(Continued from page 475)

The Atomic Energy Commission expects to maintain its graduate fellowship program in EMP students in its field at about 350 in all years of graduate study.

Not to be overlooked in surveying support for graduate students are research assistantships financed through research project grants made to universities by federal agencies. Figures on scientific and technical manpower in general are astonishingly defective, and nowhere is the picture less clear than in respect to research assistantships. But it is estimated that if the President's EMP proposals are put into effect, the number of students holding research assistantships in the EMP fields would climb from about 9000 this year to 11,000 in 1964.

A congressional staff study on federal activities in education, made at the behest of the Education and Labor Committee, is nearing publication, and another by the National Academy of Sciences is in the works, but the current figures, even of number of graduate students getting federal assistance, have to be taken as approximations.

Allowing generously for error, government sources estimate that without the proposed new EMP program, total full-time graduate enrollment in EMP fields in 1964 would be 44,000, with 18,000 of these receiving federal support, 17,000 others getting other types of support, and some 9000 on their own. The presidential panel recommended, as a "reasonable" goal for 1964, an increase of 10,000 in the number of graduate students getting federal support. Present proposals for increasing the number of fellowships, training grants, and research assistantships would provide very nearly that number. Asked by the panel, but not requested by the administration, were funds to take over support of 5000 students already enrolled, many of them part-time students or those eligible for federal assistance for whom no funds have been available.

Estimated cost of the EMP program for 1964 would be upward of $130 million for student support and allowances to institutions and some $80 to $90 million a year in matching funds for universities to use in construction of EMP facilities.

Objections have been raised to the recommendations of the President's Science Advisory Committee (PSAC) on the grounds that expansion of graduate enrollment in the EMP fields would be achieved only at the cost of diluting quality (*Science*, 1 February 1962), and the debate is likely to be carried on in Congress when the EMP proposals are taken up.

The basic administration argument for the program is that the federal government is a major consumer of man-power in the EMP fields and has an obligation to see that its own needs for defense and space programs are met and that other sectors of the society are not denied the professionals they require. The argument continues that unless a major federal effort is undertaken now, shortages in EMP fields can only go from bad to worse.

There is a feeling in Congress this year that many, at least, of the President's education proposals will succumb to the economy knives or the fires of the church-state issue. Politically, however, the EMP proposals have two main advantages over most other parts of the bill. Federal aid to graduate education has been little beset with controversy. The appeal to national security and prestige, Congress finds persuasive.
—JOHN WALSH

Announcements

The National Science Foundation is seeking a physician to serve as ship's doctor aboard its **Antarctic research** vessel *Eltanin*. The doctor will have the opportunity to perform his own research, although this will not be required. His tour of duty will be 9 months to 1 year, with an option for renewal if desired. The cruises last about 2 months, with 10-day stops at South American ports.

The *Eltanin* will carry a crew of about 45 men, plus 38 scientists in various biological and physical disciplines. (Robert Hinchcliffe, Office of Antarctic Programs, NSF, Washington 25)

Courses

Applications are being accepted for a 1-year advanced course in the theory and techniques of **steroid biochemistry,** offered by the University of Minnesota. The program is sponsored by the National Cancer Institute, and is open to

recent graduates with an M.D. or Ph.D. degree. The course will start in September. (Steroid Training Program, Department of Physiological Chemistry, University of Minnesota, Minneapolis 14)

St. John's University, New York, is offering a **research participation program in biological sciences** for high school science teachers, 1 July to 23 August. The program is sponsored by the National Science Foundation. Applicants should have a master's degree or the academic background to qualify them for candidacy for such a degree, in biological sciences. Recipients will receive stipends of $75 per week, plus $15 weekly for up to four dependents. Noncommuting participants will receive a travel allowance of four cents per mile, to a maximum of $80, for one round trip. The university will not charge tuition or fees. Stipends will be awarded about 15 March. (Paul T. Medici, Director of Research Program, St. Johns University, Jamaica 32, N.Y.)

