achievement in applied chemistry in the United States.

Established in 1906, the medal honors Sir William Henry Perkin and commemorates his discovery of the first synthetic dye in 1856. The 1956 medal will be presented to Britton in September 1956 at a dinner in his honor that will form part of the centenary celebration of Perkin's synthesis. Perkin's contributions provided a base for the synthetic dye industry.

Britton is honored for many outstanding contributions to industrial organic chemical development. His early work on the synthetic production of phenol made this raw material abundantly available for a large segment of the plastics industry. Derivatives also form such products as weed killers, insecticides, fungicides, and preservatives.

Britton also was a pioneer in the commercial development of silicone resins, the basis for an entirely new industry. Dow Corning employed his processes in making the first high-temperature silicone resin insulation for airplane engines. Subsequently the company produced silicone products for tanning leather, lens cleaners, polishes, and lubricants, as well as silicone rubber.

Agriculture is indebted to Britton not only for his development of phenol derivatives, but also for his synthesis of eight of the essential amino acids; seven of these are being studied as food supplements for man and animals. One of them, methionine, is the only essential amino acid now in commercial production; it is widely used in feed supplements, particularly for poultry.

CECIL H. WADLEIGH, career scientist and administrator in the U.S. Department of Agriculture, has been named chief of the soil and water conservation research branch of the Agricultural Research Service. He fills a position that has been vacant since the death of Robert M. Salter in September.

In his new post, Wadleigh will direct and coordinate USDA soils research in 41 States, representing all important soils regions of the United States. Headquarters of his branch are at the USDA Plant Industry Station, Beltsville, Md.

WARREN C. JOHNSON, professor and chairman of the University of Chicago department of chemistry, became dean of the division of physical sciences on 1 Nov. He succeeds Walter Bartky, who last June was appointed vice president of the university in charge of special scientific programs.

THOMAS N. A. JEFFCOATE, professor of obstetrics and gynecology at the University of Liverpool, Liverpool, England, is visiting professor this month at the State

University of New York College of Medicine in Brooklyn. He also delivered the Sir Arcot Mudaliar Lectures in Madras, India, this year and has recently completed a visiting professorship at the Royal Prince Albert Hospital in Sydney, Australia.

The following are among those who have recently received honorary doctoral degrees from Drexel Institute of Technology: ROGER ADAMS, head of the department of chemistry, University of Illinois; george R. HARRISON, dean of science, Massachusetts Institute of Technology; c. glen king, executive director, Nutrition Foundation; GEORGE P. LAR-RICK, Commissioner of Food and Drugs; HOWARD A. MEYERHOFF, executive director, Scientific Manpower Commission; ALEXANDER C. MONTEITH, vice president, Westinghouse Electric Corporation; c. GUY SUITS, vice president and director of research, General Electric Company; ROBERT E. WILSON, chairman of the board, Standard Oil Company (Indiana).

Necrology

WILLIAM J. CROZIER, Belmont, Mass.; 63; professor of general physiology at Harvard University and research authority on human vision; 2 Nov.

JULIUS H. HESS, Chicago, Ill.; 79; professor emeritus of pediatrics at the University of Illinois College of Medicine; 2 Nov.

NORMAN D. HUMPHREY, Detroit, Mich.; 44; professor of anthropology at Wayne University; 30 Oct.

HOWARD M. MARJERISON, Boston, Mass.; 59; specialist in preventive dentistry and lecturer at Harvard University; 4 Sept.

JOHN C. TRACY, New Haven, Conn.; 86; professor emeritus of civil engineering at Yale University; 1 Nov.

Education

■ The Atomic Energy Commission has approved the loan of 2 tons of natural uranium metal and a neutron source to New York University for use in constructing a facility for a nuclear engineering education program. The university will use the material in a subcritical assembly-a facility in which a neutron flux can be produced, but which is incapable of sustaining a nuclear fission chain reaction. The assembly will consist of an arrangement of natural uranium metal rods in ordinary water. If a neutron source is introduced, nuclear fissions occur in the assembly, but the reaction cannot be sustained without the presence of the neutron source.

