

THE LEVERHULME RESEARCH FELLOWSHIPS

THE Advisory Committee for the Leverhulme Research Fellowships has recommended, and the trustees have approved, the following awards, tenable for varying periods up to two years:

W. H. B. Court, M.A., lecturer in economic history, University of Birmingham, "India and British Economic Policy in the Past Century."

W. Cule Davies, D.Sc., Ph.D., lecturer in chemistry, University College, Cardiff, Leverhulme Research Fellow, "Studies of the Organic Compounds of Nitrogen, Phosphorus and Arsenic."

R. M. Davies, D.Sc., lecturer in physics, University College, Aberystwyth, "Experimental Investigations on Turbulent Flow in an Air-tunnel."

R. Dennell, M.Sc., assistant lecturer in zoology, Imperial College of Science and Technology, London, "The Structure and Physiology of the Luminous Organs of Atlantic Deep-sea Crustacea."

R. W. Firth, M.A., Ph.D., reader in anthropology, University of London, "The Social Structure and Economic Organization of Rural Malays."

D. Ll. Griffiths, F.R.C.S., clinical assistant, Orthopedic Department, Manchester Royal Infirmary, "The Comparison of Radiological and Histological Features in Bone Tumors."

A. E. Ingham, M.A., university lecturer in mathematics, Cambridge, "The Analytical Theory of Numbers."

B. Jones, B.Sc., Ph.D., lecturer in chemistry, University of Sheffield, "A Study of Reaction Kinetics in Solution."

E. B. Maxted, D.Sc., Ph.D., special lecturer in catalysis, University of Bristol, "Studies in Catalyst Poisoning."

D. A. O'Duffy, B.Sc., research and development assistant, Bahrein Petroleum Company, Leverhulme Research Fellow, "Lubrication Problems at High Temperatures and Pressures."

L. F. Taylor, M.A., I.E.S. (Ret.), late research lecturer in Indo-Chinese ethnography and linguistics, University College, Rangoon, "An Ethnographical and Linguistic Survey of Burma."

Miss M. L. Tildesley, chairman of the Comité de Standardisation de la Technique anthropologique, London, "The Definition, Measurements and Classification of Anthropometric Characters."

W. A. Waters, M.A., Ph.D., lecturer in chemistry, University of Durham, "Mechanisms of Reactions Involving Free Organic Radicals."

E. L. E. Wheatcroft, M.A., professor of electrical engineering, University of Leeds, "The Mechanism of Development of Electric Sparks with Reference to Lighting Discharges."

THE SEVENTEENTH CHEMICAL EXPOSITION

THE seventeenth Chemical Exposition will be held in the Grand Central Palace, New York City, during the week beginning on December 4, when it will celebrate the completion of its twenty-fifth year of service to the chemical and allied industries. Many of the exhibitors

in the first exposition, which was held in 1915, have engaged space this year. It is now established on a biennial basis.

Three floors of the Grand Central Palace have been reserved for the exposition, which will include chemicals and chemical products, laboratory equipment and supplies, instruments of precision, materials handling equipment, brewing, distilling and bottling equipment, industrial chemical machinery and materials, containers and packaging machinery and materials of construction. At the last exposition more than 46,000 visitors attended, representing 45 states in the United States and 130 cities and towns in 47 foreign countries. Members of the Advisory Committee include the presidents of the principal chemical organizations. Its chairman is Dr. M. C. Whitaker, long a leading figure in the chemical industry. Charles F. Roth, who has been similarly responsible for the preceding expositions, will be personally in charge.

The student course in chemical engineering which has become an established feature of the exposition, will again be presented. Professor W. T. Read, dean of chemistry of Rutgers University, who has served as director in previous expositions, will this year again be in full charge. This course enables the selected college students who enroll to coordinate lectures by leading authorities with actual examination of the materials and chemical engineering equipment discussed.

Unit processes of chemical engineering will be represented by a broad range of exhibits. Combustion processes include furnaces, kilns, refractories and the recording instruments essential for regulation and control. Crushing, grinding and mechanical separation will be represented by sifters, agitators, classifiers and ball mills. Classification of materials based on magnetic properties also will be demonstrated. Advances in the processes of filtration, evaporation and drying will be illustrated by many exhibits. Apparatus will include filters of every type and evaporating equipment applicable not only to the chemical industries but also to the food industries. Drying equipment will be shown in its relation to every phase of the pharmaceutical industry, and there will be special reference to the processing of foods.

EXHIBITION OF THE AMATEUR ASTRONOMERS ASSOCIATION OF NEW YORK CITY

THE first national exhibition of the work of amateur astronomers was opened in the American Museum of Natural History on July 30 and will close on August 20. The exhibition is sponsored by the Amateur Astronomers Association of New York City and by other societies in the metropolitan area. It includes exhibits from more than two hundred amateur

astronomers belonging to more than thirty clubs throughout the country.

