

society for power to run its machines. As a source of radioisotopes, it is now providing science and industry with new possibilities in research and control, as well as with new products. The transformation of a highly complex, theoretical concept of 1939 to the multitude of reactors operating today in research and in commercial establishments is a major achievement of modern science and engineering. The men who are selected for recognition by this Award have been leaders in that transformation. . . ."

The award was established as a memorial to Henry Ford and his son, Edsel, in response to President Eisenhower's 1955 appeal at Geneva for international efforts to develop nuclear energy for peaceful purposes. It is to be granted "solely on the basis of the merit of contribution, wherever found in the world and without regard for nationality or politics." Nominations for the award have been received from individuals and learned societies in 24 countries.

Biographies of the Recipients

Leo Szilard, a native of Hungary, was educated in Budapest and Germany, earning his doctorate at the University of Berlin in 1928. After teaching and research in Germany and England, he came to the United States in 1937, joining the faculty of Columbia University. In 1942 he moved to the University of Chicago as chief physicist in the Metallurgical Laboratory, a special research group organized to develop the potential of nuclear reactions under government auspices. Since 1946 he has been professor of biophysics at Chicago. Among his contributions are development of the field of radiation chemistry and (with Aaron Novick) new methods of control of the culture of microorganisms, making possible significant discoveries in the science of genetics. With the late Enrico Fermi he was awarded the patent for the first nuclear reactor. He was recipient of the Albert Einstein Medal for 1960.

Eugene Paul Wigner, also born in Hungary and educated there and in Berlin, came to the United States in 1930. Except for periods at the Metallurgical Laboratory of the University of Chicago and as director of the Oak Ridge National Laboratory, he has been a member of the faculty of Princeton University, having been named Thomas B. Jones professor of

mathematical physics in 1938. He is the coauthor of books on nuclear reactors and on nuclear structure. He is a member of the National Academy of Sciences and has received the Medal of Merit, the Franklin Medal, and the Fermi Award (in 1958).

Alvin M. Weinberg is a native of Chicago and a graduate of the University of Chicago, having earned his doctorate there in 1939. After teaching in that university, he joined the Metallurgical Laboratory in 1941. In 1945 he transferred to the staff of the Oak Ridge National Laboratory, where he has been director since 1955. He has been active in the design of reactors, notably the homogeneous reactor. With Wigner, he is the author of an authoritative text on nuclear reactors.

Walter H. Zinn, a native of Canada, earned his doctorate at Columbia University and served on the faculty of the City College of New York from 1932 to 1941. In that year he, too, joined the Metallurgical Laboratory at the University of Chicago, where he was a member of the team that constructed the first successful atomic pile. He designed and built the first heavy-water reactor. From 1946 to 1956 he was director of the Argonne National Laboratory at Lemont, Ill., where he was actively engaged in the development of the fast-breeder reactor and the boiling-water reactor. He is at present vice-president of Combustion Engineering, Inc. He is a member of the National Academy of Sciences.

Improvement of High-School Chemistry Courses To Be Studied under Science Foundation Grant

A far-reaching national program designed to aid in modernizing and improving the teaching of chemistry in American high schools has been undertaken jointly by the University of California, Berkeley, and Harvey Mudd College, Claremont, Calif., under a grant from the National Science Foundation. The project, which will maintain a continuous liaison with high-school teachers, has as its goal the preparation of text and experimental materials to be used in high-school chemistry classes.

Known as the Chemical Education Materials Study, or CHEM study, the program will be under the general chairmanship of Glenn T. Seaborg,

Nobel laureate in chemistry and chancellor of the University of California at Berkeley. J. A. Campbell, head of the chemistry department at Harvey Mudd College, will serve as director of the study. George C. Pimentel, professor of chemistry at the University of California, will head up the group concerned with preparation of new text materials, while Lloyd E. Malm, professor of chemistry at the University of Utah, will maintain liaison with the high schools involved in the CHEM project.

The program will be a counterpart in chemistry of the extensive national program in high-school physics undertaken by the Physical Sciences Study Committee at Massachusetts Institute of Technology under the direction of Jerrold R. Zacharias.

Steering Committee To Meet

The steering committee of the CHEM project, in cooperation with a group of the country's leading chemists and chemical educators, will meet next month in Claremont to make specific plans for the study. During June and July between 20 and 30 teachers of chemistry at the university and high-school levels will assemble in Claremont for a 6-week intensive writing conference, in the course of which hundreds of pages of text and material for laboratory experiments and lecture demonstrations will be prepared in preliminary form.

This material will be presented, during a 4-week program in August, to some 30 high-school chemistry teachers. If it is deemed sufficiently complete to warrant an immediate tryout, the material will be released to a small number of selected high schools throughout the nation during the 1960-61 school year. The trial run will permit modification of the material in the light of actual teaching experience.

In addition to providing improved text and experimental materials for use in high-school chemistry classes, the study, as planned, will include the following.

- 1) Instruction on the behavior of atoms and molecules, through animated film.
- 2) Filmed experiments and lectures by outstanding scientists.
- 3) Evaluation of the incorporation of newly available teaching machines in the nation's educational system.
- 4) Opportunity to appraise the feasibility of making monographs writ-

ten by authorities in the field of chemistry available to exceptional students.

