

the United States and two in Canada have undertaken new construction projects that will cost approximately \$45 million.

■ The Atomic Energy Commission has postponed until 10 Dec. a hearing to reconsider its conditional approval of a controversial private nuclear power project near Detroit, Mich. The hearing, on safety questions, had been scheduled for 13 Nov. The Power Reactor Development Company of Detroit is to build the plant.

Scientists in the News

WILLIAM SHOCKLEY, WALTER H. BRATTAIN, and JOHN BARDEEN have won the 1956 Nobel prize in physics for their work in developing the transistor. Their research was conducted in the Bell Laboratories, Murray Hill, N.J. Shockley left Bell last year to become director of the Shockley Laboratories of Beckman Instruments, Inc., Mountain View, Calif., and Bardeen resigned in 1951 to become professor of physics and electrical engineering at the University of Illinois.

Sir CYRIL HINSHELWOOD, a professor at Oxford University (England), and NIKOLAI N. SEMENOV, director of the Institute of Physics in Moscow (U.S.S.R.), will share this year's Nobel prize in chemistry for "their researches into the mechanism of chemical reactions." Beginning 25 years ago and working separately, the two men have dealt with essentially the same problem: the elucidation of the occurrence of chain reactions and their importance in connection with the phenomenon of explosion. It was not until after each had published several papers that Hinshelwood and Semenov came to know each other. This is the first time that a Soviet scientist has received a Nobel prize. Not since the selection of Ivan Pavlov, the physiologist, in 1904 has a Nobel award gone to a Russian living in Russia.

COLBY M. CHESTER, honorary chairman of the General Foods Corporation, has received the Frank H. Lahey memorial award for distinguished service to medical education by a layman. The presentation was made by former President Herbert Hoover at a recent dinner in Chester's honor given by the National Fund for Medical Education.

THOMAS E. MURRAY, a member of the Atomic Energy Commission, is the 1956 recipient of the peace award of the Catholic Association for International Peace. The award is presented annually to "an American whose outstanding achievements have helped further the

Christian principles of justice and charity in international life." Murray was cited specifically as one who has consistently pointed out that the "use of force in warfare is subject to the moral law, that the dictates of conscience call for rational limits on the size and number of nuclear weapons."

Two appointments to the staff of the National Science Foundation have been announced. THOMAS O. JONES has been named assistant to the head, Office of Scientific Information, and JACOB PERLMAN is the new study director for surveys, Office of Special Studies. Jones joins the foundation from Haverford College, where he has served for nearly 20 years as professor of chemistry and part of the time as department head. Perlman has been with the United Nations, where he has been principal statistical adviser in charge of a mission working with the Statistical Center of the University of the Philippines in Manila.

STANLEY E. KERR, professor of biochemistry at the American University of Beirut, Beirut, Lebanon, is spending a year as an A. D. Williams visiting professor in the department of biochemistry at the Medical College of Virginia.

E. L. DEMMON, director of the U.S. Department of Agriculture's Southeastern Forest Experiment Station, Asheville, N.C., has retired. He is succeeded by JOSEPH F. PECHANEC.

ZABOJ V. HARVALIK, professor of physics at the University of Arkansas, has taken a leave of absence to serve as director of the newly formed Basic Research Group at the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va. In addition to his work at Belvoir, Harvalik also will direct and evaluate several contributing research programs being performed by other scientific institutions and universities throughout the country.

A native of Yugoslavia, Harvalik was educated in Czechoslovakia, where he served as a professor of physics at the University of Prague. He became a naturalized U.S. citizen in 1945.

RAYMOND C. MOORE, professor of geology at the University of Kansas, has received the Hayden Memorial geological award of the Academy of Natural Sciences of Philadelphia. The award is given for the "best publication, exploration, discovery or research in the science of geology and paleontology, or in such particular branches thereof as may be designated." Moore has published three textbooks and about 200 scientific articles.

