

MEETINGS

The Strength of Crystals

A PROGRAM of invited papers on the general subject of the impact of transmission electron microscopy on theories of the strength of crystals will be presented July 5-8 on the occasion of the first International Materials Conference at the University of California at Berkeley. Presented by the Inorganic Materials Research Division of the Lawrence Radiation Laboratory in cooperation with the University Extension and the Department of Mineral Technology at Berkeley, the conference is to be unclassified and open to the first one hundred persons who request invitations (and who pay the required \$100 registration fee).

The tentative program has the following two parts: (1) Structure and Properties of Crystals, including papers on dislocations in well-annealed crystals, substructures resulting from condensation or emission of vacancies, defect substructures produced by slip, changes in cold-worked crystals during recovery, and recrystallization structures of alloys; (2) Relations Between Observed Defect Substructures and the Theory of Plastic Deformation, including papers on theory of yielding, theory of strain hardening, yielding and hardening in alloys, and theory of crack nucleation and propagation.

Requests for additional information should be sent to the University Extension, University of California, Berkeley 4, California.

Internal Friction

CORNELL University's Materials Science Center, under the sponsorship of the Advanced Research Projects Agency and the Atomic Energy Commission, is planning a Conference on Internal Friction to be held July 10-11 at Cornell. Four half-day sessions will be devoted to the following topics: (1) pinning of dislocations by point defects; (2) low-temperature peaks in deformed materials (Bordoni-type peaks); (3) phenomena involving diffusion-type motion of point defects (peaks of the Snoek type, Zener type, etc.); and (4) techniques, with special emphasis on very high frequencies.

Further information is obtainable from Paul Leurgans, Materials Science Center, Thurston Hall, Cornell University, Ithaca, N. Y.

Cryogenic Engineering

PAPERS dealing with low-temperature technology below 150°K will be presented at the 1961 Cryogenic Engineering Conference. It is the seventh such meeting, and will take place August 15-17 in Ann Arbor, Mich., under the sponsorship of the University of Michigan.

The scope of this year's meeting is expected to resemble that of the previous conferences, where papers have been presented on such topics as liquefaction cycles, purification of gases, gas separation, distillation, heat transfer, catalysis, fluid flow, absorption, hydrogen and LOX production, cryogenic fuels, oxidants, pressurants, missile problems, mechanical and thermal properties, vacuum insulation, powder insulation, super insulation, safety, friction studies, vapor-liquid equilibria, liquid-level devices, probes, pumps, bearings, transfer lines, dewars, cryostats, temperature- and pressure-measuring devices, expansion engines and turbines, heat exchangers, regenerators, high-energy and nuclear applications, and bubble chambers.

Proceedings of past conferences, entitled *Advances in Cryogenic Engineering*, are still available and may be obtained from the publisher, Plenum Press, Inc., 227 West 17th Street, New York 11, N. Y. Volumes 1-5 sell for \$13.50 each; Volume 6 costs \$15.00. It is planned that there will be a Volume 7 covering the 1961 conference.

For additional information concerning the meeting, contact the conference secretary, K. D. Timmerhaus, Chemical Engineering Department, University of Colorado, Boulder, Colo.

Radio Spectroscopy of Solids

SPONSORED jointly by the British Radio Spectroscopy Group and the recently amalgamated Institute of Physics and Physical Society, a two-day conference on radio spectroscopy of solids will be held September 21-22 at the University College of North Wales (Bangor). The Institute and Society's Guthrie Lecture will be presented at the conference by D. Shoenberg, who will speak on the de Haas-van Alphen effect and the electronic structure of metals.

Programs and application forms will be available in mid-July from the Administration Assistant, The Institute of Physics and the Physical Society, 47 Belgrave Square, London, S. W. 1, England.

Electronic Technology

THE National Electronics Conference and Exhibit, under the auspices of the American Institute of Electrical Engineers, the Illinois Institute of Technology, the Institute of Radio Engineers, Northwestern University, and the University of Illinois, will be held at the International Amphitheatre in Chicago, October 9-11. Among the subjects to be discussed at the technical sessions are microwave and millimeter-wave techniques, optical communications, magnetohydrodynamics, solid-state devices and circuits, and space communication and manned flight. A volume of the papers to be presented will be on sale in advance of the technical sessions. The exhibits of electronic apparatus will in-

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At present the laboratory is located in Union, New Jersey, but a new research center is being planned.

Specifically, a Research Supervisor is required for research areas in physics, nominally titled Electrics, Magnetism, and Radiation Physics. Additionally, we require a Supervisor of Solid State Research. It is expected that these positions will be occupied by men of proven research ability.

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DR. D. H. HOWLING

Manager, Physics Research Department

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Chemistry and Nuclear Reactors

JOINT conferences on nuclear reactor chemistry and analytical chemistry in nuclear reactor technology will be held at Gatlinburg, Tenn., from October 10 to 12, under the sponsorship of the Oak Ridge National Laboratory.

Subjects for discussion at the Second Conference on Nuclear Reactor Chemistry will include the chemical behavior of moderator and coolant materials and the effects of nuclear radiation on their properties, deportment of fission products in reactor fuels, development of reactor fuel and blanket materials, and the application of statistical methods and computer calculations in planning and evaluation of experiments.

The Fifth Conference on Analytical Chemistry in Nuclear Reactor Technology will be devoted to improved methods and instruments for the analysis of numerous nuclear reactor materials and products. Papers are particularly desired on the following or related subjects: measurements of burnup of uranium or plutonium fuels; isotopic analysis, determination of gases in reactor materials; methods and instruments for on-line analyses; remote analysis of radioactive materials; nondestructive testing of nuclear fuel elements and other reactor materials; analysis of Be, BeO, cermetes containing BeO, Zr and Nb alloys, heavy water, and plutonium and plutonium-base fuels. Review papers critically evaluating the "state of the art" are also welcome.

For both conferences, the deadline for submission of 200-400 word abstracts of contributed papers is July 15. The time required for presentation (which must not exceed 20 minutes) should be indicated by prospective authors. It is planned to publish the proceedings of the conferences.

Abstracts and inquiries should be sent to W. R. Grimes (for nuclear reactor chemistry) or C. D. Susano (for analytical chemistry), Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, Tenn.

Rheology

ACALL for papers has been issued by the Program Committee for the 32nd Annual Meeting of the Society of Rheology, which will be held from October 30 through November 1 on the campus of the University of Wisconsin. Titles of proposed papers should be indicated to the Committee as soon as possible. A deadline of August 15 has been set for the submission of abstracts which must be sent in duplicate to the chairman of the Program Committee, Edward A. Collins, B. F. Goodrich Chemical Co., P. O. Box 122, Avon Lake, Ohio.

It is planned that the abstracts will appear in the fall issue of the *Rheology Bulletin* and that the papers will subsequently be published in Volume 6 of the