

PUBLISHING NEWS

Page Charges

Under a newly adopted policy of the Federal Council for Science and Technology, all government agencies will henceforth include page charges for the publication of research results as an item in the budgets of federal grants and contracts. In the past, some government agencies have paid publication fees, but others have not.

The policy statement recognizes that the results of government-sponsored research are frequently submitted to journals published by nonprofit organizations, and it is explicit in saying that since "the rate of scientific advance is determined in a significant measure by the speed and effectiveness with which research findings are disseminated among scientists who can use them in further research, the dissemination of the results of research is an integral part of the research process". The policy also states that "page charges for publishing papers in primary journals constitute one effective means by which an appropriate portion of the research dollar" can be used for the dissemination of research results.

Page-charge bills presented by journal publishers will be honored if they satisfy the following conditions:

- (1) the research papers report work supported by the Government,
- (2) the charges are levied impartially on all research papers published by the journal, whether by Government or nongovernment authors,
- (3) payment of such charges is in no sense a condition for acceptance of manuscripts by the journal,
- (4) the journals involved are not operated for profit.

The Federal Council for Science and Technology was established in 1959 and includes representatives from the Departments of Agriculture, Commerce, Defense, Interior, and Health, Education, and Welfare, as well as from the National Aeronautics and Space Administration, the Atomic Energy Commission, and the National Science Foundation. Its purpose is to provide more effective planning and administration of Federal scientific and technological programs.

Information Service

The Technical Library of the Franklin Institute has announced the inauguration of a new scientific information service to aid research organizations in searching the technical literature. The new service, which is designed to conduct literature searches in any area of physics, mathematics, chemistry, engineering, and industrial processing, offers to provide bibliographic compilations (author, title, source), annotated bibliographies, abstracts, current-literature monitoring, and translations. Library sources available at the Franklin

Institute for such projects include more than 200 000 reference volumes, a collection of technical reports, nearly five million patents (from the United States, Great Britain, and Canada), and 2500 currently received scientific journals. The service is headed by Alec Peters, formerly of Columbia University.

Information Processing and Dissemination

Studies in the field of scientific information dissemination and processing which are currently receiving support from the National Science Foundation include the following:

The use made of translated Soviet scientific journals is to be studied by the Syracuse University Research Institute under a Foundation grant. Direct inquiry by correspondence and by interview will be used to assess the opinions of users of the translations. A survey of references in articles and books of American authorship to determine the number and kind of citations of translated material also will be undertaken.

The Foundation will provide partial continuing support of a National Bureau of Standards basic research program on the definition of visual patterns and language together with analysis by syntactic methods. The research is directed towards a "picture language machine" system capable of both processing and furnishing semantic interpretation of textual and related diagrammatic information.

Ramo-Wooldridge Corp., Canoga Park, Calif., will continue investigation of new techniques for language data processing under a cost-sharing Foundation contract. The work will include processing 300 000 words of Russian text as part of a program to partially automate dictionary compilation, and is expected to further a current program by the firm in mechanical translation.

A Foundation grant to the National Biomedical Research Foundation of New York City has been made for further development of "Tabledex," a coordinate method of indexing a bibliography by tables of numbers corresponding to articles and associated with descriptive indexing words found in the articles. The grant will permit work on the use of computers to assist in automatic preparation of such indexes. The method will be developed using reports from the International Geophysical Year collection of the Library of Congress. Staff members of the Library of Congress will evaluate results.

Studies of a proposed curriculum for training science information specialists are being made by Georgia Institute of Technology with a Foundation grant. Consideration will be given to the feasibility of short

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courses in science information for scientists, engineers, and librarians, as well as in-service training and graduate and undergraduate courses of study leading to degrees in the science information specialty.

Collections

Various aspects of materials science are covered in four separate volumes published in October by the American Society for Testing and Materials.

Volume 60 of the *ASTM Proceedings* (1242 pp.; \$12) is the official record of the society's activities for 1960. In addition to a summary of material presented at the annual meeting and a directors' report, it contains 77 reports of ASTM technical committees and 44 technical papers (supplemented by discussions not previously published) pertaining to research and standards for materials. Part of the directors' report concerns the activities of the new Division of Materials Sciences, which was organized to coordinate studies and discussions on materials research. The volume also includes a subject and author index to all 1960 ASTM publications.

The *Report on Physical Properties of Metals and Alloys from Cryogenic to Elevated Temperatures* (STP-296) was prepared by Batelle Memorial Institute under the auspices of the Data and Publications Panel of the ASTM-ASME Joint Committee on Effect of Temperature on the Properties of Metals. It lists data on the thermal conductivity, linear thermal expansion, specific heat, electrical resistivity, density, emissivity, diffusivity, and magnetic permeability of aluminum, cobalt, iron, magnesium, molybdenum, nickel, and their alloy systems. Emphasis is given to data over a range from -457°F to 4500°F . The 206-page volume is paperback and sells for \$4.75.

Papers from two symposia, "Recent Progress in Materials Science" and "Nature and Origin of Strength of Materials", both held during the 63rd Annual Meeting of ASTM (Atlantic City, June 26 to July 1, 1960), are contained in *Properties of Crystalline Solids* (STP-283). The papers represent a blending of several disciplines especially those involving crystal physics, mechanics, chemistry, and metallurgy. Sponsored by the society's Division of Materials Sciences, the 150-page publication (priced at \$4) is the first of a series of state-of-the-art publications in materials science.

The present state of knowledge concerning the properties of high-strength materials at cryogenic temperatures is considered in a collection of papers published by ASTM under the title, *Symposium on Low-Temperature Properties of High-Strength Aircraft and Missile Materials* (STP-287). Emphasis is given to the mechanical properties of alloys of aluminum, magnesium, titanium, and stainless steel at temperatures down to -423°F . Fourteen papers make up the 232-page volume, which sells for \$7.

All four books may be ordered from ASTM headquarters, 1916 Race Street, Philadelphia 3, Pa.