Soap & Glycerine Producers, Inc., on laboratories which they employ. *Nominations must be received by Nov. 1* and must be made on the official entry blank, which may be obtained from the Association.

The **Irwin Strasburger Memorial Medical Foundation** for medical research has been established in New York by members of the family and friends of Mr. Strasburger, a philanthropist who died last year. Initial grants totaling \$5000 have been made to Memorial Hospital, New York Hospital, Columbia University College of Physicians and Surgeons, and Columbia University Research Division of Goldwater Memorial Hospital. The purpose of the Foundation is to promote clinical investigation and research concerning leading causes of disability and death, particularly those pertaining to cancer, migraine, arteriosclerosis, and diseases of the digestive tract.

The **Monsanto Chemical Co.** program of financial aid to scientific education for the 1954-55 academic year will benefit 44 American colleges and universities. There are 13 graduate fellowships, 27 undergraduate scholarships, and 17 cash grants. The fellowships have an average value of \$3000, with the larger part of this amount going to the fellow; the scholarships are in amounts intended to cover tuition and are to be awarded by the administering schools on bases of both merit and need; and the grants may be used to finance research, equipment purchases, or other similar purposes.

These awards are one phase of Monsanto's over-all program of cooperation with scientific education. For instance, Monsanto's operating divisions support education through numerous grants for specific research, through faculty and student trainee programs, and by the donation of equipment and materials to schools.

The **National Science Foundation** will award individual grants to defray partial travel expenses for a limited number of scientists who will attend the **International Union of Pure and Applied Chemistry Symposia** on inorganic chemistry to be held in Muenster, Germany, Sept. 6-8, and on macromolecular chemistry to be held in Turin and Milan, Italy, Sept. 26-Oct. 2. Application blanks may be obtained from the National Science Foundation, Washington 25, D.C. *Completed forms must be submitted by July 15.*

The following scientific grants were awarded by the **Rockefeller Foundation** during the first quarter of 1954.

Karolinska Institut, Stockholm. T. Caspersson, Institute for Cell Research. Cellular studies at the molecular and electron microscopic level, 3 yr, \$30,000.

Wayne University. C. Djerassi, Department of Chemistry. Natural products of one subtribe of cacti, 3 yr, \$30,000.

University of London. J. T. Randall, King's College. Pur-

chase of electron microscope and biophysics research, 2 yr, \$24,000.

University of California, Berkeley. M. Calvin, Radiation Laboratory. Photosynthesis, 3 yr, \$18,500.

Bacteriological Institute of Chile, Santiago. Equipment and supplies for Animal Virus Laboratory, \$15,000.

Allahabad Agricultural Institute, India. Equipment, \$12,000. Medical Research Council of Great Britain. Fellowships in medical sciences, \$125,000.

National Institute of Cardiology, Mexico City. Support of laboratories of physiology and pharmacology, \$50,000.

University of Aix-Marseilles, France. G. Morin. Equipment for research in neurophysiology, 2 yr, \$30,000.

Health Insurance Plan of Greater New York. L. J. Reed. Study and report of recorded experience of the plan, \$20,500.

University of Puerto Rico. Books for School of Medicine library, \$25,000.

University of Oslo. C. Semb, Institute of Respiratory Physiology. Measurement of respiratory gaseous exchange; teaching of clinical physiology, 4 yr, \$32,000.

Uusimaa Field Demonstration and Teaching Area, Finland. Support of teaching staff, 3 yr, \$32,000.

University of Geneva. Institute of Human Genetics. Central register for recording hereditary diseases, 3 yr, \$10,000.

University College, Dublin. E. J. Conway, Process of accumulation and exchange of inorganic ions in cells and tissues, 3 yr, \$12,000.

Roscoe B. Jackson Memorial Laboratory. Survey of financial structure and support of symposium on relationships of genetics to normal and abnormal growth and behavior, \$10,000.

New York Botanical Garden. Purchase of recording spectrophotometer, \$8500.

Child Research Center of Michigan. Pilot study of the genetics of blood disorders in Africa, \$5200.

Tufts College. G. Schmidt. Nucleic acid chemistry, \$3000.

Woods Hole Oceanographic Institution. S. Turner. Meteorological research in the Hawaiian Islands, \$2500.

Pennsylvania State University. R. Pepinsky. Visit to European research centers, \$2000.

University of Michigan Hospital. D. C. Smith, Department of Pediatrics. Observation of methods of teaching maternal and child health in U.S., \$1400.

U.S. Public Health Service. B. D. Davis. Observation of new techniques in research in protein synthesis at the Pasteur Institute, Paris, \$1000.

