Meetings

127th Meeting of AAAS

AMONG the sessions on the program of the 1960 meeting of the American Association for the Advancement of Science, which will take place December 26–31 in New York City, the following are likely to be of particular interest to physicists:

A joint interdisciplinary symposium of Sections B (Physics) and D (Astronomy) entitled "Plasma—Fourth State of Matter", will be held December 28 under the joint sponsorship of the American Astronomical Society, the American Physical Society's Division of Plasma Physics, and Sigma Pi Sigma. It is being arranged by Stanley S. Ballard of the University of Florida, with Lyman Spitzer, Jr., of Princeton presiding.

The American Institute of Physics will cosponsor a four-session symposium (December 26 and 27) on the sciences in Communist China. It will include papers on physics, geophysics, and meteorology. Section B will also join with Section M (Engineering) in holding a joint panel discussion (December 30) on "The Place of Nuclear Engineering in the University Curriculum". The physicists' luncheon, also on the 30th, will include the vice-presidential address of Section B by Frederick Seitz of the University of Illinois, who will discuss "Basic Science in the NATO Family of Nations". Arrangements are being carried out by Lyle B. Borst of New York University.

The American Astronomical Society, the American Geophysical Union, and Section D will hold a symposium (December 26) on the impact of the space program on the sciences. The AAS will also conduct four sessions of invited papers. The American Astronautical Society program (December 27) will include one symposium cosponsored by NASA on lunar exploration, one on lunar spacecraft systems, and a panel discussion on "Is There a Need for a Manned Space Laboratory?"

The complete program of the meeting is available (for $2.50) from the American Association for the Advancement of Science, 1515 Massachusetts Avenue, N.W., Washington 5, D. C.

Thermoelectric Energy Conversion

CONCERNED primarily with thermoelectricity, the first in a projected series of symposia dealing with the technical problems of direct energy conversion will take place January 8–12 at the Statler-Hilton Hotel in Dallas. The January symposium will be open and the program will be supplied and conducted by the several participating societies (the Amer-

ican Institute of Electrical Engineers, the American Nuclear Society, the American Rocket Society, the American Society of Heating, Refrigerating and Air Conditioning Engineers, the Electrochemical Society, the Institute of Radio Engineers, and the Metallurgical Society of AIME). The Department of Defense is acting as a cosponsor and the initial meeting is being supported by the Navy Department. Support for each of the subsequent meetings will be provided by one of the military services.

The program will cover invited, tutorial reviews dealing with direct conversion processes, physical theory, synthesis and evaluation of thermoelectric materials, environmental effects, materials fabrication and assembly, methods of measurement, design parameters, and device construction and performance. It is intended that the proceedings will be published, either as a book or as a supplement to a technical journal.

For further information, contact the chairman of the program and publications committee, Dr. Philipp H. Klein, General Electric Co., Electronics Laboratory, Building 3, Room 221, Electronics Park, Syracuse, N. Y.

Plasmas

THE eleventh annual international Polytechnic Institute of Brooklyn Symposium, scheduled to be held April 4–6 in the Auditorium of the Engineering Societies Building in New York City, will be devoted to electromagnetics and fluid dynamics of gaseous plasma. The area of interest covers collective electromagnetic and fluid dynamic phenomena and their self-consistent analytical description in the temperature range characteristic of the transition between partially and fully ionized gaseous plasmas. The program will be made up of invited papers and a limited number of contributed papers and will conclude with a round-table discussion of some future trends in plasma research.

Typical of the subjects planned for discussion at the symposium are: (1) Microscopic and Macroscopic Theories of Nonequilibrium Magneto-Fluid Dynamics (distribution function versus moment approaches, elastic and inelastic collision contributions, effects of heat conductivity, viscosity, particle trapping, instabilities); (2) Linear Wave Propagation in Uniform and Nonuniform Plasmas (classification of wave types, surface waves, effects of plasma discontinuities, random and ordered plasma radiation, experimental wave techniques); (3) Nonlinear Wave Propagation in Uniform and Nonuniform Plasmas (shocks, dissipation and excitation phenomena, harmonic generation and parametric effects, boundary layer effects, experimental techniques); and (4) Possible Applications of Magneto-Fluid Dynamics (electromechanical forces in moving plasmas, plasma generators, plasma jets, confinement, and stability).

This year the symposium is being organized by Polytechnic's Department of Aerospace Engineering and Microwave Research Institute in cooperation with