

# Kaman Nuclear

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## **MEETINGS**

### Optical Society

The annual meeting of the Optical Society of America will be held at the Statler-Hilton Hotel in New York City from October 6 to 9. A program of invited papers is planned which will cover (1) optical detectors, (2) gas lasers, (3) high-excitation ultraviolet spectra, (4) optical information processing, (5) optical metrology, and (6) interference effects among independent photons. On the evening of October 6, there will be a session on the Optics-Action Program.

Abstracts, due by July 17, must be submitted on an abstract form, which can be obtained by writing to Mary E. Warga, Executive Secretary, Optical Society of America, 1155 Sixteenth Street, N.W., Washington, D. C.

### Superconductors

A conference on the physics of type-II superconductivity will be held by the National Science Foundation and Western Reserve University's Department of Physics in Cleveland, Ohio, on August 28 and 29. The program includes (1) microscopic and phenomenological theories, (2) structure-insensitive properties, (3) thin films and surface properties, and (4) structure-sensitive properties. Write to B. S. Chandrasekhar, Department of Physics, Western Reserve University.

#### Rheology

The first annual winter meeting of the Society of Rheology was held on Feb. 3 and 4 at the Claremont University Center in Claremont, Calif. Participants numbered over 70 rheologists, a third of whom came from out of state.

Two full days of technical sessions, held in the Baxter Science Laboratory at the Center, featured three invited lectures in complementary areas of polymer rheology. Robert S. Marvin of the National Bureau of Standards discussed molecular theories of viscoelastic behavior of rubberlike polymers. Dr. Marvin supplemented these remarks with an evening lecture on his work in Japan and Japan's contribution to the study of crystalline

polymers. D. H. Kaelble of the Minnesota Mining and Manufacturing Company described the prominent role of rheology in polymer adhesion. The discussion included the application of thermodynamic criteria to bonding and the ultimate strength concepts of Smith. G. W. Becker of the California Institute of Technology gave a survey, illustrated by slides, of research carried out in the Physikalisch-Technische Bundensanstalt in Braunschweig, West Germany, on the mechanical behavior of polymers.

Contributed papers extended rheological concepts to systems ranging from polysaccharides to asphalts, and group sessions included papers on amorphous polymers and filled systems. Fundamental contributions were made by Robert Ullman of the Ford Motor Company who used the Kirkwood-Riseman adaptation of the Oseen approximation to evaluate the intrinsic viscosity of coiling molecules for four different models of chain segment distribution; by Gerard Kraus of the Phillips Petroleum Company who commented on melt viscosities of multi-chain polybutadienes, stressing the rheological importance of molecular weight distribution and chain branching; and by F. Rodriguez of Cornell who presented new relationships for treating the viscosity of concentrated polymer systems.

Papers contributed at the meeting are eligible, for the first time, for publication in the *Transactions of the Society of Rheology*.

Roger S. Porter California Research Corp.

The Society will hold its 35th annual meeting on October 26 to 28 at the Mellon Institute in Pittsburgh. Abstracts of contributed papers, limited to 200 words, must be submitted in duplicate before August 15. The deadline for submission of complete manuscripts, to be included in the Society's annual *Transactions*, is October 29. In addition to the contributed program, the meeting will present symposia on the rheology of random media and the influence of polymer structure on solution and melt rheology.

Abstracts and correspondence should be sent to Hershel Markovitz, Mellon Institute, Pittsburgh 13, Pa.