5) Consideration of the results of nation-wide science studies in order to take advantage of new findings on teaching methods.

6) Study of present-day high-school chemistry courses with the aim of determining the optimum balance between experimentation by students and study by students of theoretical interpretations of experiments conducted by others.

In addition to providing better instruction in chemistry both for students who will eventually select a career in science and for those who will not, the CHEM study group hopes to reduce whatever gap in the understanding of science now exists between scientists and science teachers and to encourage teachers to take chemistry courses that will help them keep abreast of scientific developments.

Members of the steering committee of the Chemical Education Materials Study are as follows: Glenn T. Seaborg (chairman), chancellor and professor of chemistry, University of California, Berkeley; James A. Campbell, chairman of the department of chemistry, Harvey Mudd College; Bryce Crawford, Jr., chairman of the department of chemistry, University of Minnesota; Warren Everete, vice president for research and production, Encyclopaedia Britannica Films, Wilmette, Ill.; Henry Eyring, dean of the Graduate School, University of Utah; W. H. Freeman, president, W. H. Freeman and Company, San Francisco, Calif.; Cleveland Lane, Manufacturing Chemists Association, Washington, D. C.; Donald H. McLaughlin, regent of the University of California, San Francisco; Carl G. Nieman, professor of organic chemistry, California Institute of Technology; J. Cecil Parker, head of the Field Service Center, University of California, Berkeley; Charles C. Price, director, department of chemistry, University of Pennsylvania; Kenneth S. Pitzer, dean of the College of Chemistry, University of California, Berkeley; Robert Rice, Berkeley High School, Berkeley, Calif.; R. Silber, Central High School, Evansville, Ind.; B. R. Stanerson, director of membership affairs, American Chemical Society, Washington, D.C.; Grant Vest, director, Coordinating Council of Higher Education in Utah, Salt Lake City; and Roy L. Whistler, professor of biochemistry, Purdue University.

Research Institute To Be Established in California

The National Foundation has announced that it is supporting the establishment of a new basic research institute that is to be headed by Jonas E. Salk, well-known research worker on poliomyelitis and Commonwealth professor of experimental medicine at the University of Pittsburgh. The institute will probably be located in San Diego on the ocean front, near the La Jolla campus of the University of California.

Salk says that the institute will be devoted to the advancement of knowledge "relevant to the health and well-being of man, primarily through research in fundamental biology, and in the cause, prevention, and cure of disease, and in the factors and circumstances conducive to the fulfillment of man's biological potential." The areas of interest of the institute will be determined by its members and will not be limited except by the "limits of their imagination and ingenuity."

The National Foundation has agreed to provide a minimum of \$1 million annually for operational support and to give at least another \$1 million per year to an endowment fund, until its contribution to this fund reaches \$10 million. The institute may receive additional support from other sources.

The research staff will consist of a nucleus of permanent members, with different but overlapping interests, and a group of visiting members having diverse interests, who will be drawn from all parts of the world. An important segment of the research group will consist of young investigators beginning their careers as institute fellows.

The San Diego City Council will meet early in June to vote on the allocation of land for the institute. If the vote is favorable, detailed plans will be announced. The announcement will include the names of the trustees, initial members, and visiting members and the architectural plans.

Psychologists Form Society

The Psychonomic Society was organized in Chicago on 31 December 1959 to increase communication among psychologists whose primary interest is in research and scholarship. The society expects to hold meetings of moderate size, often in university surroundings,

that will be attended primarily by psychologists who can contribute to the science of behavior.

A committee has compiled a list of approximately 800 people who clearly qualify for membership in the new organization; these have been invited to join as charter members. After the charter membership has been established, others qualified as research workers will become eligible for election. The first annual meeting of the new body will be held 1-3 September 1960 at the University of Chicago.

C. T. Morgan of the University of Wisconsin has been elected chairman of the society's governing board, and W. S. Verplanck of the University of Maryland, secretary-treasurer. Requests for information may be addressed to either.

Grants, Fellowships, and Awards

Fulbright. Applications should be submitted *before 25 April* for United States Government grants under the Fulbright and Smith-Mundt acts for university lecturing and advanced research during 1961-62 in Australia, New Zealand, South Asia, and Latin America.

All candidates must be citizens of the United States. For lecturers, at least 1 year of college or university teaching experience is required; for research scholars, a doctoral degree at the time of application or recognized professional standing is necessary.

Grants are tenable in one country only, usually for the full academic year, and are payable in the currency of the host country. Round-trip transportation is provided for the recipient of the grant but not for his accompanying dependents. A maintenance allowance, to cover the ordinary living expenses of the recipient and his family during their residence abroad, is also provided. In addition there is a small allowance for incidental expenses of a professional nature connected with the assignment. Subject to annual congressional appropriation, a supplemental dollar grant may be made by the Department of State to lecturers assigned to certain countries to assist them in meeting continuing expenses in the United States.

Application forms and additional information may be obtained from the Conference Board of Associated Research Councils, Committee on Inter-