

ery regarding the laws of nature or have been responsible for an invention not based on a previously known fundamental law of nature. Discoveries were to be weighed in accordance with their general value to mankind and their contribution to man's fund of knowledge. Ballots were cast by 1116 electors from a total of 49 foreign countries and from each of the 50 states of the United States, in the world-wide election.

### Bohr Speaks at Laboratory Dedication

Niels Bohr, the Danish nuclear physicist, was the principal speaker at the dedication, 25 June, of General Dynamics Corporation's new John Jay Hopkins laboratory of pure and applied science, outside San Diego, Calif. In a short address, Bohr spoke of the interaction between technology and science and of the

technological demands that atomic physics has made. He said that the new laboratory has "most promising prospects" of meeting these demands.

The laboratory, which is located on a 300-acre site just north of San Diego, has, in addition to the standard research center buildings, a building to house its reactor, a linear accelerator, a fusion research center, and a "hot cell" facility. In all, there are approximately 100 laboratories in the group. In a demonstration at the dedication ceremonies, the power output of the reactor, located at the north end of the site, was increased from 1 watt to 1 million kilowatts in less than 0.1 second. The actual flash lasted approximately 0.015 second. The self-regulating feature of the reactor's fuel-moderator elements of uranium and zirconium hydride immediately reduced the power to normal operating levels.

Among the many messages read at the

ceremony was one from President Eisenhower, in which he sent congratulations to General Dynamics and continued:

"I hope that your new laboratory will be the home of many original and challenging ideas, concepts and products, and that it will fully realize the great potential you visualize for it."

### Scripps Vessel Sails for 2-Year Study

The research vessel *Stranger* of Scripps Institution of Oceanography has sailed for Thailand, where the institute will conduct a 2-year oceanographic program under the auspices of the Thai and Vietnam governments and the U.S. International Cooperation Administration. The ship will be based in Bangkok. The scientific leader of the expedition is Anton Brunn, Danish zoologist, who was leader of the Danish round-the-world *Galathea*



Aerial view of General Dynamics Corporation's John Jay Hopkins laboratory for pure and applied science, San Diego, California. The new facility, named for the corporation's founder, was dedicated 25 June.

expedition. Brunn will be joined by other scientists in Thailand.

The purpose of the expedition is two-fold: (i) to conduct oceanographic and marine biological surveys of the Gulf of Thailand and South China Sea, particularly with a view to assessing potential food resources of the area, and (ii) to train scientists from several countries in Southeast Asia in the techniques of oceanography. The Gulf of Thailand and the adjacent portion of the South China Sea comprise the largest semi-enclosed body of shallow ocean water in the world. In an area of 200,000 square miles, the water is nowhere deeper than 600 feet.

### Chinese Translation Program

The National Science Foundation will begin next year to translate many of the scientific and technical journals that are published in Communist China. The projected program is part of an attempt to avoid being caught short on Chinese scientific advances, according to Burton W. Adkinson, head of the foundation's Office of Scientific Information. The program will start with the translation of two or three journals and will be expanded in future years.

According to a survey by the foundation, about 450 scientific journals are published in Communist China. More than 200 of these are now being received by government libraries in Washington, such as the Library of Congress. Most are untranslated, according to Adkinson.

There has been a very significant increase in scientific activity in China, according to many reports. It is said, for example, that the number of research institutes connected with the Chinese Academy of Sciences has doubled since 1952. The new NSF program will be designed to translate the most important journals originating in the 68 institutes.

### Plans for Mohole Advanced

The Mohole project, a plan to drill into the boundary between the earth's crust and mantle, has been advanced recently by a decision of the Council of the National Academy of Sciences-National Research Council. The council has authorized the AMSOC Committee, which is in charge of the project, to accept responsibility for organizing and conducting the operations connected with the

project. Before the decision, the committee's activities were limited to feasibility studies. The chairman of the AMSOC Committee, Gordon Lill, and the technical director, Willard Bascom, have reported that the studies have indicated that the project is both "feasible and highly desirable." The report continues: "The feasibility of drilling to the mantle depends on two things: (i) the depth to the Mohorovicic discontinuity, and (ii) the maximum reach of drilling tools. . . . We find that there are places both in the Atlantic and the Pacific basins where the total distance from the water surface to the mantle is less than 9.5 Km. (about 31,000 feet). We also find that leading members of the oil industry believe that 'a 50,000-foot hole would be possible if there were any reason to drill it and if the best of deep-drilling equipment and technology were assembled.' (the deepest hole to date is 25,340 feet)."

A tentative schedule issued by the committee calls for completion of the project, which is expected to cost \$15 million, by 1962.

In another development, Columbia University recently received a grant of \$30,000 from the National Science Foundation to support a site survey for the Mohole project.

### News Briefs

The Air Force Research and Development Command has announced the successful development of a new information machine which reads typewritten pages and translates them into electrical signals at the rate of 200 characters per second. The new machine, the first of its kind, is called a print reader.

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The Executive Board of the National Council on the Participation of Women in Science [see *Science* 129, 1117 (1959)], at a meeting in Philadelphia on 20 June, voted to disband.

A new organization, the American Council on Women in Science, is being formed, with Mary Louise Robbins, professor of bacteriology at the George Washington University School of Medicine, Washington, D.C., as acting chairman. Other charter members include: Mrs. Ethaline Cortelyou (Aerojet-General Corporation, Atlantic Division, Frederick, Md.); Irene Corey Diller (Institute for Cancer Research, Philadelphia, Pa.); Dorris Hutchinson, (Sloan-Kettering Institute for Cancer

Research, New York); Betty McLaughlin (consultant in pharmaceutical chemistry, Washington, D.C.); and Ernestine B. Thurman (Division of Research Grants, National Institutes of Health, Bethesda, Md.).

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The establishment of a new department of virology on the Berkeley campus of the University of California has been announced. The department is one of the first in any major university in the world to be dedicated to the study of viruses. It will be closely associated with the 10-year-old virus laboratory on the Berkeley campus.

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A number of kinds of radiation equipment will be supplied free of charge to the Government of Brazil, the International Atomic Energy Agency has announced. The equipment includes ionizing chambers of various types, Geiger and scintillation counters, radiation monitors, and dosimeters.

These materials are being provided in connection with the technical assistance the agency is giving Brazil to enable it to set up a service to carry out precise measurements of radioactivity and radiation doses in connection with the purchase, distribution, and use of radioactive material. The equipment supplied will be utilized by the National Institute of Technology of the Ministry of Labor, Industry, and Commerce and the Institute of Biophysics, Faculty of Medicine, University of Brazil.

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The effectiveness of electronic devices and other equipment as aids in the teaching of science and mathematics is the subject of a major research study currently being made at Ohio State University. For purposes of the study a mobile laboratory has been designed which will contain closed-circuit television equipment, film-strip and motion-picture apparatus, a van de Graaf generator, and various demonstration devices. Grants in support of the \$100,000 project have been made by the U.S. Office of Education, the Battelle Memorial Institute (Columbus), and Ohio State University.

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A summer program for high-school science students is being offered at the New York Botanical Garden, 6 July-7 August, under a grant from the National Science Foundation. The program, designed for high-school students of high ability, will include classroom lectures, laboratory work, and research, at the college level.