Department of Health, Province of Saskatchewan. A. Hoffer, director of psychiatric research. Visit to psychiatric centers in Great Britain, Scandinavia, and other parts of Europe, \$2700.

McGill University. R. Chittick, School for Graduate Nurses. Visit to university nursing schools in U.S., \$1000.

National Health Service of Denmark. M. Foget, director of nursing education. Visit to university schools of nursing in U.S. and Canada, \$3150.

University of Copenhagen. M. G. Kolmark. Visit to U.S. centers of research in genetics, \$500.

University of Turku, Finland. E. Mustakallio, Faculty of Medicine. Visit to medical centers in U.S. and Canada, \$2650.

University of Helsinki. Institute of Sero-Bacteriology. Purchase of library equipment, \$1500.

Rheinische Friedrich-Wilhelms-Universität, Bonn. E. Hagen, Institute of Anatomy. Research, \$6150.

University of Pavia, Italy. V. Zambotti, Institute of Biological Chemistry. Equipment for biochemical research, \$5000.

University of Pavia. Institute of Comparative Anatomy. Equipment for research on spectroscopic biology, \$3500.

University of Palermo. G. Reverberi, Institute of Zoology. Equipment for research in cytology and embryology, \$5000.

University of Rome. Laboratories of Comparative Anatomy and of Embryology and Histology. Experimental biology, \$4000.

University of Pisa. M. Benazzi, Institute of Zoology and Comparative Anatomy. Genetics and embryology, \$3500.

University of Bologna. P. Pasquini, Institute of Comparative Anatomy. Embryology, \$2500.

University of Bologna. L. Raunich, Institute of Comparative Anatomy. Visit to Switzerland for studies in steroid chemistry, \$700.

University of Milan. C. Barigozzi, Institute of Genetics. Equipment for research in genetics, \$700.

University of Padua. G. Marcuzzi, Institute of Zoology and Comparative Anatomy. Visit to England, \$570.

University of Amsterdam. C. H. MacGillavry, Laboratory of General and Inorganic Chemistry. Equipment for research in x-ray crystallography, \$1500.

Karolinska Institut, Stockholm. E. K. H. Kugelberg, Dept. of Clinical Neurophysiology. Visit to neurological and neurophysiological centers in U.S. and Canada, \$1950.

University of Geneva. E. Kellenberger, Institute of Physics. Visit to European countries, \$550.

University of London. D. M. MacKay, King's College. Electrophysiology, \$8000.

University of London. H. J. Eysenck, Institute of Psychiatry. Visit to psychology research centers in U.S. and Canada, \$2700.

University of Glasgow. M. B. Swann, Dept. of Psychological Medicine. Visit to psychiatric social work centers in U.S. and Canada, \$2400.

University of London. J. R. Ellis, London Hospital Medical College. Visit to medical schools in U.S., \$2150.

Royal Technical College, Glasgow. A. S. T. Thomson. Visit to sanitary engineering centers in U.S., \$1650.

London School of Economics and Political Science. H. T. Himmelweit. Visit to social and clinical psychology centers in U.S., \$1150.

University College of North Wales. F. W. R. Brambell. Visit to U.S. and participation in Cold Spring Harbor Symposium, \$1150.

University of Liverpool. Visit of foreign delegates to symposium in Liverpool, \$1500.

University of Oxford. F. P. Glees, Laboratory of Physiology. Visit to neurophysiological research laboratories in U.S., \$800.

University of Leeds. I. Manton, Dept. of Botany. Visit to U.S. to study uses of electron microscopy, \$700.

University of Aberdeen. J. Walker, Dept. of Obstetrics. Visit to laboratories of obstetric medicine research in U.S., \$400.

Nilratan Sircar Medical College, Calcutta. A. K. Basu. Equipment for thoracic surgery, \$4600.

Department of Health, Accra, West Africa. E. Akwei. Visit to several countries to observe medical and health services, \$2850.

Kelo University, Tokyo. T. Miura, Medical School. Visit to observe teaching of psychiatry in U.S. and Canada, \$3850.

Hacienda San Ignacio, Cochabamba, Bolivia. L. Lujan. Visit to Colombian Agricultural Program for potato research, \$1485.

Institute of Agronomy, Campinas, Brazil. M. Itto. Visit to U.S. centers of research in bean breeding, \$890.

University of Chile. J. Allamand, School of Medicine. Visit to medical centers in U.S. and Canada, \$3050.

University of Costa Rica. Equipment for School of Agriculture, \$10,000.

University of Mexico. J. Laguna, Medical School. Visit to medical centers in U.S. and Canada, \$1450.

