

Development Center, Ohio, the equipment rotates the earth's magnetic field electronically around the aircraft or missile. This eliminates the time-consuming checks by several men that have been necessary heretofore.

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A small exploratory mission of the International Atomic Energy Agency in Vienna has gone to Cairo to consult with the government of the United Arab Republic on the possible production of uranium phosphate ores and on the production of heavy water. The experts of the mission are B. V. Nevsky of the U.S.S.R. and Victor Thayer of the United States.

Grants, Fellowships, and Awards

General. The National Science Foundation has announced a new program of cooperative graduate fellowships under which approximately 1000 fellowships will be provided for graduate students in the sciences and engineering. Fellows will be selected solely on the basis of ability. This program is in addition to the foundation's regular predoctoral, postdoctoral, senior postdoctoral, and science faculty fellowship programs.

In the first experimental year of operation, applicants may apply to study at one of 115 designated colleges and universities—those which have awarded an average of at least one doctoral degree annually over the last 4 years of record in the disciplines covered. Applicants will apply through the institution of their choice and initially will be evaluated by the faculty. Applications will be forwarded, together with the institution's recommendations, to the NSF.

Tenures of from 9 to 12 months are optional with the fellow. Fellows will receive a basic annual stipend of \$2200 from NSF funds. Modest supplemental support may be extended by the institutions themselves to encourage fellows to undertake limited teaching responsibilities. In addition, the foundation will provide to each institution, in lieu of tuition and fees, a fixed amount for each cooperative graduate fellow enrolled at the institution.

Application materials can be obtained from the graduate dean of a participating institution or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Applications must be submitted to the graduate dean of the participating institution of the applicant's choice by 15 December.

Natural sciences. The Weizmann Institute of Science, Rehovoth, Israel, has announced two Chaim Weizmann Me-

morial Fellowships for 1959-60. These annual fellowships in the natural sciences are tenable for a period of 12 months. They are intended for scientists with several years of postdoctoral research experience. It is expected that the candidate will have worked in a field close enough to one of the subjects under investigation at the Weizmann Institute to be able to join an existing research team.

The stipend includes round-trip fare by air for the scientist and his family and an adequate living allowance in Israel in local currency. The institute endeavors to help find suitable accommodations. Applications should reach the Academic Secretary, Weizmann Institute of Science, Rehovoth, Israel, *not later than 31 December*. Further particulars and application forms may be obtained from the academic secretary.

Science teaching. The National Science Foundation has announced a new program of summer fellowships for graduate teaching assistants. Designed to enable graduate teaching assistants to devote their full summer to study and research, the fellowships, approximately 550 in number, will be offered for study in the sciences and in engineering.

In the first experimental year of operation, 115 colleges and universities which have awarded an average of at least one doctoral degree annually for the last 4 years of record in the disciplines covered will participate in the program. Applicants, who must be citizens of the United States now serving as teaching assistants in these colleges and universities, will apply through their own institutions and will be screened and evaluated initially by their faculties. They will be judged solely on the basis of ability. The applications will be forwarded, together with the institution's recommendations, to the National Science Foundation.

Summer tenures from 8 to 12 weeks may be selected by the fellow. The weekly stipend will range from a minimum \$50 up to a maximum of \$75 per week, the exact amount to be determined by the fellow's institution according to local conditions. Payment of stipends will be made by the participating institutions from funds provided them for that purpose by the foundation. In addition, the foundation will pay to each institution the tuition and fees of its fellows.

Application materials may be obtained from the graduate dean of a participating institution or from the Fellowships Section, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C. Teaching assistants in participating institutions must submit their applications to their graduate deans by 15 December.

Scientists in the News

ALBERT H. COONS, visiting professor of bacteriology and immunology at the Harvard Medical School and career investigator of the American Heart Association, received the eighth annual Kimble Methodology Research Award at the recent Conference of State and Provincial Public Health Laboratory Directors in St. Louis. He was honored for his development of a method for the prompt diagnosis of such infectious virus diseases as influenza, measles, mumps, and chicken pox.