The facility requires no controls and will be safe at all times. Neither expensive shielding nor heat removal equipment will be necessary. It may be used for many laboratory exercises in nuclear engineering.

Simultaneously, the AEC announced that it has approved a policy of assistance to nonprofit educational institutions interested in establishing programs using subcritical nuclear assemblies. Such assistance will consist of supplying certain materials for assemblies without a use charge being made, subject to availability and to a deetrmination that such materials loans will result in a net advantage to the commission's program. The plan is designed to help to alleviate the current shortage of nuclear scientists and engineers.

■ Sixty-six students have been accepted for the second session of the new School of Nuclear Science and Engineering in Lemont, Ill., which opened on 7 Nov.; 45 are from foreign countries and 21 from the United States. The school is operated for the U.S. Atomic Energy Commission by the Argonne National Laboratory. It is one of the major projects undertaken by the AEC in cooperation with the State Department and the International Cooperation Administration in support of President Eisenhower's atoms-for-peace program.

Twenty-one nations are represented among the foreign enrollees. Of the U.S. students, 18 are sponsored by American industry and three are from the AEC. Plans are under way for a third session to begin next spring.

The second class, like the first, represents a cross section of scientists and engineers from Europe, Latin America, and the Near, Middle, and Far East, and brings the total of foreign enrollees for the two sessions to 75 persons from 29 countries.

Listed for the first time are students from Burma, Chile, the Republic of China, the Federal Republic of Germany, India, Iraq, Italy, Lebanon, Norway, and Turkey. Nations having students at both sessions are Belgium, Egypt, France, Israel, Japan, Mexico, Pakistan, the Philippines, Spain, Sweden, and Thailand.

Most of the new students arrived in Washington, D.C., on 31 Oct. for a week of general orientation under the direction of the International Cooperation Administration. They were given background lectures on U.S. history and culture and on atomic energy. The School of Nuclear Science and Engineering has a full-time faculty headed by Norman Hilberry, deputy director of Argonne National Laboratory. J. Barton Hoag, who is on leave from the U.S. Coast Guard Academy, is associate director.

The regular instruction is supplemented by lectures on specialized topics by members of the Argonne National Laboratory staff. Also there are occasional lectures by staff members of other AEC installations and by scientists and engineers in the nuclear and related fields.

In general, the curriculum is concerned with (i) production of reactor materials; (ii) design, construction, and operation of research and material-testing reactors; (iii) equipment and procedures for conducting research and development with these reactors; (iv) handling and processing of irradiated materials produced in research and materials-testing reactors; (v) utilization of the radioactive products of reactors; and (vi) principles of design, construction, and operation of nuclear power plants.

■ A \$59,650 Kellogg Foundation grant has been awarded to the University of Minnesota for further development of its course in hospital administration. The grant is to be used over a 3-year period for research work in hospital administration, integration of the on-campus and off-campus teaching programs, and preparation of textbook material.

Edith Lentz, who has just completed a 5-year Kellogg Foundation study of hospital personnel at Cornell University, will be the course's first director of research. Bruce Butters, an alumnus of the Minnesota hospital administration course who has recently returned from 3 years in the Army Medical Corps, will assemble materials for textbooks.

■ The University of Michigan board of regents has approved the division of one of the departments in the College of Engineering into two separate units and discontinuance of the department of production engineering. The present department of mechanical engineering will be divided into the department of mechanical engineering and the department of industrial engineering. All of the changes will become effective during 1956–57.

Under the change, the personnel, budget and other resources of the department of production engineering will be distributed between the reorganized department of mechanical engineering and the department of chemical and metallurgical engineering. The reorganization is expected to strengthen the curricula in industrial, mechanical, and metallurgical engineering.