University of Guanajuato, León, Mexico. F. G. Guerra, Dept. of Thoracic Surgery. Visit to medical centers in U.S. and Canada, \$1500.

University of Guadalajara, Mexico. Equipment for Dept. of Biochemistry, \$10,000.

Mexican Agricultural Program. Exchange of seeds and information; travel expenses for visiting scientists, \$5000.

Ministry of Agriculture, Peru. H. P. Smith, National Inst. of Animal Biology. Visit to U.S. centers of research on animal diseases, \$2450.

Institute of Biological Research, Montevideo. *Drosophila* genetics and histochemistry, \$800.

Institute of Biological Research, Montevideo. A. V. Ferreira. Visit to U.S. for meeting of American Association of Anatomists, \$600.

Meetings and Elections

The **9th Annual Calorimetry Conference** is scheduled to meet at the General Electric Research Laboratory, Schenectady, N.Y., Sept. 17-18. As in the past, this meeting will serve to bring together scientists—chemists, metallurgists, physicists, and others—who utilize the various methods and techniques of calorimetry. The purpose of the conference, as first founded and organized by the late Hugh M. Huffman, is to promote better calorimetry by informal discussion of mutual problems, by an exchange of ideas, and by presentation of new experimental techniques. The conference will be devoted in part to such topics as: very low temperature calorimetry; liquid helium calorimetry; high and low temperature adiabatic calorimetry; meas-

urement of stored energy in solids and related topics; high precision bomb calorimetry; and measurement of heats of solutions and heats of precipitation, both for liquid-solid and solid-solid transformation. In addition, the conference will concern itself with standard calorimetric samples, symbols and terminology, promotion of better instrumentation, and publication policies pertinent to thermodynamic data. The various topics may be presented as individual reports, as round table discussions, or as committee reports.

The G-E Research Laboratory, Engineering Laboratory, and Turbine Laboratory will be open to members of the conference for visits.

Chairman of the 1954 meeting is E. J. Prosen of the National Bureau of Standards, and the program chairman is Warren DeSorbo of the G-E Research Laboratory. Members of the Board of Directors, in addition to Prosen and DeSorbo, are E. F. Westrum, Jr., J. W. Stout, Guy Waddington, and D. R. Stull.

Program plans for the 45th annual meeting of the **American Home Economics Association** scheduled for July 6-9 in San Francisco are now complete. Theme of the meeting is "Today's challenge to the home economist." For information write to the Association at 1600 20th St., NW, Washington 9, D.C.

The **American Institute of Chemists** has elected the following officers: pres., Donald B. Keyes, Arthur D. Little Co., New York; pres.-elect, Ray P. Dinsmore, Goodyear Tire & Rubber Co., Akron, Ohio; sec., Lloyd Van Doren, Watson, Leavenworth, Kelton & Taggart, New York; treas., Frederick A. Hessel, General Aniline & Film Corp., New York.

The **Industrial Research Institute** has elected the following officers: pres., Howard G. Vesper, Standard Oil Co. of California; v. pres., E. D. Reeves, Standard Oil Development Co., New York.

The UNESCO Advisory Committee on Arid Zone Research officially sponsors an arid lands conference in even-numbered years and encourages the development of sessions under other auspices in odd-numbered years. The 1954 UNESCO Conference will be held in New Delhi, India, in October and will consider solar and wind energy problems. The Committee on Desert and Arid Zone Research of the Southwestern and Rocky Mountain Division of the AAAS, through its chairman, Peter Duisberg, suggested an **international arid lands symposium and conference** to be held in the Southwest in 1955. The suggestion and the tentative outline were considered by the UNESCO Advisory Committee at its Paris meeting, May 4-7. The UNESCO group agreed to cooperate, scheduled a committee meeting for the same time and place—tentatively, Albuquerque and Socorro, N.M., Apr. 27-May 2, 1955—and recommended a subsidy from UNESCO to assist in bringing foreign delegates to the meeting. The AAAS Board of Directors recently approved official sponsorship of the proposed symposium and conference and authorized the establishment of a planning committee.

The Southwestern and Rocky Mountain Division, host for the meetings, has set up a committee to assist the national committee that has worked out tentative plans and ideas for the symposium. The Division will hold its regular meeting in Santa Fe, Apr. 24-26, 1955. The international symposium on arid land problems will be scheduled for Apr. 27-28 in Albuquerque, with the University of New Mexico serving as host in behalf of the Division. The symposium will be open to all interested persons (an estimated 500 to 1000 attendance) and will include among its speakers and discussants distinguished workers in the arid zone fields from the U.S. and abroad. The papers and the discussions will probably be published in book form either by the AAAS or by UNESCO.

