

and inventions. While initial research will be concerned largely with the national defense effort, use of the center for projects in various fields of peace-time science and engineering is anticipated.

RADIOISOTOPES

NEW CENTERS OF DISTRIBUTION IN NORTHEAST

Two new radioisotope distribution centers for the benefit of users in the Northeastern United States have been announced by the Atomic Energy Commission in recent months. Five hospitals in Rochester, N. Y., together with the University of Rochester Medical School, are cooperating with the AEC in distributing radioisotopes for clinical and diagnostic use. This program was undertaken by the University as a community service which not only will mean a large financial saving to the participating hospitals and patients, but also will bring to them the benefits of the University's extensive work in radiation research and development. The University of Rochester Isotope Center will use facilities of the Medical School and the atomic energy project for storing, handling, and processing the radioactive materials shipped from Oak Ridge. These will be standardized in the Medical School's hot laboratory and doses will be measured, transported to the hospitals, and administered in accordance with standard safe handling requirements. The initial investment for each hospital, it is pointed out, will amount to no more than \$2000 under the plan instead of anywhere from ten to thirty times that amount if the hospital were to establish its own program. It is estimated that the annual cost of the plan will be about \$10,000 less for each hospital than if separate programs were maintained.

The second distribution center, at the Brookhaven National Laboratory on Long Island, will supply radioisotopes not ordinarily available from Oak Ridge. Production in Brookhaven's new nuclear reactor will be principally concerned with requests for highly radioactive isotopes, isotopes with half-lives too short to permit long distance shipment, or with situations requiring special consideration because of geographical location or unusual delivery schedules. The higher neutron flux of the Brookhaven reactor makes possible the production of certain radioisotopes of considerably higher specific activity than can be produced in the Oak Ridge National Laboratory reactor, although the latter will continue to be the nation's principal radioisotope source.

Requests for radioisotopes must still be made directly to the Isotopes Division, U. S. Atomic Energy Commission, Oak Ridge, Tennessee, according to the AEC, and service irradiations will not be performed at Brookhaven unless authorized by the Isotopes Division. Inquiries will be handled at Brookhaven by the Laboratory's Isotopes and Special Materials Group, under the direction of Dr. Marvin Fox.

SUMMER OFFERINGS

MIT COURSES IN PROBABILITY, ACOUSTICS

The summer program of studies at the Massachusetts Institute of Technology includes a course on probability and another on acoustics in testing and processing. The first, under the leadership of Mark Kac, professor of mathematics and engineering physics at Cornell University, extends from June 11 through July 20, and will consider topics of importance not only in mathematics but also in the study and application of physics and engineering. The second course, intended as a basic orientation in the potentialities and limitations of industrial acoustics, with at-

tention to the underlying physical principles and instrumentation techniques involved, will be given from June 18 to 22 by Richard H. Bolt and Theodor F. Heuter, director and research associate, respectively, of the MIT Acoustics Laboratory. Further information may be obtained from Walter H. Gale, director of the Summer Session, Room 3-107, Massachusetts Institute of Technology, Cambridge 39, Massachusetts.

AUTORADIOGRAPHY AT OAK RIDGE

A course in the theory and techniques of autoradiography will be held this summer by the Special Training Division of the Oak Ridge Institute of Nuclear Studies, under the directorship of George A. Boyd. Applicants who have completed the Institute's basic radioisotope techniques course or who possess equivalent experience in the use of radioisotopes in medical or biological research will be eligible for this three to four weeks' course beginning on July 2. Subjects to be covered will include photographic theory, reaction of ionizing particles with photographic emulsions, and techniques of making gross and microscopic autoradiograms, including some special histological procedures. Additional information and application forms are available from Ralph T. Overman, Chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

JOBS AVAILABLE

NOL NEEDS SCIENTISTS

The Naval Ordnance Laboratory, according to a recent communication, has an urgent need for physicists and electrical and electronics engineers. Work assignments are available in theoretical and applied research, engineering development, and technical evaluation. Civil service status is not required at the present time. Inquiries should be addressed to the Personnel Officer, Naval Ordnance Laboratory, White Oak, Silver Spring 19, Maryland.

SO DOES CIVIL SERVICE

The U. S. Civil Service Commission is currently accepting applications for physicists, chemists, metallurgists, mathematicians, and electronic scientists needed to fill positions in the National Bureau of Standards and other Federal agencies in Washington, D. C. and vicinity. Applications and further information may be obtained from most post offices, from Civil Service regional offices, or from the U. S. Civil Service Commission, Washington 25, D. C.

GRANTS AND FELLOWSHIPS

MICHIGAN STATE INVITES APPLICATIONS

The Board of Trustees of the Alumni Fund of Michigan State College has established seven predoctoral Alumni Fellowships, ranging in value from \$800 to \$1,200 per year, for the benefit of graduate students (either resident or non-resident) who wish to pursue a course of study for the PhD degree at Michigan State. Fellows will be exempt from student tuition fees. It has also been announced that one postdoctoral Alumni Fellowship (\$3,000 per year) is available for research in any special field for which the College has appropriate facilities. Applications for the fellowship awards should be submitted before May 15, 1951, and should be addressed to Dean Thomas H. Osgood, School of Graduate Studies, Michigan State College, East Lansing, Michigan.

