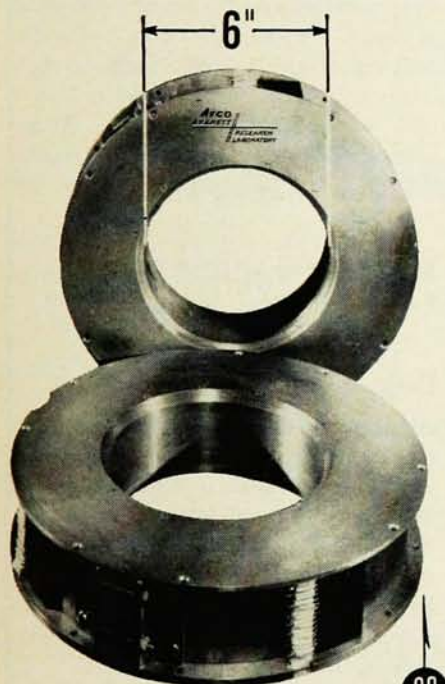


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MEETINGS

Experimental NMR

The Fifth Experimental Nuclear Magnetic Resonance Conference will be held at the Mellon Institute in Pittsburgh on February 28 and 29. The sessions will cover superconducting magnets, relaxation experiments, instrumentation maintenance, repair, modification, operation, electric field experiments, double resonance, single enhancement, and spectral analysis.

Additional information may be obtained from P. C. Lauterbur, Department of Chemistry, State University of New York, Stony Brook, N. Y.

Physics in Chicago

The Physics Club of Chicago has announced that it has scheduled lectures by E. Scheil of the US Army Electronic Laboratory on injection luminescence for March 10, and by D. L. Dexter of the University of Rochester on the solid-state for April 14. For further information write to R. A. Daly, Central Scientific Company, 1700 West Irving Park, Chicago, Ill.

IMP

On March 12, the Goddard Space Flight Center and the National Aeronautics and Space Administration will hold a symposium on the experiments conducted by the Interplanetary Monitoring Platform (IMP). This satellite (Explorer XVIII) is investigating magnetic fields, plasmas, and particles to an apogee of 198 000 kilometers. Results obtained to date will be discussed by experimenters from Massachusetts Institute of Technology, the University of Chicago, the University of California (Berkeley), NASA's Ames Research Center, and the Goddard Center.

The symposium will be held in the auditorium of Building 8 at Goddard, twelve miles north of Washington, D. C., off the Washington-Baltimore Parkway at Greenbelt, Md. For reserved parking and to facilitate entry, scientists planning to attend will be sent a windshield card upon notifying

the Public Affairs Officer (Code 207), Goddard Space Flight Center, Greenbelt, Md.

Hypervelocity Flight

The Denver Research Institute of the University of Denver and the Arnold Engineering Development Center—ARO, Inc., will cosponsor the third Hypervelocity Techniques Symposium, covering advanced experimental techniques for hypervelocity flight in the atmospheres of the earth and other planets. This meeting, which will be limited to about 250 participants, will take place at the University of Denver on March 17 and 18; the registration deadline is February 15.

Topics discussed will be in the following general areas: impulse-type hypersonic and hypervelocity tunnels; shock tubes; arc-driven, hypersonic continuous tunnels; aeroballistic ranges and hypervelocity launchers; MHD acceleration techniques; molecular beams; measurement techniques; and other advanced concepts. The *Proceedings* of the meeting will be available at the symposium.

For further information and registration forms contact the conference chairman, William G. Howell, Denver Research Institute, University of Denver, Denver, Colo.

Microelectronics

The Institute of Electrical and Electronics Engineers St. Louis Section will hold the Third Annual Microelectronics Symposium from April 13 to 15 at the Chase Park Plaza Hotel in St. Louis. The theme for the conference will be The Development of Microelectronics Through Materials Integration, and this year's program will consider the evolution of thin-film, hybrid, and integrated circuit systems, including materials requirements, processing techniques, and system interconnection methods. Typical topics will be vapor deposition, photo-etching and masking, diffusion processes, device packaging parameters, advanced semiconductor development,



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Details can be obtained from Mr. Thomas F. Murtha, Program Chairman, PO Box 4104, St. Louis, Mo.

Precipitates in Solids

The Electron Microscopy and Analysis Group of the British Institute of Physics and the Physical Society will hold a conference on the use of electron microscopy, diffraction, and probe analysis in the identification of precipitates in solids. The meeting will be held on April 16 and 17 at the National Physical Laboratory, Teddington, Middlesex.

The program will be devoted to the identification of crystal structure and analysis of precipitates in thin films and extraction replicas. The following review papers are expected: visibility of small precipitates in thin foils, use of dark field techniques to identify precipitates, determination of the degree of coherency of precipitates, the relative merits of extraction-replica and thin-foil techniques for the study of precipitates, electron diffraction patterns from precipitates in thin foils, identification of precipitates with conventional microanalyzers, microanalysis of precipitates using a modified Siemens Elmiskop I, and the study of precipitates with EMMA, a combined electron microscope and microanalyzer.

Full particulars and registration forms are available from the Administration Assistant, The Institute of Physics and the Physical Society, 47 Belgrave Square, London, S. W. 1, England. The closing date for applications to attend will be early in March.

Combustion

The Western States Section of the Combustion Institute has announced the subject matter of three of its forthcoming meetings.

The 1964 Spring Meeting will be held April 27 and 28 at Stanford University in California. The special subject areas for this meeting are combustion chambers, fire research, and underground in situ combustion.

The 1964 Fall Meeting will be held at the University of Utah, Salt Lake City, on October 26 and 27, with special emphasis on thermochemistry, metal combustion, and those aspects of fuel-cell research relating to electro-thermochemical processes and the kinetics of electrode reactions.

The 1965 Spring Meeting will take place in Los Angeles, April 26 and 27, and the special subjects chosen to date are high-energy reactions for chemical synthesis, seeded flames, and survey papers on the application of propulsion engineering combustion research to stationary powerplants.

Inquiries should be addressed to G. S. Bahn, 16902 Bollinger Drive, Pacific Palisades, Calif.

ASA

The Acoustical Society of America will hold its 67th meeting at the Hotel New Yorker in New York City from May 6 to 9. It is expected that the program will carry papers from each of the ten technical areas of the field, architectural acoustics, electroacoustics, musical acoustics, noise, physical acoustics, psychological and physiological acoustics, shock and vibration, sonic and ultrasonic engineering, speech communication, and underwater acoustics. An exhibit of scientific instruments, apparatus, and technical books will be held in connection with the meeting.

Inquiries should be addressed to Warren A. Tyrrell, Bell Telephone Laboratories, Inc., Whippany, N. J.

Crystal Defects

Argonne National Laboratory will be the site of an international conference on Lattice Defects in Quenched Metals, to be held June 15 to 17.

For further details write to International Conference on Lattice Defects in Quenched Metals, Building 212, Argonne National Laboratory, Argonne, Ill.

Computers

The 19th annual meeting of the Association for Computing Machinery will take place August 25 to 27 at the Sheraton Hotel in Philadelphia.