Following the symposium the official participants, a group of 30 to 50 including the nine members of the UNESCO Advisory Committee, will spend several days in a conference as guests of the New Mexico Institute of Mining and Technology at Socorro.

The Executive Committee of the Division has suggested a program for the symposium composed of four parts, each a half day long, covering (i) Anthropology and Archaeology; (ii) Biology and Ecology; (iii) Meteorology and Climatology; and (iv) Geology, Hydrology, and Soils. Suggestions for the Symposium and Conference will be welcome and should be transmitted immediately to Dr. Gilbert F. White, Haverford College, Haverford, Pa.

The 6th International Astrophysical Symposium organized by the Institut d'Astrophysique of Liège, Belgium, will take place July 15-17 under the chairmanship of Otto Struve. The subject this year is "Solid particles in astronomical objects."

The 2nd annual meeting of the Inter-Society Cytology Council will be held in Boston, Nov. 12-13. Those having material to present are invited to submit three copies of an informative abstract of not more than 200 words to Dr. John B. Graham, 32 Fruit St., Boston, Mass., before July 15. Authors will be notified of acceptance by Sept. 30. Abstracts of all papers accepted will be published in the official program. Papers will be limited to 15 min. They will be discussed in related groups rather than individually, and a maximum of eight papers will be presented at each session.

The diagnostic accuracy in cancer of the cervix and the lung is so well established that further verification at this meeting is not indicated. Particular attention is suggested for the endometrium and lesions of the gastrointestinal and urinary tract."

The scientific program will comprise four consecutive sessions: (i) "Special techniques, including cytochemistry, ultraviolet and electron microscopy" and "General cytology," chairman, James W. Reagan. (ii) "Prognosis in the treatment of cancer by cytologic and histologic techniques," chairman, Arthur T. Hertig; (iii) "New developments in cytology," chairman, Emerson Day; (iv) "Round table discussion of the carcinoma *in-situ* lesion," chairman, John R. McDonald.

Registration will be open to everyone interested in cytology. Medical students, internes, and residents will be admitted without charge. For additional information write to the Secretary-Treasurer, Inter-Society Cytology Council, 634 North Grand Blvd., St. Louis, Mo.

The Michigan Academy of Science, Arts, and Letters has elected these officers for 1954-55: pres., Frederick K. Sparrow, Jr., University of Michigan; v. pres., Willard E. Parsons, Wayne University; sec., Pierre Dansereau, University of Michigan; treas., Volney H. Jones, University of Michigan.

The Mineralogical Society of Japan has been established with Zyunpei Harada of Hokkaido University, Sapporo, as president. Two series of publications are the organs of the Society: *Kobutsugaku Zasshi* (Journal of the Mineralogical Society of Japan) and *Mineralogical Journal*. The Society earnestly desires to cooperate with colleagues the world over for the advancement of mineralogy.

The annual meeting of the North Carolina Academy of Science was held at East Carolina College, Greenville, May 7-8. Some 300 persons participated; 77 papers were presented. The Collegiate Academy had a program of 11 papers; in addition there was a high school exhibit and essay contests.

The presidential address was delivered by D. B. Anderson of North Carolina State College. New officers are as follows: pres., W. O. Puckett, Davidson College; v. pres., A. D. Shaftesbury, Woman's College, University of North Carolina.

The recent British Institute of Physics 4-day conference on the "Physics of particle size analysis" was attended by approximately 300 people, including several from overseas. The meeting was opened by Sir Geoffrey Taylor. The many original papers presented reflected the considerable and growing importance of the subject in industry and in its applications to medicine. Recent developments in automatized methods of counting and sizing particles, including blood counts, were of special interest at the conference, and these discussions were supplemented by demonstrations of several new machines.

Other aspects covered included the motion of particles in fluids and a comparison of sedimentation methods for particle-size analysis. Molecular phenomena encountered in the relative motion of fluid and fine particles—such as slip flow, surface diffusion, and electro-viscosity—also received consideration. Recent theoretical and experimental studies of the scattering and absorption of light by particles formed a valuable background in the study of photo-extinction and similar methods. Consideration was also given to the practical issues of particle shape factors and visual counting and sizing with a microscope. The conference concluded with a general discussion, including comparison of methods of size analysis and the adhesion of dust particles.

The papers presented at the conference and the discussion on them are being published by the Institute as a supplement to its *British Journal of Applied Physics*. Copies may be ordered through any bookseller or direct from the Institute of Physics, 47 Belgrave Square, London, S.W. 1.

