

MEETINGS

Interplanetary Travel

The technical and scientific factors to be considered in any manned exploration of Mars will be reviewed at a symposium to be held by the American Astronautical Society, June 6 and 7, at the Hilton Hotel in Denver.

Cosponsored by the American Astronomical Society, the American Institute of Biological Sciences, the Rocky Mountain Section of the American Institute of Aeronautics and Astronautics, and the National Aeronautics and Space Administration, the meeting will feature technical sessions on propulsion and orbit concepts, vehicle design, mission guidance, Earth return and re-entry, communication and power supply, recent astronomical data on Mars and evidence of Martian life, and the life-science aspects of the mission. In addition, efforts are being made to arrange a special lecture by a Soviet scientist who was associated with the recent launching of a Mars probe.

Inquiries should be addressed to Dr. George W. Morgenthaler, Symposium on the Exploration of Mars, PO Box 766, Littleton, Colo.

Nucleon Structure

An international conference intended to collect and advance basic knowledge of the structure of the proton and the neutron will be held at Stanford University from June 24 to 27. The International Conference on Nucleon Structure, sponsored by Stanford, the National Science Foundation, the Office of Naval Research, the Atomic Energy Commission, the Air Force Office of Scientific Research, and the International Union of Pure and Applied Physics, will be open to qualified persons having a genuine concern with the subject.

Most of the sessions will be devoted to invited summary-type papers, and the organization of the meeting is expected to be similar to that of the International Conference on Nuclear Sizes and Density Distribution, which was held at Stanford in 1957.

Inquiries should be sent to Professor Robert Hofstadter, Department of Physics, Stanford University, Stanford, Calif.

Gordon Research Conferences

Four New Hampshire schools, (Colby Junior College, New Hampton School, Kimball Union Academy, and Tilton School) will again be the locations of the annual Gordon Research Conferences, which are to be held this year from June 10 to August 30. Designed to stimulate research by fostering a free and informal exchange of ideas among persons actively interested in the subject areas selected for discussion, each conference is organized as a series of morning and evening sessions, with

afternoons left free for recreation and informal discussions. The conferences are intended "to bring experts up to date on the latest developments, to analyze the significance of these developments, and to provoke suggestions concerning the underlying theories and profitable methods of approach for making progress".

Although the majority of the conferences are oriented toward chemistry and the biological and medical sciences, topics to be covered are summarized below for sessions which may be of interest to physicists.

Colby Junior College, New London, N. H.

Nuclear Chemistry (June 17-21): theory of nuclear matter, nuclear vibrations, single-particle states from stripping, shell-model data from high-energy reactions, collective model, superfluidity and quasi-particles, blocking in superfluidity, some experimental evidence for superfluidity, coulomb excitation, collective states from nuclear-reaction spectroscopy, intermediate coupling, experimental evidence on intermediate coupling, high-energy phenomena and nuclear structure, clusters in nuclei.

Polymers (June 24-28): new developments in polymer chemistry, new developments in cellulose structure, new horizons in cellulose applications, recent developments in the ultracentrifugation of synthetic polymers, the glass temperature and related temperatures in polymers, studies of fractures in polymers, mechanochemistry and muscular contraction, theory of catalysis by transition metals, catalysis by lithium and its derivatives, polymerization in solid state, the effect of solvent in anionic polymerizations, kinetics of anionic polymerization and copolymerization, morphology of block polymers in solution, thermodynamics and kinetics of antibody-hapten reactions, theory of carbonium-ion polymerization, isomerizations in low-temperature carbonium-ion polymerizations.

Instrumentation (August 12-16): on the equality of charges in space, experimental limit to the electron-proton charge difference by the atomic-beam method, experiments to determine the neutrality of matter, new developments in tunneling phenomena, ionization gages for vacuum measurement, computer-controlled x-ray diffractometer, some experimental methods of studying atmospheric density, special electronic transducers, applications of the laser to instrumentation, instruments for atomic absorption spectroscopy, the integrating Schlieren system in shock-wave studies, digital-computer pattern recognition of the electrocardiogram, processing of audio-frequency data using noncoherent optical analogs, optical measurement of the rotation rate of Telstar, infrasonics, the gap between sound and weather, computer analysis of image-transmission systems, neutron-capture gamma-ray analysis.

Other conferences at Colby will include: Hydrocarbon Chemistry (June 10-14), Catalysis (July 1-5), Textiles (July 8-12), Elastomers (July 15-19), Corrosion (July 22-26), Medicinal Chemistry (July 29-August 2), Food and Nutrition (August 5-9), Separation and Purification (August 19-23), Cancer (August 26-30).