Coons' method uses a fluorescent dye and ultraviolet light to identify infectious disease viruses. The key to the work which Coons and his associates began in 1941 is the fact that antibodies formed in the body to combat disease are specific; for example, an antibody against influenza will react only with an influenza virus. Such antibodies may be tagged with a fluorescent dye so that they will glow under ultraviolet light.

To find a cell infected with a virus such as influenza, serum containing tagged influenza antibodies is put on a slice of tissue. The antibodies will adhere only to the influenza virus. Under a microscope, the specific virus may then be detected and accurately located within the cell.

LAURENCE H. SNYDER, president of the AAAS and of the University of Hawaii, has been invited to serve as president of the next Pacific Science Congress, which is scheduled to be held in Hawaii during the last week of August and the first week of September 1961. The National Academy of Sciences-National Research Council and the Bernice P. Bishop Museum, Honolulu, the representative institutions sponsoring the tenth congress of the Pacific Science Association, issued the invitation to Snyder.

B. Q. WARD, bacteriologist and associate professor of biology at Mississippi Southern College, has been designated director of the Mississippi Institute of Microbiology that has recently been established as a unit of the college's department of biology. The institute is the only organization of its kind in the state. It is essentially a research establishment and is empowered to accept and administer grants.

The staff of the institute also has responsibility for preparing an annual report that is to include recommendations for teaching and course work within the academic department. However, appointment to the faculty of biology at Mississippi Southern does not confer institute membership, nor need a research

worker at the institute teach, but it is expected that institute personnel will normally be composed of those with dual appointments to both organizations.

The following mathematicians have reported new appointments for the academic year 1958-59.

HENRY SCHEFFE, professor at the University of California, Berkeley, will be a visiting professor at Princeton University, where he will work with the Statistical Techniques Research Group.

E. V. SCHENKMAN, professor at Louisiana State University, has been appointed visiting professor at the University of Wisconsin.

SEYMOUR SCHUSTER, associate professor at the Polytechnic Institute of Brooklyn, has been appointed visiting associate professor at Carleton College.

C. H. W. SEDGEWICK, professor at the University of Connecticut, has retired and has accepted a position as statistician in the Bureau of the Census, Washington, D.C.

R. J. SILVERMAN, associate professor on leave from the Illinois Institute of Technology, has been appointed visiting professor at the University of Puerto Rico, Mayaguez.

K. T. SMITH, associate professor on leave from the University of Kansas, has been appointed associate professor at the University of Wisconsin.

CHOY-TAK TAAM, associate professor at Catholic University of America, has been appointed professor at Georgetown University.

J. H. WAHAB, associate professor at Georgia Institute of Technology, has been appointed a professor at Louisiana State University.

R. L. WILSON of Convair, Fort Worth, Tex., has been appointed professor at Ohio Wesleyan University.

YUNG-CHOW WONG, professor on leave from the University of Hong Kong, will be at the Institute for Advanced Study for the first semester, and at the University of Chicago for the second semester.

A. S. FAIRBAIRN, a medical statistician at the Medical Research Council's Statistical Research Unit, London School of Hygiene and Tropical Medicine, London, England, is spending from 4 to 5 months as visiting scientist at the National Institutes of Health, where he is working with Harold F. Dorn of the Biometrics Branch, Division of Research Services.

D. B. HOPE, member of the Medical Research Council's Radiobiological Research Unit, Atomic Energy Research Establishment, Harwell, England, is spending this year at the Rice Institute, Houston, Tex., where he is working with J. Awapara.

Two noted researchers have joined the zoology department at Southern Illinois University: RICHARD KUDO, protozoologist, and RICHARD BLACKWELDER, a specialist in the classification of insects. Kudo is working on the giant amoeba, while Blackwelder is working on animal classification.