Mount Desert Island Biological Laboratory, Salisbury Cove, Me., and New York University College of Medicine will hold an informal symposium on "Protoplasmic structure and cellular transport mechanisms" on Aug. 23-25 in Salisbury Cove. Homer W. Smith, president of the Laboratory will preside. The program will feature presentations by Hans Ussing of the Zoophysiological Laboratory, Department of Biological Isotope Research, University of Copenhagen, and Johannes Rhodin of the Department of Anatomy, Karolinska Institutet, Stockholm. Prof. Ussing will speak on cellular transport mechanisms, and Dr. Rhodin will speak on the electromicroscopy of the renal tubule. Protoplasmic structures and cellular transport mechanisms will be discussed by other participants. All visitors are invited to bring lantern slides and similar material for consideration.

The Laboratory will be happy to assist in securing reservations for scientists and their families who plan to attend. Correspondence should be addressed to the director, Dr. Warner F. Sheldon. Prof. Ussing and Dr. Rhodin will be in residence at Salisbury Cove from Aug. 1-31, and will be available, with other investigators, for informal conferences.

Officers of the **Society of Rheology** for 1954-55 are: pres., W. H. Markwood, Jr.; 1st v. pres., F. D. Dexter; 2nd v. pres., J. H. Dillon; sec.-treas, W. R. Willets.

The **7th World Health Assembly** has elected as president Joseph Nagbe Togba, Director of Public Health and Sanitation of Liberia. Vice-chairmen elected are Youssef Bauji, Lebanon; Sir Claude Corea, Ceylon; and Public Health Ambassador Felix Hurtado, Cuba. E. J. Aujaleu of France is chairman of the Committee on Program and Budget, responsible for the examination of the work of WHO in 1953 and for establishment of the program and budget for 1955. M. Jafar of Pakistan is chairman of the Committee on Administration, Finance and Legal matters.

Miscellaneous

An invitation to attend the **First International Instrument Congress and Exposition** at Philadelphia in September has been extended to scientists and engineers of 32 foreign countries by William A. Wildhack of the National Bureau of Standards and president of the Instrument Society of America. Special invitations prepared for distribution to foreign countries through their embassies have been printed in French, German, Portuguese, and Spanish. Members of the Society who desire to send individual invitations abroad may have copies for their use.

The **International Union for the Protection of Nature** is building up a "bank" of articles by specialists and technicians on one or another aspect of nature protection. These will be put at the disposal of any periodical that wishes to publish them. The articles will be given freely in each country to the first applicant to the Secretariat of the Union, 42 rue Montoyer, Brussels, Belgium. Articles available will be listed and described briefly in the IUPN Information Bulletin.

The New York Section of the American Chemical Society will accept contributions for a bust of **Josiah Willard Gibbs** that is to be placed in New York University's Hall of Fame. The memory of Willard Gibbs (1839-1903), Yale University professor of mathematical physics for 32 yr and one of the greatest of American scientists, was honored by New York University in 1950 by his election to the Hall of Fame. However, despite generous contributions by the National Academy of Sciences, the AAAS, the American Philosophical Society, the American Academy of Arts and Sciences, and private sources, \$5900 of additional funds will be necessary to have a bust created and installed. The endowment of the Hall does not allow for these expenses, which will total some \$8500. Ordinarily the funds are provided by the family, friends, or business associates of the honored person or by public subscription.

Results of 1953 Fungicide Tests, reprinted from a series of articles that appeared in *Agricultural Chemicals*, January through March, may be purchased in bound and covered form for \$1.00 per copy by sending orders with remittance to Dr. W. D. Mills, Department of Plant Pathology, Department of Agriculture, Cornell University, Ithaca, N.Y. Sponsored by the American Phytopathology Society, it is a continuation of the publication of results formerly provided through a Supplement of the *Plant Disease Reporter*, Plant Disease Survey, U.S. Department of Agriculture.

The underwriting of this project was accomplished through contributions from many commercial companies identified with the pesticide industry. The Temporary Advisory Committee on Collecting and Disseminating Data on New Fungicide Tests of the American Phytopathological Society arranged for the recent publication of data and the establishment of a program for annual publications of fungicide test results in the future. Dr. D. A. Roberts, Dept. of Plant Pathology, Cornell University, is in charge of this project during the current year.

The New York Office of UNESCO has announced the following **science and engineering vacancies** in the technical assistance program: anthropologists, Rio de Janeiro, Brazil; sociologist, Rio de Janeiro; professor in industrial engineering and administration, Indian Institute of Technology, Kharagpur, India; expert in electronics instruments, National Physical Laboratory, Delhi, India; expert in irrigation engineering, Roorkee University, U.P., India.