Grants, Fellowships, and Awards

Recognizing that geography in America suffers because few American geographers are doing field research in foreign areas, the National Academy of Sci-

ences-National Research Council has initiated a program of support to enable young geographers to carry out field investigations abroad. Preference will be given to projects that involve at least 5 months of foreign residence.

Funds will be made available not only to geographers but also to scientists in related fields whose research topics are closely allied to geography. Financial support is provided by the U.S. Office of Naval Research. The NAS-NRC Division of Earth Sciences is appointing a committee to screen all applications.

■ The Mycological Society of America has announced that it will receive applications for the newly established graduate fellowship in mycology. This fellowship will be awarded for 1956–57 and carries a stipend of \$750. Eligible candidates must be predoctoral students in residence at the institution where they are registered.

Forms for application may be obtained after 1 Jan. from the secretary-treasurer of the society, Dr. C. J. Alexopoulos, Department of Botany and Plant Pathology, Michigan State University, East Lansing, Mich. Applications are due by 15 Feb. 1956.

■ Nominations are solicited for the 1956 award and a gold medal made available by the Borden Company Foundation, Inc. The American Institute of Nutrition will make this award in recognition of distinctive research by investigators in the United States and Canada that has emphasized the nutritive significance of the components of milk or of dairy products. The award will be made primarily for the publication of specific papers during the previous calendar year, but the jury of award may recommend that it be given for important contributions made over a more extended period of time, not necessarily including the previous calendar year.

The award is usually given to one person, but if in their judgment circumstances and justice so dictate, the jury may recommend that it be divided between two or more collaborators in a given research project. The jury may also recommend that the award be omitted in any given year if in its opinion the work submitted does not warrant the award. Membership in the American Institute of Nutrition is not a requisite of eligibility for the award. Employees of the Borden Company are not eligible for this honor.

Nominations should be accompanied by such data relative to the nominee and his research as will facilitate consideration for the award. The formal presentation will be made at the annual meeting of the institute in the spring of 1956. To be considered for the award, nominations must be submitted by 1 Jan. 1956 to the chairman of the nominating committee, Gladys Everson, Department of Home Economics, University of California, Davis.

■ The American Foundation for Pharmaceutical Education annually offers three cash awards of \$250 each for meritorious papers in pharmacognosy, published or unpublished. An award will be made to one competitor in each of the following groups: (i) undergraduate students in accredited colleges of pharmacy; (ii) graduate students in accredited colleges of pharmacy; and (iii) teachers, research workers, and industrial scientists.

The papers submitted must be principally within the fields of morphologic, taxonomic, or cytogenetic pharmacognosy, or in drug-plant cultivation or commercial pharmacognosy. Phytochemical aspects of the work may be included in conjunction with discussion in one or more of the aforementioned fields. Each paper must contain some new information ascertained from studies made by the contestant on (i) one or more medicinal, pesticidal, allergenic, poisonous, or aromatic plants; or (ii) one or more cellular drugs, pesticides, adulterants, or substituents thereof; or (iii) methods of quantitative microscopical analysis as applied to the determination of the percentage of an adulterant in a natural cellular drug, condiment, or pesticide; or (iv) the cytology or genetics of a medicinal plant; or (v) the cultivation of one or more drug plants.

For information write to: Dr. H. W. Youngken, Massachusetts College of Pharmacy, Longwood Ave., Boston 15, Mass. All entries must be received by 1 Feb.

- The Division of Biological and Medical Sciences of the National Science Foundation has announced that the next closing date for receipt of research proposals in the life sciences is 1 Feb. 1956. Proposals received prior to that date will be reviewed during the spring meetings of the advisory panels, and final disposition will be made approximately 10 weeks from the dates of those meetings. Proposals received after 1 Feb. 1956 cannot be reviewed until the following fall.
- Twenty-eight fellowships are offered by the American Association of University Women to American women for advanced study or research during the academic year 1956–57. In general, the \$2000 fellowships are awarded to young women who have completed residence work for the Ph.D. degree or who have already received the degree; more mature scholars receive \$2500 to \$3500 awards. Most of the fellowships are un-