New Journals

Bibliography of Reproduction, vol. 1, No. 1, January, 1963. D. Casey, Ed. Reproduction Research Information Service, 8 Jesus Lane, Cambridge, England. $17.50 per year. Monthly.

Mechanical Engineering Education, vol. 1, No. 1, Sept. 1962. J. H. Lamble and J. Parker, Eds. Pergamon Press, 122 E. 55 St., New York 22, N.Y. $10 per year. Semiannual.

SIAM Journal on Control, vol. 1, No. 1, Sept. 1962. J. E. Bertram, Ed. Society for Industrial and Applied Mathematics, P. O. Box 7541, Philadelphia 1, Pa.

Acta Oncológica, vol. 1, No. 1, Jan.–June 1962 (in Spanish). 45 Londres, Madrid 2, Spain. Semiannual. $15 per year.

Malacologia, vol. 1, No. 1, Sept. 1962. (J. B. Burch, Institute of Malacology, 2415 S. Circle Dr., Ann Arbor, Mich.). Irregular. $5 per vol.

Bulletin of the Regional Research Laboratory, Jammu, vol. 1, No. 1, July 1962. (Regional Research Laboratory, Jammu-Tawi, India). Biannual.

Publications

Recent Russian **studies of aging** are described in a 24-page English translation of a paper, "Aging of the Organism at the Molecular Level." The paper, by Zh. A. Medvadev, of the Timiriasev Agricultural Academy, Moscow, was originally read at the fifth international congress on gerontology, in San Francisco, 1960. The translation was released last month by the National Institutes of Health. Topics covered include the character of age changes of proteins and nucleic acid, the accumulation of molecular changes, and possibilities of controlling their rate. (Center for Aging Research, Division of General Medical Sciences, NIH, Bethesda 14, Md.)

The **1963 Catalog of American Standards** is available from the American Standards Association. The 84-page book contains approximately 2000 American standards, plus recommendations from the International Organization for Standardization and the International Electrochemical Commission. Also included is a cross-index which carries the designations of about 35 organizations. The book is available without charge. (ASA, Dept. P 349, 10 E. 40 St., New York 16)

Scientists in the News

Three U.S. biochemists last month received $1000 awards from the American Chemical Society at its general assembly:

Mildred Cohn, of the University of Pennsylvania; the Garvan Medal for her research on the process by which the body stores and uses the energy in food.

William P. Jencks, of Brandeis University; the ACS Award in Biological Chemistry, for research on proteins, nucleic acids, and enzymes.

Charles Gilvarg, of the New York University School of Medicine; the Paul-Lewis Laboratories Award in Enzyme Chemistry, for studies of the synthesis of lysine by bacteria.

George C. Green, former director of the radioisotope department at Fitkin Memorial Hospital, Neptune, N.J., has been named professor of radiobiology in the school of medicine, West Virginia University.

Howard S. Coleman, former vice president of research and engineering at Bausch and Lomb, has been named head of physics research of Melpar, Inc., Washington, D.C.

William R. Marshall, associate dean of the University of Wisconsin College of Engineering, has been elected president of the American Institute of Chemical Engineers.

Carl H. Pottenger has become vice president and director of research at Koppers Co., Pittsburgh. He formerly was vice president and assistant general manager of the plastics division.

E. A. Guggenheim, professor of inorganic chemistry, the University, Reading, England, will be George F. Baker lecturer in chemistry at Cornell University 2 April to 9 May.

David Weinman, associate microbiology professor at Yale University, has been granted a 2-year leave of absence to serve as visiting professor of microbiology in the University of Saigon Medical School, South Vietnam.

George A. Westlund, a former group manager with Technical Operations, Inc., has been named chief of the computer section of the Operations Evaluation Group of the Center for Naval Analyses, Arlington, Va.