quirements under the Food and Drug Act have been completed. Under the law, interested persons will be allowed 30 days in which to make written comments. Any such observations "will be taken into account in the drafting of the order," the announcement said. This action followed 2 years of tests that proved seven of the banned colors had caused "definite injury" when ingested by animals. Ten other colors were so similar in chemical composition to those tested that they were also ruled off the cosmetic market.

## Nuclear Medicine at Chicago

The University of Chicago is establishing a section of nuclear medicine in the department of medicine of the Division of the Biological Sciences to serve as a focal point for those members of the unversity with special interest and competence in the broader aspects of nuclear energy relating to public health. To help support the section over a 10-year period, the Rockefeller Foundation has appropriated \$500,000.

In cooperation with other divisions of the university, the section of nuclear medicine will examine the legal, psychological, and social implications with respect to community development and industry of various problems arising from the use of nuclear energy. Attention will be given such general areas of concern as the increase in natural background radiation resulting from the use of nuclear devices and the probable consequences, genetic and physiologic, of increased exposure of man and domestic animals to ionizing radiations.

## **Moon Relay Station**

Using the moon as a passive relay station, the U.S. Navy will establish a new radio communications link between Washington and Pearl Harbor, the country's major military command center in the Pacific. The new system, known as the Communications Moon Relay Project, is the outgrowth of 9 years of work by the Naval Research Laboratory.

The new system will transmit radio signals from large saucer-shaped antennas 84 feet in diameter. These signals will bounce off the surface of the moon and will be picked up by parabolic antennas at the receiving end. The signals will make the trip in two and a half seconds. The surface distance between Washington and Pearl Harbor is 4519 miles. By way of the moon, the distance is approximately 460,000 miles.

A number of major advantages are expected to result from the new system. Reliability in transmission is perhaps the

major one. Unlike conventional radio channels, the moon-relay system will not be impaired by noise interference and by blackouts caused by disturbances in the ionosphere. Another advantage is that the system will be virtually invulnerable to jamming. One method of jamming the moon circuit would require the location of a jamming station within a few miles of either the receiving or the transmitting station. A second jamming technique, that of sending signals of the same frequency to the moon, could be overcome by rapid variation in the frequency of the signals sent by this country. In addition to these advantages, the new system opens up a whole new spectrum of frequencies in the already overcrowded radio channels for long-range communication.

The transmitting and receiving stations are now under construction, and pilot operation is expected to begin within the coming year, according to Navy officials.

## **News Briefs**

The European Atomic Energy Community (Euratom) and the U.S. Atomic Energy Commission have announced that private and government enterprises in the six countries comprising Euratom have been invited to submit proposals to build and operate nuclear power plants under the joint United States-Euratom nuclear power program. The objective of the program is to install within the community in the next 4 to 6 years approximately 1 million kilowatts of electrical generating capacity. Those who intend to submit proposals are requested to give notice to the Euratom Commission by 28 May. The deadline for submission of proposals is 1 September, and the date for selection of projects by Euratom and the U.S. AEC is 31 December.

The state of Victoria in Australia has recently established the state's second university, Monash University, at Clayton, in the metropolitan area of Melbourne. An interim council for planning is now advertising certain key positions, including those of vice-chancellor and librarian. There are also openings for professors of engineering, chemistry, physics, and biology. For information write to Mr. T. B. Paltridge, Australian Scientific Liaison Office, 1907 K St., NW, Washington 6, D.C.

The N.S. (nuclear ship) Savannah, the first nuclear-powered merchant vessel, will be launched on 21 July at the New York Shipbuilding Corporation ship-yard, Camden, N.J. President Eisenhower, in implementing the legislation

authorizing construction of the ship, in October 1956, directed the Atomic Energy Commission and the Department of Commerce to proceed as rapidly as possible with the design and construction, saying: "This new vessel will be a floating laboratory, providing indispensable information for the further application of atomic energy in the field of ocean transportation."

A new column entitled "Spectroscopic Tricks" has been started in Applied Spectroscopy. Brief contributions (not exceeding 500 words) that describe new or modified techniques and instrumentation in the field of spectroscopy may be sent to the editor, Leopold May, Psychiatric Institute, University of Maryland, Baltimore 1, Md.

The Society of Biological Psychiatry is a new affiliate of the AAAS. The society holds independent meetings and at times it also meets with other organizations, such as the combined meeting to be held in Atlantic City, N.J., 13-14 June, with the American Electroencephalographic Association. The society offers an annual prize for the best original research paper, and it has a research committee which sponsors research everywhere, for the organization is both national and international in scope. Joseph Wortis is president, and the secretary-treasurer is George N. Thompson, 2010 Wilshire Blvd., Los Angeles 57, Calif.

An 18-page printed booklet on Nuclear Science Fellowships has been published by the International Atomic Energy Agency in Vienna to inform governments of opportunities and procedures for obtaining help with the training of specialists for atomic energy programs. The booklet lists training opportunities in 49 specific areas of nuclear physics. Two groups of fellowships are offeredone of some 200 that has been made available to the agency by member governments, and another of a "considerable number" that will be financed out of the agency's own operating fund, which is built up from voluntary contributions.

Presentation of the first complete highschool chemistry course on motion-picture film, produced by Encyclopaedia Britannica Films, Inc., with the cooperation of the American Chemical Society, was announced at ceremonies in Washington last month. James R. Killian, Jr., Special Assistant to the President for Science and Technology, received a set of the new films on behalf of the Federal Government and was the principal speaker on the program. John C. Bailar, Jr., of the University of Illinois, president of the American Chemical Society, opened the program by discussing the contribution of the American Chemical Society in helping to produce the films and the ways in which educators can use them most successfully.