Kudo, who left his native Japan in 1915 to teach at Columbia University, retired in 1954 after serving on the University of Illinois faculty for 36 years. Before joining Southern Illinois as visiting professor this fall, he taught for 4 years at Rutgers University and its Institute of Microbiology. He is the author of *Protozoology*, a major reference work in the field.

Blackwelder, for 20 years curator of insects at the U.S. National Museum, taught 2 years at St. John Fisher College before joining Southern Illinois.

JOHN C. BAIARDI, chairman of the department of biology at Long Island University, has been appointed associate dean for scientific development in the university's College of Liberal Arts and Science, Brooklyn. He will continue to serve as chairman of the biology department.

HAROLD H. SMITH, senior geneticist at Brookhaven National Laboratory, has been appointed for a period of 1 year to the staff of the International Atomic Energy Agency, Vienna, Austria, in connection with programs in genetics, biology, and agriculture.

VERL HOUSE, formerly head of the biology department of Radford College, has been named associate professor of genetics in the department of zoology and entomology at Ohio State University.

ARTHUR W. VANCE, former chief engineer of the Astro-Electronic Products Division, Radio Corporation of America, has been named head of the newly formed information processing research department of Hughes Aircraft Company, Culver City, Calif. Prior to joining Hughes, Vance was employed for nearly 30 years by R.C.A. and Westinghouse, where his work concerned television systems and circuits, feedback systems, instruments, analog and digital computers, and fire-control and reconnaissance systems.

FRANK K. SCHOENFELD, vice president, research, B. F. Goodrich Company, has been named recipient of the Industrial Research Institute Medal for 1959. The medal has been awarded annually since 1945 to honor "outstanding accomplishment in leadership in or management of industrial research which

contributes broadly to the development of industry or the public welfare." The presentation of the medal to Schoenfeld will take place next May at the annual meeting of the Industrial Research Institute.

Recent Deaths

GEORGE H. BOTSTIBER, Philadelphia, Pa.; 60; biochemist, originally of Vienna, Austria, where he conducted research at the Rudolph Hospital and in the laboratories of the Poliklinik; in this country he was a biochemist in Philadelphia for about 20 years; 13 Aug.

RICHARD M. HITCHENS, St. Louis, Mo.; 53; senior adviser to the director of research and development of the organic Chemicals Division, Monsanto Chemical Company in St. Louis; had been with the company since 1931; 28 Oct.

KENNETH D. JOHNSON, Orleans, Mass.; 60; dean emeritus of the New York School of Social Work, Columbia University; former president of the New York State Welfare Board; 6 Nov.

ROBERT O. MARSH, New Brunswick, N.J.; 69; professor of science at Pembroke College (N.C.) from 1947 until his retirement in 1954; head of the department of hygiene and biology at Gettysburg College (Pa.), 1924-39; 10 Nov.

JOHN T. NICHOLS, New York, N.Y.; 75; curator of the department of recent fish at the American Museum of Natural History from 1927 until his retirement in 1952; had been with the museum for almost 50 years; founder and president of the American Society of Ichthyologists and Herpetologists; founder of *Copeia*, a magazine which deals with coldblooded vertebrates; 10 Nov.

Sir GILBERT WALKER, London, England; 90; mathematician and professor of meteorology at the Imperial College of Science and Technology in London; director-general of observatories in India, 1903-24; transformed the predictions of India's monsoons from augury to a science; 5 Nov.

AUGUSTUS P. WEST, Tampa, Fla.; 80; retired research chemist with the National Bureau of Standards, Washington, D.C.; chief of the Division of Chemical Research, Bureau of Science, Manila, Philippines, 1933-42; conducted research in the Philippines in association with the University of the Philippines and the Bureau of Science in Manila for 35 years; 24 Oct.

BENJAMIN P. YOUNG, Ithaca, N.Y.; 71; professor emeritus of zoology at Cornell University; retired in 1952 after having been connected with the university for 35 years; 10 Oct.