is sponsored by Fritzsche Brothers, Inc., New York.

HARVEY C. DIEHL, professor of chemistry at Iowa State College, is the winner of the Fisher award in analytic chemistry, sponsored by the Fisher Scientific Co. of Pittsburgh, Pa. This award of $1000 and an etching is given to recognize and encourage outstanding contributions to the science of analytic chemistry in the United States or Canada.

MERTON F. UTTER, associate professor of biochemistry at Western Reserve University, has been chosen to receive the $1000 Paul-Lewis Laboratories award in enzyme chemistry. The prize was established by Paul-Lewis Laboratories, Inc., Milwaukee, Wis.

OTTO M. SMITH, emeritus professor of chemistry and chemical engineering and director of the Research Foundation at the Oklahoma Agricultural and Mechanical College, will be presented with the $1000 scientific apparatus makers award in chemical education.

CLARENCE E. LARSON has been appointed vice president in charge of research for the National Carbon Co., a division of the Union Carbide and Carbon Corp. He was formerly director of the Oak Ridge National Laboratory, which is operated by Union Carbide for the Atomic Energy Commission. Larson will head all of the National Carbon Co.'s research activities and will be a member of the corporation's research committee. His headquarters will be in Cleveland, Ohio, at the company's new research laboratory that is now under construction.

L. M. CURRIE, former vice president in charge of research, will continue as vice president and will assume new responsibilities involving sales, production, development, and research.

CHARLES L. DUNHAM has been appointed director of the Atomic Energy Commission's Division of Biology and Medicine, effective 1 Oct. He succeeds JOHN C. BUGHER, who will return to the Rockefeller Foundation, where he was recently named director of medical education and public health. Dunham became deputy director of the Division of Biology and Medicine in July 1954. He is succeeded in this post by CHARLES W. SHILLING, who since July has been serving as a special assistant to Bugher [*Science* **122**, 409 (2 Sept. 1955)].

WILLIAM E. REYNOLDS, assistant professor of preventive medicine at the Harvard Medical School since 1949, became head of the department of public health and preventive medicine at the University of Washington in Seattle on 1 Sept. He succeeds Leland Powers, who resigned in 1953 to join the medical faculty of the American University in Beirut, Lebanon. Reynolds' research interests include rheumatoid arthritis, heart disease, and eye diseases in newborn infants.

R. E. BLACKWELDER delivered this summer's Timothy Hopkins lectures at the Hopkins Marine Station of Stanford University. The series of 10 lectures had the general title "Basic biological concepts." Blackwelder recently resigned from the Smithsonian Institution to pursue studies on the principles of biology.

ROBERT F. MEHL of Carnegie Institute of Technology has been invited to lecture at the Royal School of Mines, University of London, 20–25 Oct. Mehl, who is head of the department of metallurgical engineering and dean of graduate studies at the institute, is the first American to receive a lecture invitation from the British institution since its founding 100 years ago. He will discuss diffusion in solid metals and alloys; formation of ferrite and bainite from austenite; the pearlite-austenite reaction; and the growth of metal crystals from metal vapor.

BENJAMIN PASAMANICK, formerly associate professor in the division of mental hygiene, Johns Hopkins School of Hygiene, has been appointed professor of psychiatry at Ohio State University College of Medicine, and director of research at the Columbus State Psychiatric Institute.

ELLIS R. LIPPINCOTT, associate professor of chemistry at Kansas State College since 1951, has been appointed professor of chemistry at the University of Maryland. Lippincott is an authority on infrared and Raman spectroscopy. Another phase of his work has been concerned with the hydrogen bonds of proteins and biological substances. His principal activity at Maryland will be the development of a satisfactory theory of the nature of chemical bonds.

R. W. LAMONT-HAVERS, for the last year medical director of the British Columbia Division of the Canadian Arthritis and Rheumatism Society, has succeeded GIDEON K. DEFOREST as associate medical director of the Arthritis and Rheumatism Foundation, New York. DeForest will resume his duties on the teaching staff of the Yale University School of Medicine, where he is also head of the arthritis clinic.

OLIVER F. SENN, former assistant chairman of the chemistry department, Stanford Research Institute, has been appointed chairman. Recently he has centered his attention on research in waste utilization and air pollution.

