

MEETINGS

High-Temperature Materials

FUEL, moderator, and other reactor elements will be discussed at a topical meeting on high-temperature requirements and characteristics of materials for nuclear applications in land, sea, and space equipment, which is to be held in San Diego during the period April 11-13. The meeting is being organized by the San Diego Section of the American Nuclear Society. Subjects to be considered include a variety of specific reactors, direct conversion and electric propulsion devices, radioisotope generators, and nuclear rocket and ramjet engines. Those wishing to attend should contact J. F. Schumar, General Atomic, P. O. Box 608, San Diego 12, Calif.

Mathematics and Computation

TWO complementary symposia on the relations between mathematical research and high-speed computer technology will be held in mid-April under the auspices of the American Mathematical Society.

The first, a symposium on experimental arithmetic, is to be held as part of the Society's April 12-14 meeting at the University of Chicago. The symposium, which has the support of the Institute for Defense Analyses, will explore ways in which modern high-speed computing equipment might furnish enlightening experience with regard to outstanding mathematical problems, including those arising in other sciences. Design of arithmetical experiments, reduction and analysis of data obtained through such experiments, and relevant mathematical theories, such as the theory of Monte Carlo calculations, will be among the topics discussed. Table calculation and other nonexperimental subjects will be excluded. The following titles and authors have been announced: On Automatic Numerical Integration of Ordinary Differential Equations (A. Nordsieck), On the Use of Machines to Study Sequence Space Mappings (G. A. Hedlund), Few Particle Experiments in Statistical Mechanics (B. Alder), Unexpected Dividends in the Theory of Prime Numbers (J. B. Rosser), Eliminating the Irrelevant from Mechanical Proofs (M. Davis), and Computer Investigation of Orthogonal Latin Squares of Order Ten (E. T. Parker).

The second, a symposium on interactions between mathematical research and high-speed computing, will be sponsored by the Association for Computing Machinery and supported by the US Army Research Office and the National Science Foundation. It will be held in connection with a meeting of the Mathematical

Society which will take place April 16-19 at the Chalfonte-Haddon Hall Hotel in Atlantic City, N. J. The symposium is designed to aid scientists in learning more about the potentialities and problems involved in the use of modern computing devices and to stimulate activity in certain areas of mathematical research in which progress has not kept pace with computer technology. The five scheduled sessions of the program will cover the use of computers in pure mathematics, geophysics, and chemistry, tracing the paths of problems in these fields to the computer; problems in numerical analyses, and the nature and impact of computing machines.

Complete programs for the two symposia are to be found in the February issue of the *Notices of the American Mathematical Society*, and it is expected that the proceedings of both will be published by the Society in a single volume. Further information can be obtained from E. Pitcher, American Mathematical Society, 190 Hope Street, Providence 8, R. I.

Information Retrieval

RESEARCH, development, and operational activities related to machine literature-searching systems will be reviewed at a conference to be held April 18-20 at Western Reserve University under the sponsorship of the University's Center for Documentation and Communication Research of the School of Library Science. The theme is "Information Retrieval in Action" and the program will consider systems using an existing machine, the General Electric 225 general-purpose computer. Emphasis will be given to four areas of interest: (1) development and operation of mechanized systems for searching the literature of specific disciplines; (2) comparative testing and evaluation of information-retrieval systems; (3) administration and operation of such systems, with special emphasis on the basic unit operations involved; and (4) analysis of the fundamental problems underlying the operation of information-retrieval systems and an examination (based on search data) of practical and theoretical problems such as pertinency, the use of the thesaurus, and the application of models in documentation.

Further details can be obtained from the Center for Documentation and Communication Research Conference, Western Reserve University, 10831 Magnolia Drive, Cleveland 6, Ohio.

X-Ray Spectroscopy

A part of the program of the Mid-American Spectroscopy Symposium which will take place in Chicago from April 30 to May 4, two day-long sessions on x-ray spectroscopy are scheduled, the first being on absorption spectroscopy and the second on emission spectroscopy.

L. G. Parratt of Cornell University will open the absorption session on April 30 with an invited paper