Miscellany

Documentation

An Advisory Committee has been appointed to the Office of Documentation of the National Academy of Sciences-National Research Council to give general guidance to the Office and to serve as the NAS-NRC advisory body to the National Science Foundation and other organizations in connection with general problems of scientific documentation. The Advisory Committee is under the chairmanship of Elmer Hutchisson, director of the American Institute of Physics, and has the following other members: W. O. Baker (Bell Telephone Laboratories), W. R. Brode (Washington, D. C.), R. G. Cleland (Indiana University), H. T. Cox (American Institute of Biological Sciences), J. M. Fogg (University of Pennsylvania), S. A. Goudsmit (Brookhaven National Laboratory), I. Igelsrud (Battelle Memorial Institute), C. Leake (Ohio State University), P. M. Morse (Massachusetts Institute of Technology), A. Opler (Computer Usage Company, Inc.), G. Petrie (IBM Corporation), and F. Y. Wiselogle (The Squibb Institute for Medical Research).

A Scandinavian Documentation Center, SCAN-DOC, has been opened in Washington, D. C. (2136 P Street, N.W.) for the purpose of furthering the mutual exchange of scientific and technological information and documentation between the Scandinavian countries and the United States and Canada. The participating countries are Denmark, Finland, Norway, and Sweden. SCANDOC, a nonprofit organization, will render free service to all interested parties and is financed and directed by the Research Councils and Science Academies of the participating countries through their common Scandinavian Council for Applied Research, which originated the proposal for this venture. SCANDOC is headed by Arne Sverdrup, a Norwegian science attaché assigned to Norway's Embassy in Washington. SCANDOC will procure upon request unclassified reports and documents not readily available through libraries, bookstores, and other commonly used channels. It will also report to the Scandinavian Council for Applied Research on any such significant material published in the US or Canada.

During the current fiscal year the National Science Foundation will consider proposals for additional research projects or studies of a fundamental or general nature that may produce new insights, knowledge, or techniques applicable to scientific information systems and services. Although the Foundation will con-

sider any proposal for a project that may contribute to the general goal of improving the handling of scientific information, the following research areas are currently of particular interest:

- Information needs of the scientific community (studies
 or experiments to provide better understanding of scientific communication processes, scientists' information
 needs, and the extent to which needs are met by existing
 publications and information services, or could be met
 by proposed new types of publications and services).
- 2. Information storage and retrieval (research on the systematization and mechanization of procedures for handling large volumes of scientific information, including procedures for automatic analysis of texts of documents, automatic indexing, and abstracting, automatic searching of stored materials, and tests and evaluations of existing, newly developed, and proposed procedures for handling scientific information).
- 3. Mechanical translation (new groups wishing to undertake research on mechanical translation procedures and related studies of language should give first consideration to building upon and complementing the intensive work already accomplished by established groups).*

All inquiries and proposals should be addressed to the Documentation Research Program, Office of Scientific Information Service, National Science Foundation, Washington 25, D. C.

The cooperation of all scientific and technical information centers in the United States has been requested in connection with a survey being conducted by Battelle Memorial Institute for the National Science Foundation. The survey is intended to locate all information centers in the US serving the physical and life sciences and technologies and to collect factual data relating to their activities and services. The survey results will be used to prepare a national directory of information centers and to relate the activities of the centers to the total US scientific and technical information program. Information concerning location, subject coverage, scope of collection, and types of services available, etc., will be gathered by questionnaire. The value of the survey and directory will depend upon the completeness of coverage. NSF has therefore requested that any activity which identifies itself as an information center should send its name and address to Mr. William H. Bickley, Battelle Memorial Institute, 505 King Avenue, Columbus 1, Ohio.

A new quarterly scientific journal, SPE Transactions, will be published for the first time next January by the Society of Plastics Engineers. The journal will contain articles on basic polymer theory, science, and engineering. It is available to both members and nonmembers of the Society on a subscription basis. Further information is available from the Society of Plastics Engineers, Inc., 65 Prospect Street, Stamford, Conn.

^{*}The semiannual report Current Research and Development in Scientific Documentation, available from the National Science Foundation, describes these projects in the US and abroad.

through operations research



Operations research at ORO adds new dimensions to military tactics and strategy. Combining the diverse backgrounds of individuals representing more than thirty different disciplines, the Operations Research Office of the Johns Hopkins University employs modern scientific methodology on a mixed team basis in the solution of world-wide military problems in advanced and pioneering applications. The result: improved operational readiness and a better national military posture.

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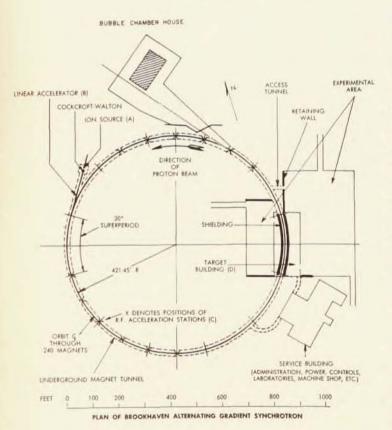
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Aerial view of the Brookhaven Alternating Gradient Synchrotron. The half-mile circular tunnel housing the magnet ring is covered with an earthen dike as a shielding measure. At the lower left edge of the ring is the Linac Building, housing the injection system for the synchrotron. The large square structure astride the rear side of the ring is the Target Building, where high-energy experimental equipment will be installed; to its right is the laboratory and office area. (Photos courtesy Brookhaven National Laboratory.)



Brookhaven AGS in Operation

The first trial run of the newly constructed alternating gradient synchrotron at Brookhaven National Laboratory was completed successfully on July 29 when the accelerator produced a beam of 30-Bev protons after having operated for about an hour at 24 Bev. Having achieved a satisfactory accelerated beam, the 170 members of the AGS staff expect to devote most of their work during the next few months to perfecting the machine's performance and preparing it for the experimental programs to follow. This will involve efforts not only to increase the intensity of the beam and to determine its characteristics but also to deflect the protons out of the vacuum chamber in order to provide the experimental versatility which an external beam will offer. Most of the initial operation will involve acceleration to approximately 25 Bev. Consistent attainment of the maximum design energy of 32 Bev will require extensive adjustment of equipment for correcting the effects of magnetic saturation in the magnet iron.

After these preliminaries are over, the experimental program is expected to start in earnest with a beam at full energy of more than 10¹⁰ protons per pulse. Early research efforts will be devoted to the identification of nuclear particles generated when protons from the machine collide with the nuclei of target atoms, and to a thorough search for any hitherto undiscovered particles