MEETINGS

Gordon Research Conferences

THE over-all plan of the Gordon Research Conferences for 1961 shows that more meetings are scheduled than in previous years and that they will be held at four New Hampshire schools, rather than three as in the past. This year's program will commence on June 12 and will continue through September 1. The meetings will take place at Colby Junior College, New Hampton School, Kimball Union Academy, and Tilton School.

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 this year's conferences are oriented toward chemistry and the biological and medical sciences, brief listings of topics to be covered are included for sessions which seem likely to be of interest to physicists.

Colby Junior College, New London, N. H.

Nuclear Chemistry (June 26–30): topics on high-energy nuclear chemistry and nuclear cosmo-chemistry, including the present status of high-energy nuclear physics, emulsion and nuclear-recoil studies of high-energy nuclear reactions, and cross sections for high-energy proton beam monitors, as well as topics on extinct radioactivity, nuclear astrophysics, and origins of cosmic rays, meteorites, and the solar system.

Corrosion—Oxidation of Metal Surfaces (July 24–28): techniques for study of corrosion and oxidation and discussion of growth of oxide films on metals and alloys.

Instrumentation (August 14–18): optical masers, interferometers, the present state of the art and future trends of NMR and EPR, spectrophotometric color measurement, computers, information transfer, electric propulsion of space vehicles, an instrument for measuring viscoelastic properties at low rates of shear, British process control, and Australian scientific instrument development.

Other conferences at Colby will include: Petroleum (June 12–16), Catalysis (June 19–23), Polymers (July 3–7), Textiles (July 10–14), Elastomers (July 17–21), Medicinal Chemistry (July 31–August 4), Separation and Purification (August 7–11), Food and Nutrition (August 21–25), and Cancer (August 28–September 1).

New Hampton School, New Hampton, N. H.

Chemistry and Physics of Liquids (June 19–23): machine studies of molecular dynamics, thermodynamics and statistical mechanics of nonuniform fluids, molecular properties, transport processes, viscosity studies, and viscoelastic, ultrasonic, and dielectric relaxation.

Scientific Information Problems in Research (July 3–7): theory and techniques of information retrieval, indexing, character recognition devices, special services, and goals and prospects.

Magnetic Resonance (July 10–14): effects of pressure and temperature on crystalline field splittings, acoustic absorption techniques in NMR, Knight shifts and NMR properties of intermetallic compounds, dynamic nuclear orientation, dynamic polarization and spin temperatures, measurement of electron densities, NMR and relaxation processes in ferromagnets, magnetic relaxation in polymers, possible new biradicals, electron-resonance studies of free radicals, and EPR studies of spin correlation and of transient radicals.

Adhesion (August 28–September 1): bulk properties of polymers and metals and their effect on adhesion, molecular forces and zero-point energies, effect of molecular structure and shape on adhesion, techniques and materials, and elastomeric properties in adhesion.

Also scheduled at New Hampton School are conferences on Chemistry of Coal (June 12–16), Proteins (June 26–30), Radiation Chemistry (July 17–21), Organic Reactions and Processes (July 24–28), Steroids and Other Natural Products (July 31–August 4), Statistics in Chemistry and Chemical Engineering (August 7–11), Analytical Chemistry (August 14–18), and Inorganic Chemistry (August 21–25).

Kimball Union Academy, Meriden, N. H.

Physical Metallurgy (June 26–30): field-emission microscopy of metal crystal nucleation from the vapor, experimental and theoretical aspects of substructures, dislocations, point defects, structure in diffusional and diffusionless transformation, quantitative electron-transmission metallography, annealing twins and surface topography, and transformations at high pressure.

Solid-State Studies in Ceramics (July 31–August 4): electrical behavior and semiconducting properties of compounds of the transition metals, properties of electrons in rutile, electrical and optical properties of stannic oxide crystals, electronic and ionic conductivity in magnesium oxide crystals, electrical properties and transport processes of rare earths, thermal conductivity of semiconducting materials at high temperatures, polarization and diffusion in glass, and a discussion of Project Mohole.

Chemistry and Physics of Solids (August 14–18): new theoretical viewpoints and their experimental significance —the normal metal, superconductivity, magnetism, transport phenomena, insulators, and one-electron theories.

Photonuclear Reactions (August 21–25): photon-induced reactions and inelastic particle scattering.

High-Temperature Chemistry—Molten Salts (August 28–September 1): structural models, transport and thermodynamic properties, electrode processes and electrochemistry, spectroscopy, metal-molten salt systems, and advances in high-temperature technology.

Also included in the Kimball program are conferences on Lipide Metabolism (June 12–16), Cell Structure and