

Aid for Polish Science

A \$475,000 appropriation to aid science in Poland has been announced by the Rockefeller Foundation. At the end of April the Ford Foundation also announced a \$500,000 grant to stimulate cultural, science and technical exchanges between Poland and the West. Both programs developed from visits by the foundation's representatives to Poland last February. In each case, they were the first such efforts by the foundations on behalf of Soviet-dominated countries.

The Rockefeller program includes \$175,000 for fellowships to enable from 20 to 30 young Polish scholars to study in other countries during the next year. The remaining \$300,000 is to buy materials and equipment for Polish universities and research institutions. In addition, half a dozen senior Polish scholars are expected to be included in the foundation's regular program for travel grants. This would be outside the special appropriation.

Approximately half of the Polish fellows may seek to come to the United States. Problems of passports and visas will be handled by the scientists themselves. The State Department has indicated it is "the general attitude of our Government to encourage such contacts with Poland." No favors or exceptions from official policy have been asked.

The fellows will be drawn largely from the biological sciences, particularly medicine and agriculture. After personal interviews by foundation advisers with candidates nominated by Polish institutions, awards will be made that will assure the scholars posts upon their return to Poland.

The \$300,000 grant will aid the universities at Warsaw, Poznan, Wroclaw, Lublin, Cracow, and Lodz, medical and agricultural schools and research institutes affiliated with the Ministries of Health and Agriculture, and the Polish Academy of Sciences.

Film on Security Practices

Can the Federal Government's industrial security program grow so large that eventually every engineer and scientist in the country will require clearance in order to work anywhere at all? This question is raised in a movie previewed recently in Washington by the national council of the League of Women Voters. The film, produced by the League's Carrie Chapman Catt Memorial Fund, neither condemns nor condones current security practices. The League's purpose in making the film is not to criticize the industrial security program, "but to get people to think about it."

"Kill Only the Ivy" is the title. It

will be offered soon to League units all over the United States for local presentation. The movie shows the outcome of two fairly typical cases which actually came before the screening board set up in the Defense Department to pass on people who apply for secret and top-secret work in defense plants. In both cases dramatized, clearance had been denied. But eventually, in one instance, the decision was reversed.

Women in Engineering

Emma C. Barth, an engineer in the rotating apparatus department at the Westinghouse plant in East Pittsburgh, Pa., commented recently on discrimination against women engineers. She pointed out in a lecture that of more than 120,000 women who received degrees in 1956 only 62 were graduated in engineering, while at the same time a survey by the National Education Association showed that this country will need 630,000 engineers by 1965 but will have only 530,000 available then. Miss Barth also observed that the male advantage in basic engineering aptitude tests is only 3 to 2 over women, according to a 1956 report of the U.S. Department of Labor.

Brown-Hazen Fund

The Research Corporation has announced the establishment of the Brown-Hazen Fund, its first program of grants in the medical sciences. The fund's resources are derived from royalties on the production of nystatin, the antifungal antibiotic discovered and developed by Elizabeth L. Hazen and Rachel Brown of the scientific staff of the New York state laboratory.

The fund committee will consider requests for support of fundamental research in biochemistry, microbiology, and immunology. Inquiries may be addressed to Dr. Rachel Brown (secretary), Division of Laboratories and Research, New York State Department of Health, Albany 1, N.Y., or to Mr. Charles H. Schauer, Research Corporation, 405 Lexington Ave., New York 17, N.Y.

Pyroceram

The Corning Glass Works has reported the development of a versatile new substance, Pyroceram, that is harder than steel and lighter than aluminum. The material was announced at the recent dedication of Corning's new research center. The first practical use of Pyroceram will be in radomes, the nose cones

that protect the directional instruments in guided missiles.

Pyroceram starts out as glass and is melted and fashioned in the same way. But each batch of raw material includes chemical ingredients that contain a nucleating agent, which, under heat treatment, forms crystals. Glass is noncrystalline, whereas Pyroceram is crystalline.

The new material can be cast like metal in a foundry, thus allowing the fabrication of large and complex shapes. The substance is extremely hard and fine grained. It can be made transparent or opaque and, by controlling the chemical composition and growth of the Pyroceram crystals, materials of widely differing properties can be produced. Pyroceram was invented and developed by S. Donald Stookey, manager of Corning's chemical research department.

Cloud-Seeding

An evaluation of the effects of commercial cloud-seeding that has been carried out in the Great Plains area is being conducted by the Advisory Committee on Weather Control. The problems of this evaluation are being called to the attention of interested meteorologists and statisticians before an attempt is made to calculate the precipitation during the seeded period.

At present the committee staff is studying techniques for the effective forecasting of precipitation in the summertime. The problems that present themselves immediately are (i) how to find a satisfactory control area and (ii) how to deal with the wide variability of the shower-type precipitation that occurs during the summer. Comments and suggestions will be appreciated. These should be sent to Max A. Woodbury, Advisory Committee on Weather Control, Washington 25, D.C.

Luminous Clams

William D. McElroy, professor of biology at Johns Hopkins University and director of the university's McCollum-Pratt Institute, is in Naples, Italy, collecting specimens of the luminous clam, *Pholas dactylus*, that is native to the area. Through the cooperation of the Naples Experimental Zoological Station, he hopes to procure several hundred of these mollusks, which he will have packed in ice and shipped to the university.

McElroy and his colleagues will use the clams in their studies of the conversion of chemical energy into light energy. The research group at Hopkins has long been concerned with the chemical in fireflies, adenosine triphosphate, that is