Announcements

More than $108 million—half of it federal funds—has been used during the two fiscal years since passage of the National Defense Education Act to improve the teaching of science and mathematics in the public elementary and secondary schools. The U.S. Office of Education announced that states have approved 56,545 projects, ranging from less than $100 to more than $50,000, involving science and mathematics, including equipment and minor remodeling of classrooms and laboratories. As a result of this combined federal, state, and local effort, advanced concepts of mathematics are being introduced at earlier grade levels, and high schools are adding courses in mathematics. There is greater emphasis on laboratory work, more science instruction is provided in the elementary schools, and advanced chemistry and physics courses are being added to high school curriculums. Many states report that enrollments in science and mathematics have risen, in some schools, 40 to 50 percent.

A recent AAAS study, sponsored by the National Science Foundation, proposes that science education should begin in kindergarten, as part of a major program to effect improvements in science and mathematics instruction in all grades through junior high school [*Science* **133**, 2019 (23 June 1961)].

Research groups in **aviation medicine, technology, electronics**, and **law** have recently been established by the Santos Dumont Foundation in Brazil. Institutions or individuals specializing in these fields are invited to write the foundation. (Ove Schirm, Fundação Santos Dumont, São Paulo, Brazil)

The **Bibliography of Temperature Measurement**, covering the period from January 1953 to June 1960, lists 500 references on temperature measurement, calibration of instruments, and theories supporting measurement techniques. [Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. (National Bureau of Standards Monograph No. 27) $0.15]

The third edition of the **National Institutes of Health Scientific Directory and Annual Bibliography** is available to research workers in the biomedical sciences. The publication lists 1600 scientific and technical papers deriving from the NIH program of direct research—laboratory and clinical—during 1960. The subject index reflects the scope of NIH research and provides reference to major and subordinate research areas. (Public Information Section, Office of Research Information, National Institutes of Health, Bethesda, Md.)

The **Placement Service of the Biophysical Society** has listings of positions open in several areas of biophysics. It also has names of candidates for positions in these fields. The service is free, and membership in the society is not required for registration. (Biophysical Society Placement Service, Box 668, Frederick, Md.)

A **collection of articles** translated from *Advances in Physical Sciences*, a journal of the Academy of Sciences of the U.S.S.R, has been published by the Department of Commerce. Included in the volume are a discussion of the origin of cosmic rays, a report on semiconductor bolometers, and a Soviet scientist's interpretation of quantum mechanics. [Office of Technical Services, Business and Defense Services Administration, U.S. Department of Commerce, Washington 25, D.C. (AEC-tr-3972, $7)]

The International Commission on **Zoological Nomenclature**, London, has issued a notice relative to the proposed use of its plenary powers in the matter of validation or suppression of certain generic and specific names and designation of certain type species. Full details are given in the 16 June issue of the *Bulletin of Zoological Nomenclature*. Zoologists who wish to comment on any of the cases should do so in writing, in duplicate, prior to *16 December*. (Secretary, International Commission on Zoological Nomenclature, c/o British Museum, Cromwell Rd., London, S.W.7)

Meeting Notes

A conference on **internal friction** will be held 10–11 July at Cornell University. The meeting, sponsored jointly by the Defense Department's Advanced Research Projects Agency and the Atomic Energy Commission, will include sessions on pinning of dislocations by point defects; low-temperature peaks in deformed materials; phenomena involving diffusion-type motion of point defects; and very-high-frequency techniques. (Paul Leurgans, Materials Science Center, Thurston Hall, Cornell University, Ithaca, N.Y.)

A 2-day conference on **radio spectroscopy of solids**, sponsored by the British Radio Spectroscopy Group and the Institute of Physics and Physical Society, will be held 21–22 September at the University College of North Wales, Bangor. (Administration Assistant, Institute of Physics and the Physical Society, 47 Belgrave Sq., London, S.W.1)

Joint conferences on **nuclear reactor chemistry** and **analytical chemistry in nuclear reactor technology**, sponsored by Oak Ridge National Laboratory, will be held in Gatlinburg, Tennessee, 10–12 October. Deadline for submission of abstracts is *15 July*. [W. R. Grimes (for nuclear reactor chemistry) or C. D. Susano (for analytical chemistry), Oak Ridge National Laboratory, P.O. Box X, Oak Ridge, Tenn.]

Grants, Fellowships, and Awards

Organizations sponsoring short courses in science at an advanced level may be eligible for financial support under the **NATO Advanced Study Institute Program**. Courses may be in any of the sciences and should last for 2 weeks or longer, with participants drawn from several countries. The courses may include experimental work. Deadline: *1 December*. (Scientific Affairs Division, NATO, Place du Maréchal de Lattre de Tassigny, Paris 16°, France)

The Selby fellowship, recently established by the Australian Academy of Science, is to be awarded to a young scholar for work in **physical or biological science** at a university or research institution in Australia. Applicants should be under 30 years of age on 1 July of the year in which their applications are received; they should hold a Ph.D. degree or its equivalent and must have had preliminary research experience in a country other than Australia. The fellowship will not normally be awarded to anyone who has previously held a senior research award. The recipient will devote full time to research. Deadline: *30 July*. (Assistant Secretary, Australian Academy of Science, Gordon St., Canberra City, Australia)

Scientists in the News

M. Carl Walske, theoretical physicist serving as a member of the U.S. delegation to the Geneva test-ban conference since 1959, has been appointed scientific representative of the Atomic Energy Commission in London. He succeeds **Louis B. Werner**, who has accepted the position of vice president of Hazelton Nuclear Science Corporation, Palo Alto, California.

