

MEETINGS

Shock tubes

This spring, the American Physical Society's Division of Fluid Dynamics, with the Naval Ordnance Laboratory acting as host, will sponsor the fifth in a series of shock-tube symposia. The divisional meeting, which will take place in Washington, D.C., from April 28 to 30, overlaps the last two days of the APS Spring meeting, and will cover the theory, performance, and evolution of the shock tube as a research tool. Emphasis will be placed on shock-tube processes, techniques, and instrumentation rather than the results of shock-tube applications.

Abstracts of contributed papers will be published in the Society's *Bulletin*, and are due on or before March 19. Abstracts should be sent to J. F. Moulton, Jr., Building 323-304, US Naval Ordnance Laboratory, White Oak, Silver Spring, Md.

High pressures

The Air Force Office of Scientific Research and the University of Arizona are sponsoring an international conference on the physics of solids at high pressures, to be held from April 20 to 22 in Tucson. The meeting is intended to provide closer contact between solid-state theorists and experimentalists and to present the latest results in solid-state research at high pressures. Approximately 15 theoretical and 15 experimental papers are scheduled.

Requests for additional information should be sent to C. T. Tomizuka, Department of Physics, University of Arizona, Tucson, Ariz.

Conductivity

The low-temperature and materials and testing groups of the British Institute of Physics and Physical Society will hold a European symposium on electrical conduction at low temperatures at the Royal Aeronautical Society in London on May 20 and 21.

The symposium program will cover the factors limiting the conductivity

of normal metals and superconductors, including discussion of electron scattering by impurities, dislocations, and other lattice defects; size effects; magnetoresistance; factors determining the current-carrying capacity of superconductors; and alternating-current losses in superconductors.

Additional details of the meeting, application forms, and instructions for the preparation of outlines of contributions can be obtained from the Administration Assistant, The Institute of Physics and the Physical Society, 47 Belgrave Square, London, SW 1, England.

Molecular spectroscopy

This year's symposium on molecular structure and spectroscopy will be held at Ohio State University's Department of Physics from June 14 through June 18. The meeting will cover the phases of spectroscopy that are of current interest, including methods of obtaining molecular spectroscopic data and their interpretation. Dormitory accommodations will be available.

For further information, and for a copy of the program when it becomes available, write to Professor K. Narahari Rao, Department of Physics, The Ohio State University, 174 West 18th Avenue, Columbus, Ohio.

Low temperatures

Commission I of the International Institute of Refrigeration will meet June 9 to 11 at the University of Grenoble, with the cosponsorship of the Société Air Liquide. The scientific sessions of the meeting will be devoted to a symposium on heat flow below 100°K and its technological applications, including heat transfer in solids, fluids, boiling hydrogen and helium, and missile and space operations.

On June 8, the Centre de Recherches sur les Très Basses Températures in Grenoble will present a series of lectures on liquid hydrogen in techni-

cal and space problems, covering the physical properties of liquid hydrogen, methods of mass production, applications to space flight (chemical and nuclear propulsion), and instrumentation.

Abstracts of papers for the symposium are due by March 1. All correspondence should be sent to Centre de Recherches sur les Très Basses Températures, Boîte Postale 319, Grenoble, France.

Antennas

The Institute of Electrical and Electronics Engineers will hold its 1965 symposium on antennas and propagation at the Sheraton Park Hotel, Washington, D.C., from August 30 to September 1. Theoretical, experimental, and developmental papers are solicited in the following areas: (1) antennas (frequency-independent, low-noise, signal-processing, large reflectors, phased arrays), (2) scattering and diffraction, (3) electromagnetic theory, (4) radio-wave propagation (tropospheric, ionospheric, space, guided waves), and (5) radio physics (plasmas, radio-astronomy systems).

Three copies of 50-to-100-word abstracts should be sent by May 15 to R. J. Adams, Chairman, Technical Program Committee, 1965 International Symposium on Antennas and Propagation, Code 5330, Naval Research Laboratory, Washington, D.C.

Acoustics

The Palais des Congrès on the Esplanade de l'Europe in Liège has been chosen as the site for the 5th International Congress on Acoustics, to be held September 7 to 14, 1965. The Congress will consist mainly of 50-minute general conferences, in French, German, or English, and 20-minute specialized conferences, also in one of these three official languages.

Contributions to the program will fall under the following general categories: (1) speech analysis and synthesis, (2) physiological and psychological acoustics, (3) molecular acoustics, (4) ultrasonics, (5) noise control, (6) room acoustics, (7) electroacoustics, (8) physical acoustics, and (9) mechanical vibrations and musi-