A national convention of amateur astronomers, with sessions at the museum and the New York World's Fair, will be held on August 19 and 20, the closing days of the exhibition. August 19 will be Amateur Astronomers Association Day at the New York World's Fair. An address "Astronomy in the World of To-morrow" will be given on that day at the fair by Dr. Harlow Shapley, director of Harvard College Observatory.

A nine-inch reflecting telescope made by school students in Flint, Mich.; star photographs from an amateur in New Brunswick, Canada; lens-making tools from Lewiston, Maine, and a home-made spectroscope from Norwalk, Conn., are among the exhibits. The Alabama Astronomical Association shows photographs; Earl C. Witherspoon, of Sumter, S. C., is displaying a home-made Herschel wedge for use in solar telescopic observations. A Schmidt camera, the new type of telescope now being widely used by professional astronomers, difficult of design and construction, is being exhibited by Stanley Brower, of Plainfield, N. J., with samples of stellar photographs. A celestial globe, complete with automatic electric motions, is being shown by E. C. Stanton, of Bethesda, Md. The Cook Observatory of Wynnewood, Pa., is exhibiting photographs of its equipment and samples of its work. Exhibits from members of the National Capital Amateur Astronomers Association in Washington, D. C., are also on view. The New Haven Astronomical Society includes in its exhibit tools and devices used in the production of telescope mirrors, grinding machines, testing apparatus and the like. Donald S. Kimball, president of the group, is showing a series of forty-four auroral photographs taken from his home in Hamden, Conn.

Visitors are invited also to visit the workshop of the optical division of the association in the basement of the Hayden Planetarium, where they may watch the making of telescopes, mirrors, lenses, mountings and other equipment. The Junior Astronomy Club is represented by photographs and the paintings made on its 1932 eclipse expedition to Peru, as well as by instruments constructed by its members.

Honorary life membership in the association will be presented during the convention to Leslie C. Pel-tier, of Delphos, Ohio, who has to his credit the discovery of several comets and novae. A special performance will be given at the Hayden Planetarium and at "Time and Space," the special exhibit of the museum at the World's Fair. The exhibition will be open on week days and Saturdays from 10 A.M. to 5 P.M. and on Sundays from 1 P.M. to 5 P.M.

RECENT DEATHS AND MEMORIALS

DR. WILLIAM JAMES MAYO, of the Mayo Foundation and the University of Minnesota, surgeon and chief of staff of the Mayo Clinic, died on July 28 at the age of seventy-eight years.

DR. WILLIAM ARTHUR TARR, professor of mineralogy and geology at the University of Missouri, died on July 28. He was fifty-eight years old.

DR. HARTLEY BURR ALEXANDER, professor of philosophy at Scripps College, Claremont, Calif., previously professor of philosophy at the University of Nebraska, died on July 27 at the age of sixty-six years. In addition to his publications in philosophy and psychology Dr. Alexander is known for his work in Indian anthropology.

DR. ALFRED HARKER, emeritus reader in petrology at the University of Cambridge, a fellow of St. John's College, died on July 29 at the age of eighty years.

Nature announces the death of Dr. W. A. Jolly, professor of physiology in the University of Cape Town, and of Brigadier-General the Hon. C. G. Bruce, leader of the Mount Everest Expeditions of 1922 and 1924.

As a permanent recognition of the contribution of the late Professor Charles Sumner Plumb, the animal husbandry building of the Ohio State University will be called "Plumb Hall," on the recommendation of the College of Agriculture, in which Professor Plumb served as professor of animal husbandry for thirty-seven years. At the same time the board of trustees recorded its "profound appreciation and the gratitude of the university for the gift of the priceless library" of Professor Plumb, whose death occurred in March. The library consists of more than 1,600 items.

SCIENTIFIC NOTES AND NEWS

THE "golden jubilee" of David Fairchild, formerly chief of the Division of Plant Exploration and Introduction of the U. S. Department of Agriculture, author of "The World is My Garden," who joined the department fifty years ago, was marked on July 24 at Glenn Dale, Md., when Secretary Henry A. Wallace presented him with the Frank N. Meyer Medal. This was the sixteenth award of the medal, which was established

by the will of Mr. Meyer, who was also a plant explorer of the Department of Agriculture.

THE Southern Minnesota Medical Association has presented its annual gold medal to Dr. Vernon L. Hart, professor of surgery at the medical school of the University of Minnesota, for the best scientific exhibit at the recent meeting of the Minnesota State Medical