News of Science

NSF Institutes for Science and Mathematics Teachers

Because of the national importance of maintaining scientific and technical leadership, and in recognition of the key role our college and high-school teachers play in increasing our technical potential, the National Science Foundation will continue its program of summer institutes for high-school and college teachers. In addition, the foundation will support two experimental academic-year institutes designed to assist colleges and universities in their efforts to improve science subject matter training programs for high-school teachers of science and mathematics. Both programs are directed toward strengthening the capacity of our teachers to motivate students to consider careers in science and engineering by increasing the students' comprehension of basic science and mathematics.

Twenty grants have been made to institutions for the support of summer institutes for college and high-school science and mathematics teachers. The institutes planned for the summer of 1956 will enlarge the experimental program that was initiated in 1953 and described previously [*Science* **121**, 414 (25 Mar. 1955)]. Now in its fourth consecutive year, the program will provide opportunities for staff members of colleges and high schools to attend courses in the subject matter of science and mathematics that are especially designed for teachers and that are conducted by faculty members noted for competence in their fields and for skill in presentation.

The grants provide for financial assistance to more than 1000 participating teachers, approximately 50 at each institute, and for additional allowances for dependents. Institutions receiving grants, their institute designs, and persons to whom inquiries or applications may be addressed are as follows:

Alabama College, 6 weeks, for high-school teachers of science; P. C. Bailey, Department of Biology, Alabama College, Montevallo.

American Society for Engineering Education, at the Argonne National Laboratory, Chicago, Ill., 8 weeks, nuclear energy, for staff members from engineering colleges; Donald H. Loughridge, Dean of Engineering, Northwestern University, Evanston, Ill.

American University, 6 weeks, for high-school teachers of the physical sciences; Keith C. Johnson, Science Supervisor, D.C. Public Schools, Woodrow Wilson High School, Washington, D.C.

University of Arkansas, 6 weeks, for high-school teachers of the natural sciences; L. F. Bailey, Department of Botany, University of Arkansas, Fayetteville.

Botanical Society of America, at Cornell University, 6 weeks, for college teachers of botany; Harlan P. Banks, Department of Botany, Cornell University, Ithaca, N.Y.

Indiana University, 4 weeks, for college teachers of chemistry; Robert B. Fischer, Department of Chemistry, Indiana University, Bloomington.

Indiana University, 6 weeks, for high-school teachers of biology; Shelby D. Gerking, Department of Zoology, Indiana University, Bloomington.

Iowa State Teachers College, 6 weeks, for high-school teachers of mathematics; Henry Van Engen, Department of Mathematics, Iowa State Teachers College, Cedar Falls.

Marshall College, 6 weeks, for high-school teachers of the physical sciences; Donald C. Martin, Department of Physics, Marshall College, Huntington, W.Va.

University of Michigan, 8 weeks, for college teachers of mathematics; T. H. Hildebrandt, Department of Mathematics, University of Michigan, Ann Arbor.

Montana State College, 5 weeks, for high-school and college teachers of chemistry; L. O. Binder, Jr., Department of Chemistry, Montana State College, Bozeman.

Oak Ridge Institute of Nuclear Studies, two institutes—4 weeks each—one for high school teachers and one for college teachers of physical science; Ralph T. Overman, Special Training Division, Oak Ridge Institute of Nuclear Studies, Inc., Box 117, Oak Ridge, Tenn.

Oregon State College, 4 weeks, for college teachers of chemistry; W. H. Slabaugh, Department of Chemistry, Oregon State College, Corvallis.

Pennsylvania State University, 6 weeks, for high-school teachers of science; William H. Powers, Arts and Science Extension, Pennsylvania State University, University Park.

University of Rochester, 6 weeks, for high-school teachers of physics; Howard R. Anderson, Dean of University School, University of Rochester, Rochester, N.Y.

University of Utah, 5 weeks, for high-school and college teachers of biology; Loren C. Petry, Department of Botany, University of Missouri, Columbia.

Wesleyan University, 6 weeks, for high-school teachers of science; H. B. Goodrich, Department of Biology, Wesleyan University, Middletown, Conn.

Williams College, 6 weeks, for high-school and college teachers of mathematics; Donald E. Richmond, Department of Mathematics, Williams College, Williamstown, Mass.

Wisconsin State College at Eau Claire, 4 weeks, astronomy for staff members of teacher training colleges; William A. Calder, Bradley Observatory, Agnes Scott College, Decatur, Ga.

University of Wyoming, 5 weeks, for high-school and college teachers of physics; Marsh W. White, Department of Physics, Pennsylvania State University, University Park.

The National Science Foundation plans to continue the summer institutes program in 1957. Proposals from colleges, universities, and professional societies for support of 1957 summer institutes should be received by the foundation not later than 1 Sept. 1956. Preliminary inquiries and final proposals should be addressed to the Program Director for Education in the Sciences, Division of Scientific Personnel and Education, National Science Foundation, Washington 25, D.C.

Grants for the experimental academic-year institutes for high-school science teachers have been made to the University of Wisconsin and Oklahoma A. and M. College. Both of these institutes will offer courses of study in science and mathematics that are planned cooperatively by the members of the science, mathematics, and education departments in the host institution. In each institute there will be provisions for adapting the curriculum to individual needs, and the courses designed specifically for high-school teachers may be applied as partial fulfillment of the requirements for a master's degree. The grants will provide stipends of $3000 to 50 teachers in each institute. Additional allowances for dependents will also be provided.

These two experimental institutes will be conducted in the academic year 1956–57. The experience gained in them will be used in planning a somewhat larger program for the academic year 1957–58.