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The Engineers Joint Council, 29 W. 39 St., New York 18, N.Y., has announced the release of the 1959 Engineering Societies Directory. This is the first revision of this publication since 1956. The directory provides basic information concerning international, national, regional, state, and local engineering groups and lists, for each entry, address, membership, secretary, and organizational publications.

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In England, three stations of the Department of Scientific and Industrial Research—all concerned with the preservation, storage, handling, or protection of foodstuffs-will be transferred to the Agricultural Research Council on 1 July. They are the Ditton Laboratory at Larkfield, Kent; the Low Temperature Research Station at Cambridge; and the Pest Infestation Laboratory at Slough. The agreement between the Council for Scientific and Industrial Research and the Agricultural Research Council was made because the two councils believe that it is in the national interest to bring all government research on food other than fish under one body, in order to make the research more effective.

Field work has begun on a cooperative oceanographic expedition which will examine some of the sediments of the east shelf of the Gulf of California. Scientists from three institutions—the Scripps Institution of Oceanography, the Universidad nacional autonoma de Mexico, and the U.S. Navy Electronics Laboratory—are now engaged in the first of three trips connected with the study.

Some specific objectives of the project are study of the characteristics of the sediments and morphology of the deposits along a coastal plain-continental shelf; study of "beach ridges"; study of the effects of variations in climate on the characteristics of the sediments and the morphology of the deposits; and study of the transition between subaerial and marine sediments.

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A composite list of 137 research studies on psychopharmacologic drugs which are being conducted under support of grants from the National Institute of Mental Health is now available. These research studies, as classified by the institute's Psychopharmacology Service Center, fall into three main categories: 57 studies directly related to problems of drug development and assessment; 68 studies of the basic mechanisms of the action of psychopharmacological agents; and 12 studies pertaining to method de-

velopment and data analysis. Single copies of the list of research grants, divided by category and including the name and institution of each investigator and a brief description of his project, are available on request from the National Institute of Mental Health, Bethesda 14, Md.

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The Nuclear Division of the Martin Company has won the 1958 Miniaturization Award for the development of SNAP—111, the 5-pound atomic generator. The award, which annually recognizes advances in the art and science of miniaturization, was presented to the company last month by the president of Miniature Precision Bearings, Inc., sponsor of the program. The generator, developed by Martin under the auspices of the Atomic Energy Commission, is the first device to combine a radioisotopic heat source with a highly efficient thermoelectric conversion system.

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Russian-English and English-Russian dictionaries of terms used in the mathematical sciences are now being prepared by scholars working in this country and in Russia. The combined effort, initiated nearly 3 years ago as one of the results of a mathematical conference held in Moscow, is being supported by the academies of science of both countries. Work on the part of the project being done in this country is expected to be completed by June. Compilers from the University of Michigan are now preparing to get together with their Russian counterparts to review the work done to date. It is expected that the two dictionaries will be published in 1960.

The International Atomic Energy Agency has approved plans for the setting up of a functional laboratory to be built on a site adjoining the Austrian reactor and atomic laboratories at Seibersdorf, near Vienna. The new facility will be used for standardization of isotopes and preparation of radioactive standards; calibration and adaption of measuring equipment; quality control of special materials for nuclear technology; and measurement and analysis in connection with the agency's safeguards and health and safety program. Its services will be used by member states. The United States has offered to donate \$600,000 to be applied against the cost of constructing and equipping the laboratory.

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A booklet that highlights the extent and organization of Soviet research and development in the Far North and discusses the nature of Russia's over-all system of scientific and technological institutions has just been released by the Arctic Institute of North America. The 100-page publication is *Institutions of the U.S.S.R. Active in Arctic Research and Development*, by Vladas Stanka, a member of the research staff of the Arctic Institute's Arctic Bibliography Project. In all, 374 Soviet organizations and institutions directly or indirectly concerned with northern science and progress are listed, many with details regarding their fields of activity, organizational setup, and publications. An additional listing gives names and locations of 107 polar stations known to have been in operation in 1956.

A working group has been appointed to conduct major long-range scientific explorations of the moon's surface and environment, the National Aeronautics and Space Administration has announced. Headed by Robert Jastrow of NASA headquarters, the group is one of a number of working units whose members will follow through on experiments and correlate forthcoming satellite and space probe projects. Establishment of working groups in the fields of satellite beacons and orbiting astronomical observatories has been previously announced.

## Scientists in the News

SIDNEY BURWELL, professor of medicine at Harvard University Medical School, will retire 31 August to become Levine professor emeritus of medicine, after 40 years of academic service. A distinguished physiologist in the cardiovascular field, Burwell was appointed dean of the faculty of medicine and research professor of clinical medicine at Harvard in 1935, where he remained until 1949. He then returned to the research laboratory at the Peter Bent Brigham Hospital which he had maintained during his deanship at Harvard. He also organized a Medical Service and a Medical Research Laboratory at the Boston Lying-in Hospital. From 1927 until 1935 he was head of the department of medicine at Vanderbilt University Medical School. Burwell is coauthor of Heart Disease and Pregnancy. After his official retirement he plans to write the history of the Harvard University Medical School.

THOMAS PARRAN, president of the Avalon Foundation, New York, and former Surgeon General of the U.S. Public Health Service; and WARREN WEAVER, vice president of the Rockefeller Foundation and former president of the American Association for the Advancement of Science, have been elected to honorary membership in the National Association of Science Writers.