should be kept in mind that the award is given as recognition of specific research and not in recognition of a man's career in science. The research must have potential national significance to agriculture.

Each committee will receive nominations, evaluate them, and forward three selections to Fred M. Shaw, Secretary, Hoblitzelle Awards, Texas Research Foundation, Renner, Tex. Nominations must be received by the Texas Research Foundation *not later than 1 Nov. 1957.* Further information may be obtained from Shaw.

The Hoblitzelle Foundation, the donor of this award, was established by Karl Hoblitzelle in 1942 "exclusively for charitable, scientific, literary or educational purposes. . . ." Hoblitzelle, a resident of Dallas, is a businessman, financier, and philanthropist.

NSF Research Data

The National Science Foundation has initiated a new series of brief reports under the general heading *Reviews of Data on Research and Development.* The first report is a 4-page leaflet dealing with "Expenditures for Research and Development in the United States, 1953." In a graphically illustrated text, the release shows that the Federal Government contributed 52 percent, and industry 44 percent, of the $5370 million available for research and development in that year. Industry, on the other hand, carried out 72 percent of the actual work, whereas the Government assumed responsibility for only 18 percent. Colleges and universities provided financial support for only 3 percent of the total, yet they performed 9 percent of the research and development done.

The National Science Foundation is using this new medium to provide advance summaries of work in progress. Soon to appear are reports on "Expenditures for Research in Medical Schools, 1953–54," and "Expenditures for Research in Colleges and Universities, 1953–54."

New Oceanography and Ornithology Laboratories for Yale

Yale University will begin construction this summer of a $650,000, two-story wing of the Peabody Museum that will house the Bingham Oceanographic Laboratory and the Ornithology Laboratory. The laboratories are scheduled for occupancy in January 1959.

The new structure has been made possible by generous donations from Wendell W. Anderson, Allan Shelden 3d, William W. Shelden, and Thomas Shevlin. In addition, the ornithology part of the building, established by a substantial bequest from the late William Robertson Coe, is the culmination of many years of planning to enhance research and collections in ornithology. The late Harry Payne Bingham, who started the Bingham laboratory many years ago with extensive gifts of his own collections and funds to support and build them, also left a sizable sum to Yale for the eventual construction of the wing.

34,000-Year-Old Skeleton

The Smithsonian Institution has announced that an adult human skeleton has been found 14½ feet below the surface in the top Mousterian layer of the Shanidar Cave, in northern Iraq. Ralph S. Solecki, Smithsonian collaborator and archeologist-leader of the Smithsonian-sponsored expedition to Iraq, reports that no exact age can be given for the skeleton, but the layer in which it was found is known to be over 34,000 years old.

Solecki first visited the Shanidar Cave in 1951. So promising were his initial excavations that he arranged to return for ten weeks in the summer of 1953. It was during the second expedition that Solecki found a child's skeleton at a depth of 26 feet from the surface. A recent study of the teeth of the Shanidar child indicates that it belongs to a new form of Mousterian or Upper Pleistocene man. Since the newly discovered adult comes from a higher level in the cave, it may represent a still different type of man.

Solar Energy Center

A Solar Energy Center will be built at Tierra del Sol, Calif., a townsite owned by J. Y. Leveque, sponsor of the new project. Leveque, a San Diego and Los Angeles management consultant specializing in the aircraft and oil industries, undertook the new venture with the backing of eastern businessmen. Construction will begin shortly. The center will be privately financed, and will aim at obtaining research and development contracts from Government agencies and industrial firms.

Tierra del Sol, on the Tecate Divide 65 miles east of San Diego, is 3800 feet above sea level. The site is close to much higher and much lower altitudes where experiments can be conducted under a wide variety of climatic conditions. The smog- and fog-free site receives sunshine almost every day of the year and has easy access to good highway and rail facilities.

The purpose of the center will be to develop practical uses for solar energy. A solar furnace, capable of reaching temperatures in excess of 6000°F, will eventually be built for the project. It will be used for testing and heat-treating.