Necrology

JOHN C. DESSLOCH, Rochester, N.Y., 73, chief anesthesiologist at Genesee Hospital for 25 years and a member of the staff for 41 years, former president of Associated Anesthetists of the United States and Canada, 9 Sept.

GRAHAM EDGAR, Greenwich, Conn., 67, consulting chemist to Ethyl Corp., New York, former professor of chemistry at California Institute of Technology and the University of Virginia, World War I consultant chemist to the Army Ordnance Corps, and former staff member of the National Research Council, 8 Sept.

W. REDETT HATFIELD, White Plains, N.Y., 58, dentist and former assistant professor at Columbia University, 6 Sept.

GERADUS P. HERRICK, New York, N.Y., research engineer, "father of convertible aircraft," World War I captain in the aviation section of the Army Signal Corps, 9 Sept.

GEORGE A. HULETT, Princeton, N.J., 87, emeritus professor of chemistry at Princeton University and first professor of physical chemistry to be appointed there, a founder of the Army Chemical Warfare Service, 6 Sept.

WILLIAM F. JENNINGS, Mendham, N.J., 69, powder metallurgist, 14 Sept.

ALFRED E. MIDGLEY, Linden, N.J., 67, chemist, 8 Sept.

GUSTAVE NOBACK, Forest Hills, N.Y., 65, retired professor of anatomy at Cornell University, former chairman of the department of anatomy at the College of Dentistry, New York University, former professor and head of the department of anatomy at the University of Puerto Rico, 10 Sept.

ROBERT SALTER, Washington, D.C., 63, chief of soils research for the Department of Agriculture and former head of the Soil Conservation Service, former chairman of the Ohio State University's Agronomy Department, vice president in 1938 of AAAS Section O, Agriculture, 14 Sept.

HAAKON STYRI, Philadelphia, Pa., 69, research consultant and metallurgist, 13 Sept.

Education

■ Development and construction of a new radiotelescope for solar research has recently been announced by Donald H. Menzel, director of Harvard College Observatory. This radiotelescope, technically known as the dynamic spectrum analyzer, will be used to further basic scientific knowledge of the sun by studies of the radio emission from active sunspots and other solar disturbances.

The radiotelescope will consist of an antenna 28 feet in diameter, used in

conjunction with highly sensitive receivers, which scan the frequency range from 100 to 600 megacycles at the rate of 10 times per second. This solar radiotelescope will be the first of its type in the country. The equipment will be placed in operation at the Upper Air Research Observatory at Sacramento Peak, N.M., in the early part of 1956. This observatory, which is a joint scientific operation by Harvard and the Air Force, is now devoted largely to optical observations of the sun with coronagraphs and other specialized optical instruments.

Construction of the new radiotelescope has been made possible through financial support extended by the Geophysical Directorate of the Air Force Cambridge Research Center. Henry Jasik, consulting engineer of Mineola, N.Y., will serve as electronics consultant to the project.

The astronomer-in-charge of the new telescope will be Alan Maxwell, recently of the Jodrell Bank Experimental Station of the University of Manchester, England. He joined the Harvard College Observatory staff in August. Richard N. Thomas, of the observatory staff, will direct the scientific project in conjunction with Menzel.

■ A special advanced course in theoretical problems of microwave physics will be offered by the California Institute of Technology this coming year for the benefit of the institute's Industrial Associates. The new course, which will be conducted by Charles H. Papas, associate professor of electrical engineering, was inspired by the interest of Industrial Associates representatives who attended a series of seminars on antenna theory held at C.I.T. last fall. The institute does not ordinarily offer courses for industry.

■ The University of Maryland issues an unusual periodical, *The Barker,* which is published bimonthly by Arnold W. Kellner, Sr., manager of the animal farm at the university's school of medicine. The 4-page mimeographed newsletter is distributed to the employees of the animal farm, to science teachers in the Baltimore schools, and to interested employees at the university. *The Barker* first appeared in March of this year as a 3-page mimeographed letter. Subsequent issues have been a page larger.

Contents of the publication vary from a long story—continued through two issues—about how Baltimore met the problem of supplying research dogs from the municipal pound, to helpful hints on animal care. The first issue carried an invitation to visit the animal farm daily from 10 A.M. to 4 P.M., without appointment except for large groups.