Inquiries regarding the institute at Oklahoma A. and M. College should be addressed to Prof. James H. Zant, Department of Mathematics, Oklahoma A.

and M. College, Stillwater. Inquiries regarding the institute at the University of Wisconsin should be addressed to Prof. Harvey Sorum, Department of Chemistry, University of Wisconsin, Madison.

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New AAAS Associate Society

The Council of American Bioanalysts was formed with the primary purpose of bringing together people who direct, perform, or teach analyses as they are applied to medical laboratory procedure or related fields. The term *bioanalyst* was coined from the prefix *bio* and the word *analyst* to describe an individual who by training and competence is capable of directing or teaching analytical procedure involving the biological sciences.

While the first members were drawn from state clinical laboratory associations, provision for membership was made for other scientific workers with identical interest. Accordingly, laboratory officers in the armed forces, technical laboratorians from public health laboratories, and university professors teaching curricula in these areas have become members.

The administrative organization consists of a national board of directors and five regional boards. The officers serve in dual capacities as national and regional representatives. Scientific activities of the society are concentrated in an internal council known as the scientific council. Officers to staff this are elected, and some of them serve simultaneously on the national board. All meetings, evaluation studies, publication of scientific journals, and studies of the utility of courses offered for academic instruction are governed through this council.

The most important project undertaken so far has been a general evaluation of laboratory routine and methods. The program is divided into two general categories; one consists of 25 laboratories selected on the basis of previous performance; the second consists of an indeterminate number of laboratories that accept specimens to check routine procedures within their institutions. The first group acts as a control unit for the preparation of samples issued to the second, and in addition conducts evaluation of specific methods or technics. This entire program has been under the direction of Nell Hollinger, an associate professor in the School of Public Health at the University of California, Berkeley.

Publication of a quarterly journal, *Abstracts of Bioanalytic Technology,* has provided coverage of technical, bioanalytical literature in a manner not previously offered by other publications. Under the editorial direction of H. E. MacDaniels of the Illinois State Department of Public Health, a group of editors scattered throughout the United States scan and select articles. These are professionally abstracted by the Crerar Library staff in Chicago and published within 3 months of their original appearance.

Emphasis has been placed on regional meetings within a geographic area small enough to allow the greatest number to participate. The society has established a policy of inviting the attendance at meetings of members of all other scientific societies within the area concerned. National meetings are usually held in conjunction with one of the regional meetings.

The past two presidents have been Donald Abel of Chicago and William Reich of Walnut Creek, Calif. The present president is Marion Dooley, director of a clinical laboratory in Dallas, Tex. The president-elect is Thomas S. Hosty, director of the Alabama State Department of Public Health Laboratory at Montgomery.

In a special tribute Margaret Beattie, an outstanding educator and a professor in the School of Public Health at the University of California, Berkeley, was made an honorary member of the council. A lecture series named in her honor, the Margaret Beattie lecture, was created as an annual event. The inaugural paper was presented in January 1955 by Maxwell S. Wintrobe, professor of medicine of the University of Utah. The second will be delivered on 4 Feb. in San Francisco, by Linus Pauling, Nobel laureate in chemistry and professor of chemistry at California Institute of Technology.

The council engages in a number of other programs designed for the benefit of its members. Notable among these is an insurance program for those in applied bioanalysis that provides malpractice coverage. Another is the preparation of a series of handbooks that are being assembled for future publication under the general title "The handbook of bioanalytic technology." Still another is a program of improving educational facilities for present and future members.

LUCIEN D. HERTERT
Executive Secretary
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Radioisotope Distribution

The Atomic Energy Commission announced issuance on 11 Jan. of a revised regulation, "Licensing of byproduct material," that removes certain restrictions on the sale of radioisotopes abroad and simplifies procedures governing domestic distribution. The regulation is effective on 10 Feb.; it replaces the existing radioisotopes-distribution regulation, which was first issued in 1951.

The revised regulation makes more conveniently available to scientists in other countries radioactive materials for use in medicine, agriculture, industry, and the physical sciences. Research groups abroad may now deal directly with production and distribution centers in this country. In the United States the revision will help American research workers and the growing body of radioisotope users by raising the limit on quantities of radioactive materials available to each user under general license.

In issuing the revised regulation, the AEC said that its usual practice of publishing a proposed regulation and inviting comment was not followed because the revisions made are for the most part designed to remove certain existing restrictions and to clarify present provisions, and not to impose additional requirements on licensees or applicants. In connection with consideration of further amendments, interested persons may submit written comments and suggestions to the U.S. Atomic Energy Commission, Washington 25, D.C., attention the Director, Division of Civilian Application.

Salk Vaccine in Massachusetts

■ A report on the effectiveness of the Salk vaccine in last summer's poliomyelitis epidemic in Massachusetts has been compiled by the Massachusetts Department of Public Health under a grant from the National Foundation for Infantile Paralysis. The report appeared in the 19 Jan. issue of the *New England Journal of Medicine*. It states that one injection was 60 percent effective against all paralytic poliomyelitis, 66 percent effective against bulbospinal poliomyelitis, and 65 percent effective against bulbar poliomyelitis.

(A U.S. Public Health Service analysis of paralytic poliomyelitis in 11 other states, made on 15 Nov., showed vaccine effectiveness levels for 1955 ranging from 55 to 91 percent, and averaging 76 percent. Last April's report by Thomas Francis, Jr., on the vaccine used in the 1954 field trials gave an effectiveness of from 60 to 90 percent for children who had received three injections in a 5-week period.)

The Massachusetts report said that "no conclusions should be drawn" from the figures on results of more than one injection of vaccine, because relatively few cases were tabulated. But the effectiveness for two or more shots was estimated at 69 percent against all paralytic poliomyelitis.

This means that 157 paralytic cases