In addition to the construction of suitable laboratory facilities, everything possible will be done to keep Tierra del Sol in character with the Solar Energy Center. A model home will be built that uses solar energy for heating and hot water, and street lights will be equipped with solar batteries. A solar pump, to be imported from Italy, will be installed on a well that is about to be drilled.

An exhibit of various solar-energy applications, collected from all over the world, will be open to the public. In addition, scientists from various countries will be invited to visit the center.

One of the first projects to be undertaken will be research in the application of solar energy as a means of sea-water conversion. Sea water will be shipped by rail from San Diego for this purpose.

Films for Junior High Schools

To stimulate the interest of teenagers in science as a possible career field, the McGraw-Hill Book Company, New York, has released a junior science film series. The series, a program of 39 films, each about 13 minutes in length, has been planned with the junior-high-school curriculum in mind. While maintaining a sound educational approach, these films are geared to lead the students to appreciate the advantages offered by careers in science.

Using equipment and materials readily available, each film deals with a basic scientific principle and relates it to ordinary life. For example, through the medium of film, a toy locomotive demonstrates Newton's third law of action and reaction; children playing on a seesaw are transformed into a lever diagram; and a cowboy's lariat illustrates centrifugal force.

News Briefs

The schedule is now available for the laboratory refresher training courses that are to be offered by the U.S. Public Health Service Communicable Disease Center during the period 9 Sept. 1957–28 Mar. 1958. Information and application blanks may be secured from the Laboratory Branch, Communicable Disease Center, U.S. Public Health Service, P.O. Box 185, Chamblee, Ga.

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The Air Research and Development Command has established a new Development Field Office in the San Francisco Bay area to provide a close link between

the Command and the private research institutions and industries of that area. At present the office is located at Moffett Field, Mountain View, Calif., although its permanent home will be in or near Palo Alto. Capt. Otis R. Hill, formerly of ARDC Headquarters in Baltimore, Md., is in charge of the new office.

* * *

International Business Machines Corporation has announced the opening of its first radioisotope laboratory. Located at IBM's Product Development Laboratory in Endicott, N.Y., the new equipment provides instrumentation for radio chemical studies of machine parts such as bearings, electrical contacts, and gears, and for radiographic analysis of such components as heavy machine castings.

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Awards totaling more than $1 million have been allocated for heart research this year by the Life Insurance Medical Research Fund. This is the first time that the annual awards have passed the $1-million mark. In all, the Fund has given $9,211,000 for heart research since it was organized in 1945, including the 1957 awards of $1,059,490. The awards are of two types: grants to research institutions to support specified basic research projects; and fellowships to promising young men and women for training in heart research.

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The National Science Foundation has announced 235 grants totaling $4,316,352 awarded during the quarter ending 31 Mar. 1957 for the support of basic research in the sciences, for conferences in support of science, for short-term research by medical science students, for exchange of scientific information, and for training of science teachers. This is the third group of awards to be made during fiscal year 1957. Since the beginning of the program in 1951, 3401 such awards have been made totaling almost $54,300,000.

Heavy-Ion Linear Accelerator

The Atomic Energy Commission has announced that a new type of linear accelerator designed for study of the elements and isotopes in the transuranic region has gone into operation in the University of California Radiation Laboratory. The machine is now accelerating nuclei of nitrogen atoms (nitrogen-14) to energies of 140 million electron volts.

The new instrument does not compete in energy with such powerful machines as the Radiation Laboratory's bevatron, which accelerates protons—the nuclei of the lightest element, hydrogen—to 6.2 billion electron volts. In contrast, the new facility is designed especially to accelerate the nuclei, or ions, of very heavy atoms. It is therefore called a heavy-ion linear accelerator, or HILAC.

