propagation through the solar corona, and nonlinear optics of ionized media.

Additional information can be obtained from the Conference Center, Pennsylvania State University, University Park, Pa.

### Materials

More than 150 technical sessions will be held by the technical committees of the American Society for Testing and Materials during its Committee Week and Spring Meeting, February 4–8, at the Queen Elizabeth Hotel in Montreal. The program will include discussions on various materials and their properties, electrodeposition, testing techniques, radioisotopes, radiation effects, and other relevant subjects. A special feature at this year's meeting will be the first in a series of ASTM Lectures on Outstanding Research. Cyril S. Smith, professor of metallurgy at the Massachusetts Institute of Technology, will speak on the factors contributing to successful results in the study of materials.

Inquiries concerning the meeting should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia 3, Pa.

# Biophysics

Three symposia of four invited papers each, in addition to sessions of contributed papers, will make up the program of the Biophysical Society's seventh annual meeting, which will take place February 18–20 at the Statler Hilton Hotel in New York City. The symposia topics are (1) structure of water, proteins, and viruses, (2) nonmuscular contractions in biological systems, and (3) control mechanisms in biological systems. Inquiries concerning the meeting should be sent to Dr. Alexander Mauro, Rockefeller Institute, York Avenue and 67th Street, New York, N. Y.

During the meeting, the Society's placement service will provide facilities for interviews between employers and candidates for positions. Placement information, including registration forms and lists of available positions and candidates, can be obtained from the Biophysical Society Placement Service, Box 668, Frederick, Md.

#### NMR Spectroscopy

Experimental aspects of nuclear-magnetic-resonance spectroscopy will be considered at the fourth omnibus conference on that topic, to be held at the Mellon Institute in Pittsburgh from February 28 to March 2. The first and last days of the meeting will be devoted, respectively, to broadline- and pulse-NMR experiments on solids and polymers and to high-resolution NMR. Miscellaneous material of general interest will be covered on the second day. This year's Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, which opens on March 4, has arranged to present its NMR papers on its first day, as a special con-

venience to NMR spectroscopists who wish to attend both meetings.

For additional details, write to Charles W. Wilson, III, Research and Development Department, Union Carbide Chemicals Company, South Charleston, W. Va.

## **Twinning**

Deformation twinning will be the topic of a conference to be held March 21–22 on the campus of the University of Florida in Gainesville. It is being sponsored by the University and the Physical Metallurgy Committee of the Metallurgical Society's Institute of Metals Division.

The meeting will cover work recently completed or in progress on twinning phenomena resulting from the use of hexagonal and other noncubic metals and on twinning as a type of plastic deformation in all metals, including cubic, at extremely low temperatures and high strain rates. Papers and discussions will be published in a volume of the Metallurgical Society Conference Series, and distributed without charge to conference registrants. The conference chairman is R. E. Reed Hill of the University of Florida.

### Nuclear Reactions

Reactions between complex nuclei, the third in a sequence accepted as topical conferences by the American Physical Society, will take place April 15–17 at Asilomar, Calif. Abstracts of contributed papers must be submitted in the form prescribed in the Bulletin of the American Physical Society. They are due no later than February 23. Both abstracts and requests for more detailed information concerning the meeting should be sent to Dr. Albert Ghiorso, Lawrence Radiation Laboratory, University of California, Berkeley 4, Calif.

# Thin Films in Electronics

The Electrochemical Society's Spring Meeting, to be held April 15–18 in Pittsburgh, will feature a symposium on thin films for electronic application, which is being organized by the Society's Divisions of Electronics, Electric Insulation, and Electrothermics and Metallurgy.

The program is expected to cover the following topics: (1) materials (metals, insulators, semiconductors); (2) combinations of materials (cermets); (3) deposition, monitoring, and testing techniques; (4) materials for specific applications (magnetic, dielectric, superconducting, tunneling); (5) experimental and theoretical properties; (6) aging effects; (7) compatibility of thin films with other thin films and various substrates; and (8) devices and integrated circuits employing thin films. The program committee for the symposium is soliciting brief, late-news papers describing recent research results.

Abstracts (the deadline is March 15 and they should be submitted in triplicate) and requests for