LUIS AVELEYRA ARROYO DE ANDA has been appointed director of the National Museum of Anthropology in Mexico. He is well known to American students, to whom he has for a number of years extended generous and competent assistance. He is also well known for his leadership, along with Maldonado, in the discovery in the Iztapan area of two mammoths and associated dart points indicating the existence of early man.

ROBERT F. MEHL, dean of graduate studies at Carnegie Institute of Technology, will receive the 1956 Pittsburgh award of the Pittsburgh Section of the American Chemical Society at a dinner in his honor on 12 Dec. This award is made annually for outstanding contributions to the advancement of chemistry in the Pittsburgh area.

At the recent dedication of Temple University's \$12-million medical center, the following medical educators received honorary degrees: FRANKLIN D. MURPHY, chancellor of the University of Kansas; ISIDOR S. RAVDIN, professor of surgery at the University of Pennsylvania; WILLIAM S. MIDDLETON, head of medical services of the Veterans Administration Hospitals; FRANCIS R. MANLOVE, director of the University of Colorado Medical Center; MANSON MEADS, Bowman Gray School of Medicine; WILLIAM B. WOOD, Jr., Johns Hopkins University; ALEX J. STEIGMAN, University of Louisville; DAVID S. RUHE, University of Kansas School of Medicine; and GEORGE W. CORNER, Rockefeller Institute for Medical Research.

Recent Deaths

HAROLD L. AMOSS, Greenwich, Conn.; 70; former professor of medicine at Duke University; 2 Nov.

FARRAND N. BENEDICT, Parsippany, N.J.; 76; vice president and chief engineer of the Crimmins Contracting Company; 3 Nov.

WILLIAM L. BURGOYNE, Lake Success, N.Y.; 58; consulting aeronautical engineer; 8 Nov.

ANDREW A. DICK, Los Angeles, Calif.; 53; former professor of surgery at Loyola University (Chicago); 2 Nov.

G. LYMAN DUFF, Montreal, Canada; 52; dean of the faculty of medicine at McGill University; 1 Nov.

HARRY G. V. EVANS, Caldwell, N.J.; 32; research chemist at Thomas A. Edison, Inc.; 3 Nov.

VLADIMIR P. FILATOV, Odessa, Russia; 81; director of the Ukrainian Research Experimental Institute for Eye Diseases and Tissue Therapy; 30 Oct.

SUSANNA HAIGH, New York, N.Y.; 64; former faculty member of the New York Psychoanalytic Institute; 7 Nov.

FRITZ HOFFMAN, Hanover, Germany; 89; inventor of synthetic rubber, who had to decline the Nobel prize for his development on order of the Nazis; 31 Oct.

HARVEY J. HOWARD, Clearwater, Fla.; 76; former head of ophthalmology at the University of Canton Medical School; 6 Nov.

ALBERT G. KELLER, New Haven, Conn.; 82; professor emeritus of the science of society at Yale University; 31 Oct.

LUTHER C. SCOTT, Toledo, Ohio; 92; professor emeritus of geology at the University of Toledo; 31 Oct.

Sir FRANCIS SIMON, London, England; 63; physicist, professor of experimental philosophy at Oxford University and head of Clarendon Laboratory; 31 Oct.

Education

■ High-school teachers of biology who are especially interested in improving laboratory and field work in secondary-school biology courses are invited to apply for appointment to a group that will prepare a source book of laboratory and field studies for such courses. The project is sponsored by the Committee on Educational Policies of the Biology Council, Division of Biology and Agriculture, National Academy of Sciences-National Research Council, and by Michigan State University, with the support of grants from the National Science Foundation. The source book will be developed at an 8-week writing conference, to be held 24 June to 16 Aug. 1957, at Michigan State University.

Despite their importance in high-school biology, laboratory and field study are often pedestrian and unimaginative. One way to improve the situation is to supply teachers with a collection of superior exercises, realistically adapted to high-school situations. All teachers could then use procedures developed by particularly capable teachers. This is the purpose of the source book, which will contain a series of complete exercises from which individual teachers can draw ideas, studies for particular topics, or the laboratory and field work for entire courses.