The machine represents, in part, a joint project between the University of California and Yale University. Yale and Berkeley scientists developed the design of the machine, a duplicate of which is nearing completion now in New Haven. The research emphasis at the two institutions will be different: Yale is chiefly interested in problems in physics and Berkeley is giving priority to chemical transmutation experiments.

Chester Van Atta, physicist in the Radiation Laboratory, Berkeley and Livermore, has been in over-all charge of the Berkeley development, which has been under the immediate supervision of Edward Hubbard, physics. At Yale, Robert Beringer is in charge of the machine's development.

Proposed Legislation

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows:

S 1552. Authorize Secretary of Agriculture to establish a program for purpose of carrying on research and experimentation to develop methods for commercial production of fish on flooded rice acreage in rotation with rice field crops. Fulbright (D Ark.) Senate Agriculture and Forestry.

S 1628. Provide further protection against dissemination of diseases of livestock or poultry. Ellender (D La.) (by request) Senate Agriculture and Forestry.

HR 5857. Amend Soil Bank Act to permit grazing land to be included in conservation reserve program. Albert (D Okla.) House Agriculture.

S 1572. Authorize appropriations for Atomic Energy Commission for acquisition or condemnation of real property or any facilities, or for plant or facility acquisition, construction, or expansion. Anderson (D N.M.) Joint Committee on Atomic Energy.

HR 6212. Provide for national scholarships for college and university undergraduate study. Porter (D Ore.) House Education and Labor.

HR 5932. Establish U.S. Commission on Aging and Aged. Fulton (R Pa.) House Education and Labor.

H J Res 270. Establish a U.S. Academy of Foreign Service. Dwyer (R N.J.) House Foreign Affairs.

S J Res 75. Propose amendment to Constitution of U.S. to prevent interference with, and eliminate limitations upon, power of states to regulate health, morals, education, marriage, and good order therein. Eastland (D Miss.) Senate Judiciary.

Scientists in the News

RICHARD M. GOODY, British physicist, will become professor of meteorology at Harvard University on 1 July. He also will succeed CHARLES M. BROOKS [*Science* **125**, 984 (17 May 1957)], who is retiring as director of the Blue Hill Meteorological Observatory. Goody is reader in meteorology at the Imperial College of Science and Technology, University of London. His research has included studies of temperatures in the stratosphere, thermal equilibrium, and the spreading of heat in the earth's atmosphere. He also has made studies of the atmosphere of Venus and the sun.

MAURICE EWING, director of the Lamont Geological Observatory of Columbia University and president of the American Geophysical Union, has received the union's 19th William Bowie medal. He is well known for his contributions to geophysical sciences, most notably perhaps in seismology and in the study of the ocean floor.

C. LALOR BURDICK, since 1946 secretary of the Polyfibers Committee of E. I. du Pont de Nemours and Company, Wilmington, Del., retired in April after 29 years with the company. As coordinating officer of the committee, Burdick has helped direct the development of policy for all Du Pont activities in the field of synthetic fibers, as represented by nylon, Orlon acrylic fiber, and Dacron polyester fiber. He has also been a member of the company's committee on fellowships and grants.

Burdick joined Du Pont in 1928 as assistant chemical director of the ammonia department. From 1939 to 1945, he was assistant to the president of the company. Then, for the year preceding his appointment to the Polyfibers committee, he served as chairman of the board of two Du Pont Latin American affiliates, Cia. Mexicana de Explosivos and Du Pont, S.A.

Through his association with the Lalor Foundation, which he has directed since its establishment in 1935 as a private organization to support research, Burdick has been closely identified with the promotion of research and education in the biological sciences.

Burdick was graduated in 1911 from Drake University, Des Moines, Ia., receiving the degree of bachelor of science in chemistry. From Massachusetts Institute of Technology he received a similar degree in 1913, and a year later his master's degree. Entering the Kaiser Wilhelm Institute in Berlin, Burdick remained until 1915 when he went to the University of Basel, Switzerland; there he received the degree of doctor of phi-