

MEETINGS

Vacuum and surfaces

The American Physical Society's Division of Electron Physics will hold a symposium on electronic and atomic processes at the vacuum-solid interface, during the APS meeting that convenes in New York City from June 23 to 25 this summer. Four invited papers are planned, covering scattering of atomic and molecular beams from metallic surfaces, condensation of gold on gold single crystals, photodesorption of CO from surfaces, and multiple scattering in low-energy electron diffraction.

Further information can be obtained from Dr. Frederick G. Allen, Bell Telephone Laboratories, Murray Hill, N. J.

Positrons

Wayne State University in Detroit will act as host for a conference on positron annihilation, to be held July 27 to 29 under the auspices of the Wayne State Fund, the University of North Carolina, the Advanced Research Projects Agency, and the National Science Foundation.

Most of the meeting's program will consist of invited papers on the study of positron annihilation and its use as a probe in studies of the condensed state of matter. However, short contributions will be considered if 200-word abstracts are received before June 18.

All correspondence should be addressed to A. T. Stewart, Physics Department, University of North Carolina, Chapel Hill, N. C.

Space physics

NASA's Goddard Space Flight Center will hold a meeting on atomic interactions and space physics from August 10 to 11. The meeting has been planned to follow closely the IUPAP meeting on the physics of electronic and atomic collisions (August 2-6, Québec), since the two deal with closely related subject matter.

The first day of the Goddard meeting will be devoted to charged par-

ticles and spectral observations from the ionosphere; the second to theoretical and experimental aspects of resonances and autoionization and their relevance (application) to astrophysics.

Inquiries regarding both the submission of papers and attendance should be made to Aaron Temkin, Goddard Space Flight Center, Greenbelt, Md.

Interplanetary exploration

The fifth annual space conference at Virginia Polytechnic Institute, which meets between August 23 and 27, will be devoted to discussion of the exploration of Mars and Venus. This year's conference will be jointly sponsored by the National Aeronautics and Space Administration and the Air Force Cambridge Research Laboratories.

More detailed information can be obtained from Dr. M. L. Collier, Virginia Polytechnic Institute, Blacksburg, Va.

X rays

The Metallurgy Division of the Denver Research Institute will hold the 14th annual conference on applications of x-ray analysis from August 25 to 27 in Denver.

The agenda schedules sessions on diffraction, emission spectrography, microprobe analysis, absorption and microscopy, instrumentation, topography, and small-angle scattering. Special sessions are planned on soft x rays and on effects of chemical combination on x-ray spectra.

Additional information can be obtained from William M. Mueller, Denver Research Institute, University of Denver, Denver, Colo.

Thermophysics

The American Institute of Aeronautics and Astronautics will hold a thermophysics specialist conference from September 13 to 15 at the US

Naval Postgraduate School in Monterey, Calif.

The program will be devoted to ablation, thermophysical problems associated with the exploration of interplanetary space, space environmental effects on thermal control surfaces, thermal modeling, interface effects, surface roughness, radiation property measurement techniques, and the theory of radiation in solids. One evening session will be devoted to an invited panel discussion on the problems of spacecraft thermal design as revealed by satellite experience.

Additional information can be obtained from Milton Schach, Thermal Systems Branch, Goddard Space Flight Center, Greenbelt, Md.

Organic solid state

The Franklin Institute Research Laboratories will hold the third annual symposium on the organic solid state on September 20. The program will consist of four invited papers: controlled transfer of excitation energy through thin layers, optical properties of highly absorbing organic solids, luminescent compounds, and the liquid crystalline state.

Advance registration by September 8 is required. Further information and registration forms can be obtained from Dr. M. M. Labes, Franklin Institute Research Laboratories, Philadelphia, Pa.

Neutron scattering

Brookhaven National Laboratory is planning a symposium on the inelastic scattering of neutrons by condensed systems, in connection with the start-up of its new high-flux beam reactor.

To be held September 20 to 22, the meeting will consist of nine invited papers distributed over the three-day period, to allow extensive time for informal discussion. These will summarize present understanding of selected fields, with emphasis on areas where knowledge is lacking and where

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useful measurements could be made with neutrons. Some contributed papers will also be accepted. Topics to be discussed at the meeting are: lattice dynamics, spin waves and excitations in magnetic materials, critical phenomena, superconductivity, superfluidity, liquid dynamics, and motions of complex biological molecules.

Correspondence should be addressed to Dr. Harry Palevsky, Department of Physics, Brookhaven National Laboratory, Upton, Long Island, N.Y.

Microbalances

An informal conference on vacuum microbalance techniques will immediately precede the 12th national symposium of the American Vacuum Society, which meets September 29 to October 1 in New York City. The meeting will take place on September 27 and 28 at the Nassau Inn in Princeton, N. J., and is expected to cover theory, new types of balances, difficulties, associated equipment, other microweighing methods, and applications. Titles and 150-word abstracts of contributions are due by July 30. Address correspondence to Dr. Klaus H. Behrndt, Bell Telephone Laboratories, Murray Hill, N.J.

Space optics

England's Institute of Physics and the Physical Society is planning a conference on optics in space, to be held September 27 to 30 at the University of Southampton.

The proposed program of the meeting includes discussion of materials and instrumentation, spectroscopy, telescopes in space, laser techniques, television techniques, optical tracking, optical guidance, photography from space vehicles, environmental testing, and wavelength sampling. Contributions on other appropriate topics will also be considered.

Information on the preparation of outlines of contributions (to be sent by June 30 to H. G. Jerrard, Physics Department, University of Southampton, Hampshire), further details, and application forms can be obtained from the Meetings Officer, Institute of Physics and the Physical Society, 47 Belgrave Square, London SW 1.



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