The material will be developed by a group of 20 high-school teachers and 10 college and university biologists. The latter group is already selected. The prime requirement for participants is a creative, imaginative approach to laboratory and field studies. All interested high-school biology teachers are invited to apply. Biologists and school adminis-

trators are also urged to submit the names of teachers who are well qualified for the assignment.

Each applicant or nominee will be sent a form asking for information on his background and experience and evidence of his ability to contribute to the preparation of the source book. The final selection will be made on the basis of two essays submitted by each applicant who passes a preliminary screening. One essay will illustrate how a topic supplied by the committee can be converted into a study for high-school use; the other will present an exercise that the teacher has devised.

The essays will form a part of the pool of ideas for the source book. Manuscripts so used will be credited to their authors, who may thus appear in the publication even if they are not selected to participate in the conference. The writing team also will have access to other collections of exercises, including those gathered by the committee in preparing a series of source books of laboratory and field studies for college courses in the biological sciences.

Each participant will receive a stipend of \$1000. His round-trip travel expenses between his home and East Lansing, Mich., will also be paid. From the stipend he will be expected to pay his own living expenses during the conference. The university will provide housing and dining facilities at reasonable prices for teachers and their families. The conference will be directed by C. A. Lawson, head of the department of natural sciences in the Basic College at Michigan State.

Completed applications should be submitted by 31 Jan. 1957. All correspondence concerning the project should be addressed to: Committee on Educational Policies, Division of Biology and Agriculture, National Research Council, 2101 Constitution Ave., NW, Washington 25, D.C.

■ The Committee on Reactor Materials of the Atomic Industrial Forum, New York, has announced that a concentrated 2-week course on reactor materials will be held at New York University from 26 Nov. to 7 Dec. As in the case of an earlier course at Northwestern University last January, lectures will be presented by outstanding scientists on properties, technology, and applications of reactor materials.

Cochairmen for the course are Lyle Borst, chairman of the N.Y.U. physics department, and David Gurinsky, head of the metallurgy division at Brookhaven National Laboratory. Participation will be limited to 60 persons. Tuition for the course is \$125 and does not include transportation expenses, hotel accommodations, or living expenses.

■ Wabash College has received a 180-acre tract of woodland from the estate of W. C. Allee. Allee served for 30 years on the faculty of the University of Chicago, from which he retired as professor of zoology to teach for five more years at the University of Florida, where he was chairman of the biology department.

As one keenly interested in the relationship between environment and living things, it was Allee's wish that the tract, which is near Turkey Run State Park, be kept inviolate. The college has agreed to follow this wish for 99 years. During this period records will be kept of the changes in the animals and plants on the tract. The president of Wabash has appointed a committee to look after the land and to plan ecological studies.

Grants, Fellowships, and Awards

■ The National Science Foundation, Washington 25, D.C., will award individual grants to defray partial travel expenses for a limited number of scientists who wish to attend the following international meetings sponsored by the International Union of Pure and Applied Chemistry.

Second International Congress on Surface Activity, London, England, 8-12 Apr. 1957; application deadline 1 Jan. 1957.

International Symposium on Purity Control by Thermal Analysis, Amsterdam, Netherlands, 24-26 Apr. 1957; application deadline 1 Jan. 1957.

Sixteenth International Congress on Pure and Applied Chemistry, Paris, France, 16-23 July 1957; application deadline 1 Feb. 1957.

■ The Association of Official Agricultural Chemists has announced the establishment of the Harvey W. Wiley award for analytic methods. The award honors the memory of the founder of the federal pure food and drug laws, who was also one of the founders of the association.

The \$500 award will be presented annually to the scientist or group of scientists who make an outstanding contribution to development of methods of analysis of foods, cosmetics, drugs, feeds, fertilizers, pesticides, and soil, as well as for methods in general analytic chemistry. The first award will be given at the 71st annual meeting of the association in October 1957. All scientists, whether members or nonmembers of the AOAC are eligible for the award.

■ The Atomic Energy Commission has established a program of special fellowships to encourage more students to pursue courses of study in the physical sciences and nuclear engineering. The fellowships are part of the commission's