John D. Dwyer, director of the department of biology at St. Louis University, has received the J. Henri Fabre award from the French Government for his studies of French tropical plants.

Martin Barr, professor of physical pharmacy and pharmaceutical research at the Philadelphia College of Pharmacy and Science and associate in dermatology at the University of Pennsylvania's Graduate School of Medicine, has been appointed professor of pharmacy and chairman of the department at the Wayne State University College of Pharmacy.

Howard L. Hamilton, professor of zoology at Iowa State University, has been appointed chairman of the university's department of zoology and entomology.

Bernard N. Halpern, director of the Allergy and Immunology Research Center, Hôpital Broussais, Paris, has been appointed professor and head of the department of experimental medicine, Collège de France, Paris.

Merle Lawrence, professor of otolaryngology and physiology at the University of Michigan Medical School, has been named director of the university's new Kresge Hearing Research Institute.

Mahlon B. Hoagland, associate professor of bacteriology and immunology at Harvard, has been named the university's first Ruby Boyer Miller fellow in medical research.

Arthur P. Long, retired colonel and chief of the preventive medicine division of the Army Surgeon General's Office, has been appointed professor of environmental medicine and codirector of the International Center for Medical Research Training at the University of California.

Donald H. Loughridge, physicist and head of the physical research department at General Motors Research Laboratories, has been appointed director of applied research management with the Aerospace Corporation, El Segundo, Calif.

Jesse L. Bollman, emeritus consultant in medical research at the Mayo Clinic and director of research for the Rochester (Minn.) State Hospital, has received the Julius Friedenwald medal of the American Gastroenterological Association.

Ragnar Granit, director of the Nobel Institute for Neurophysiology, Stockholm, and visiting professor at the Rockefeller Institute, New York, has received the Anders Jahre prize of Oslo University and the third Saint Vincent prize for Medical Sciences awarded by the Academia di Medicina of Turin.

Olaf A. Hougen, professor of chemical engineering at the University of Wisconsin, has been appointed science attaché for the Scandinavian nations with the U.S. embassy in Stockholm, Sweden.

Hilton A. Smith, professor of chemistry at the University of Tennessee, has been appointed dean of the university's graduate school and coordinator of research.

Mariano Guiducci, organic chemist at the Squibb Institute for Medical Research, is the first winner of the institute's annual fellowship award. The $15,000 grant provides for leaves of absence of up to 39 months in order to allow staff members to obtain advanced degrees.

Larry Stein, research psychopharmacologist at Wyeth Laboratories' Basic Medical Sciences Research Division, has received the A. E. Bennett Neuropsychiatric Research Foundation award.

Roland H. Alden, chief of the University of Tennessee's division of anatomy, has been named dean of the university's School of Biological Sciences.

Preston Cloud, Jr., of the U.S. Geological Survey, has been appointed chairman of the department of geology at the University of Minnesota. He succeeds **George A. Thiel**, who is retiring.

Martin A. Elliott, director of the Institute of Gas Technology, has been appointed academic vice president of the Illinois Institute of Technology.

Philip N. Powers, head of Purdue University's department of nuclear engineering, has been appointed vice-president of the Purdue Research Foundation.

Luis Sequeira, on leave from his duties as scientific director of the United Fruit Company's Coto Research Station, Costa Rica, has been appointed associate professor of plant pathology at the University of Wisconsin College of Agriculture.

Recent Deaths

K. S. Krishnan, 63; physicist and director of India's National Physical Laboratory, a member of the Indian Atomic Energy Commission, and chairman of the Board of Nuclear Science; 13 June.

Francis F. Lucas, 76; metallographist and microscopist with Bell Telephone Laboratories from 1902 until his retirement in 1949; 20 June.

Ernest S. Reynolds, 76; research associate professor at the University of Miami's Institute of Marine Science; 31 May.

Thomas A. Stephenson; marine biologist and professor of zoology at the University of Wales since 1940; 3 Apr.

Frederick T. Thwaites, 77; emeritus professor of geology at the University of Wisconsin; 7 June.

Erratum: Seven lines were improperly placed in last week's news report on Project Chariot. The last two sentences of the first paragraph under the heading "CNI conclusions" (p. 2001) should have appeared at the end of the paragraph beginning "AEC officials . . ." in the preceding column. That paragraph would then read: "AEC officials complain that the [CNI] report is neither as accurate nor as complete as the general public might suppose. They point out, for example, that the CNI assertion that the strontium-90 yield might be 10 times greater than the AEC believed likely was based on a misreading of an AEC-sponsored study. This study gave 5 percent as the most probable portion of the total radioactive yield that might get into the fallout. But it also estimated that for the particular fallout constituent CNI was concerned with, strontium-90, the most probable figure would be 25 percent. Thus the figure could be underestimated, at most, by a factor of 4, not by the factor of 10 calculated by CNI."

Erratum: In the report "Simple method for measuring heart vector of isolated animal hearts [*Science* **133**, 1831 (9 June 1961)], by C. V. Nelson, the data for the rabbit heart experiments are given incorrectly in the first sentence of the last paragraph on page 1831. This sentence should have read: "In four rabbit heart experiments in the larger sphere, the average peak vectors were 235 μa-cm for QRS and 100 μa-cm for T."