■ Lehigh University will dedicate its new Fritz Engineering Laboratory on 14 Oct. The building consists of a seven-story section 130 feet by 70 feet and a four-story section 114 feet by 24 feet. The main test bay of the new building measures 50 feet by 130 feet. It houses a 5-million-pound testing machine that is serviced by a 20-ton crane 65 feet overhead.

■ The teaching of psychiatry has been expanded at the University of Oklahoma School of Medicine with the appointment of two more full-time psychiatrists and the opening of the first 20 of 60 neuropsychiatric beds at University Hospitals. Although the neuropsychiatric areas were built 3 years ago, it was not until this year that the legislature appropriated moneys to start operating the in-patient services.

With the opening of the 20 beds in August and the use of 114 affiliated beds at the Oklahoma City VA Hospital, the training of the first four psychiatric residents is under way. The psychiatric outpatient service, which has been in operation for many years, will continue to expand as more beds are opened.

The two new appointees are Donald C. Greaves, who has been attending psychiatrist at the Payne Whitney Clinic in New York, and John Gussen, formerly of the Karoline University Hospital, Stockholm, Sweden. Greaves was appointed associate professor of psychiatry, and Gussen an assistant professor.

■ New York University is erecting a 300-foot weather study tower at Indian Point in Buchanan, N.Y. This tower represents the first step in the construction of an electric generating station by Consolidated Edison. The proposed $55-million station will use fuel oil, as well as the fission of atoms, to generate electricity.

Consolidated Edison has contracted with the research division of N.Y.U.'s College of Engineering for a 1-year study of local weather conditions. The study will determine the necessary height of the plant's stack to prevent pollution in the vicinity.

■ Cornell University is establishing a biological and conservation station at Shackelton Point on Lake Oneida, N.Y., on a 400-acre estate bequeathed to the university by an alumnus, Charles S. Brown, Syracuse engineer and inventor who died in 1953. Gustav A. Swanson, head of Cornell's conservation department, will be responsible for developing the station, and Edward C. Raney will direct its scientific program.

The area is an exceptionally rich one for work in biology and conservation. Research projects have begun, and plans for summer classses and extension experiments and demonstrations are under way. Cooperating with the State Conservation Department, the university expects to develop a series of ponds to attract even more wildlife and for pond fisheries studies.

■ Rensselaer Polytechnic Institute and Raytheon Manufacturing Co., Waltham, Mass., have jointly announced the initiation of a cooperative education plan. Under this plan selected electrical engineering students will be given assignments in Raytheon's laboratories and factories so that they may parallel their academic pursuits with actual work in their chosen field. The program will lead to a bachelor's degree.

Grants, Fellowships, and Awards

■ During the year June 1956 to June 1957 the Office of Naval Research will continue its program in support of basic research in astronomy and astrophysics. As in past years, an advisory committee of seven astronomers nominated by the Council of the American Astronomical Society will aid ONR in evaluating proposals received. At present the membership of this committee is as follows: O. C. Wilson, *chairman,* B. J. Bok, J. W. Evans, G. C. McVittie, A. B. Meinel, J. J. Nassau, and K. Aa. Strand.

Proposals for research to be undertaken should be addressed to the Chief of Naval Research, Department of the Navy, Washington 25, D.C., Attention: Code 430. Ten copies will be required and, if possible, a letter of approval from the institution at which the work will be performed. These should be received *not later than 15 Dec.*

■ During the coming school year, 140 students throughout the nation will share awards totaling $10,000 in the 5th annual program of Science Achievement Awards. The program is conducted by the Future Scientists of America of the National Science Teachers Association. The contest is open to all students in grades 7 through 12 in public, private, and parochial schools. Awards consisting of U.S. Savings Bonds, gold pins, certificates, and school trophy plaques will be given for outstanding projects. Honorable mention awards will be granted to several hundred additional students. Equal awards will be given in each of eight geographic regions. The National Association of Secondary-School Principals has placed this contest on the Approved List of National Contests and Activities for 1955–56.

Any project—for example, an investigative problem, library research, model building—in general science, biology, chemistry, physics, or any field of science or mathematics at any grade level (7