CENCO OFFERS FELLOWSHIPS

The Central Scientific Company is offering two scholarships in the physical and engineering sciences for the academic year 1951-52. Awards of \$1,000 and \$1,500, the former for a student working for his master's degree and the latter for a pre-doctoral candidate, will be granted. Letters of application, containing full personal data, the school at which graduate study is planned, contemplated course of study, and college transcript, plus separate letters of recommendation, should be addressed to the Scholarship Committee, Central Scientific Company, 1700 Irving Park Road, Chicago 13, Illinois, and mailed not later than May 15.

FLORIDA STATE ASSISTANTSHIPS AVAILABLE

Florida State University's physics department has announced that several assistantships will be awarded for the academic year 1951-52. These awards, which bear a stipend of \$100 per month (and will also defray certain fees for out-of-state students), will be granted to qualified applicants for either part-time teaching or research duties. Appointees will be permitted to carry from six to twelve hours of course work towards a Master's Degree. Research opportunities exist in the fields of x-ray spectroscopy, electron microscopy, x-ray scattering, electronics, and theoretical physics. Further details and application blanks may be obtained by writing to Harold Richards, Head, Department of Physics, Florida State University, Tallahassee, Florida.

NEW RESEARCH CORPORATION GRANTS

Additional grants in support of basic scientific research have been announced by Research Corporation, a nonprofit educational and scientific foundation with headquarters in New York City. Forty-six scientists in twenty-five states and the District of Columbia have received a total of \$86,000 for projects in physics and chemistry. The current grants, according to the foundation, emphasize its policy of helping to expand the nation's facilities by providing necessary equipment, materials, and other assistance for smaller colleges, many of which previously could not carry out research programs. Thirty-nine of the awards are intended to stimulate young scientists and their students as well as to support the work they propose. One of the grants was a special award to the U. S. Committee on Crystallography of the National Research Council for the publication of the International Tables of Crystallographic data.

Research Corporation derives its funds for the support of scientific research from the manufacture and sale of Cottrell precipitators and the management of patents assigned to it under agreements with colleges, universities, and public-spirited inventors. Further information on the foundation may be obtained by writing to C. H. Schauer, Research Corporation, 405 Lexington Avenue, New York 17, N. Y.

Harald August Bohr

Harald Bohr, well-known Danish mathematician and the brother of Nobel Prize physicist Niels Bohr, died in Copenhagen on January 22nd at the age of sixty-three. He had been professor of mathematics at the University of Copenhagen for more than twenty years. In 1946 Dr. Bohr spent several months in the United States at the Institute for Advanced Study in Princeton. While in this country, he lec-

tured at an international conference on mathematics which was held at Harvard University. He was a member of the American Philosophical Society.

Arthur Taber Jones

Arthur Taber Jones, Professor Emeritus of Physics at Smith College, died suddenly February 8, 1951. Dr. Jones was born in 1876 at Vassalboro, Maine, received his BS degree from the University of Chicago 1899, and his PhD from Clark University 1913. He was on the teaching staff of Purdue University from 1902 to 1911, at Iowa State College 1913-14, and at Smith College from 1914 until his retirement in 1946. Dr. Jones was a Fellow of the American Association for the Advancement of Science, the American Physical Society, the Acoustical Society of America, and a member of the American Association of Physics Teachers, American Association of University Professors, Phi Beta Kappa, and Sigma Xi. He was well known for his research work in acoustics, particularly on the subject of bells. He was instrumental in the formation of the American Acoustical Society, was a member of its Council from 1935 to 1938, and has been a frequent contributor to its meetings and its journal. He was still very active in this work and was also at the time of his death a member of the editorial board of the American Journal of Physics.

Yoshio Nishina

Yoshio Nishina, recognized as the father of Japanese physics, died in Tokyo on January 10th at the age of sixty-one. As pre-war head of the Physico-Chemical Research Institute, he taught many of Japan's rising atomic scientists, including Hideki Yukawa, winner of the Nobel Prize in physics for 1949. Dr. Nishina was himself a student of Niels Bohr, and in 1949 returned to Denmark to attend the fifth congress of the International Academic Conference in Copenhagen. At the end of the war, American scientists were dismayed to learn of the dismantling and subsequent destruction by the U. S. occupation troops in Japan of the cyclotron used by Dr. Nishina in his research work. Active in cosmic ray research, he was one of the authors of the Klein-Nishina formula for predicting the Compton collision probability for photons. He had served as president of the Science Research Institute in Tokyo, and after the war was instrumental in its reconstruction. Dr. Nishina had also served as vice president of the Science Council of Japan.

Sergei Vavilov

Sergei Ivanovitch Vavilov, president of the Academy of Sciences of the USSR, died on January 25th in Moscow at the age of sixty. A member of the Academy since 1932 and its president since 1945, he was also the director of the Lebedev Institute of Physics and the State Optical Institute, and organized and directed the All Union Society for the Dissemination of Knowledge. He specialized in optics, making his most important contributions in the field of quantum fluctuations of light. He was also regarded as an authority on photoluminescent phenomena. Dr. Vavilov was a graduate of Moscow University, and served as professor in physics prior to becoming director of the Institute of Physics. He frequently contributed to Soviet newspapers and periodicals, translated scientific works into Russian, and edited numerous technical and popular scientific works. Dr. Vavilov, although not a member of the Communist party, received two Orders of Lenin and the Stalin Prize for work in optics in 1942.