MEETINGS

High Polymers

A FIVE-DAY symposium on high polymers, opening on April 30 and continuing through May 4, will be presented by Pennsylvania State University under the chairmanship of Arthur E. Woodward, associate professor of physics at Penn State.

In addition to selected topics concerning the preparation of new types of polymers, the symposium will offer lectures and demonstrations dealing with methods of investigating physical-chemical behavior in the bulk state and in solution. The following subjects will be discussed: (1) polymer preparation and kinetics; (2) dynamic properties of high polymers; (3) the crystalline state of high polymers; (4) infrared investigation of high polymers; (5) effects of irradiation on high-polymer properties; (6) flow of amorphous polymer melts and concentrated solutions; and (7) dilute solution properties.

Further information can be obtained by writing to the Conference Center, Pennsylvania State University, University Park, Pa.

High-Resolution NMR Spectroscopy

CURRENT problems and recent research in highresolution nuclear magnetic resonance spectroscopy will be reviewed at a symposium to be held at the University of Colorado in Boulder from July 2 to 4. The sponsoring organization is the Division of Physical Chemistry of the American Chemical Society.

The program will include about two dozen invited papers covering the theory of chemical shifts and spin-spin interactions, solvent effects, nuclear magnetic double-resonance methods, relaxation methods, hindered internal rotations and conformational isomerism, analysis of spectra, organic structure analysis, hydrogen bonding, solutions of macromolecules, etc.

A complete program is expected to be available sometime this month. The conference chairman is Dr. Max T. Rogers, Department of Chemistry, Michigan State University, East Lansing, Mich.

Glass Technology

THE Sixth International Congress on Glass will be held at the Sheraton-Park Hotel in Washington, D. C., during the week of July 8-14. Arrangements for the event are being made by the American Ceramic Society, which is acting as the secretariat for the sponsoring organization, the International Commission on Glass. More than 600 specialists in glass technology from countries in Europe, Asia, and the Americas are expected to attend.

A technical program of 47 papers will explore process principles in continuous glass melting and forming, the structure and mechanical properties of glass, diffusion phenomena, metal-glass interaction during conditioning and forming, and properties of new glasses. A supplementary program will deal with the form, art, and history of glass.

The International Commission on Glass was established in 1933 to promote and stimulate the international exchange of information on the science, technology, and art of glass. It derives its support from participating national organizations in the United States, Germany, Norway, Sweden, Denmark, Finland, Italy, England, Japan, Spain, Poland, and Egypt.

Registration and program information concerning the congress can be obtained by writing to the American Ceramics Society, 4055 North High Street, Columbus 14, Ohio.

X-Ray Diffraction and Crystal Structure

ON the occasion of the fiftieth anniversary of the discovery of x-ray diffraction, the Ludwig Maximillians University of Munich, the Bavarian Academy of Sciences, and the International Union of Crystallography will sponsor a meeting entitled Fifty Years of X-Ray Diffraction. Following the meeting, which will take place at the University from July 25 to 27, the IUCr and the Section of Crystallography of the German Mineralogical Society will hold a symposium on recent advances in the experimental and theoretical methods of crystal-structure research, which will also be held at the University and will continue through July 31.

The commemorative session of the first meeting will include addresses on the early history of x-ray diffraction by P. P. Ewald, W. Friedrich, and Sir Lawrence Bragg. Invited papers on subsequent developments in the field will be presented in the remaining sessions. The following program has been announced: Instrumentation, M. J. Buerger; Inorganic Structures, G. Menzer; Silicates, W. H. Taylor; Metal Structures, J. S. Kasper; Organic Structures, J. M. Robertson; Structures of Biological Interest, L. Pauling; Structure of Haemoglobin and Myoglobin, M. F. Perutz; Fluids, Gases, and Macromolecules, P. J. W. Debye; Diffusion of X Rays by Thermal Agitation in Crystals, J. Laval; Background Scattering due to Disorder, B. E. Warren; Technical Application of X-Ray Analysis, R. Brill, A. Guinier, F. Laves; Refraction by an Ideal Crystal, G. Borrmann; and Spectroscopy of X Rays, Y. Cauchois.

The second symposium will commence on July 27