U. S. ARMY BALLISTIC RESEARCH LABORATORIES Aberdeen Proving Ground, Maryland

VACANCIES FOR:

- *Nuclear Engineers and Technicians
- *Electronic Engineers and Technicians
- *Physical Scientists and Physical Science Technicians

SALARIES: From \$7710 to \$12,075 for Engineers and Physical Scientists, and from \$7220 to \$8650 for Technicians.

FUNCTIONS: Work consists of conducting radiation exposure studies in a new pulse nuclear reactor facility being constructed for the purpose of evaluating the effects of high intensity radiation on the performance of weapons, electronic equipment and other military material. The facility will provide all East Coast defense activities and contractors with a means of studying nuclear radiation effects. The work will also include research and development studies to improve the design for advanced pulse reactors especially reactor cores and controls and develop and improve diagnostic, data acquisition and data processing instrumentation and equipment. APPLICATIONS: Standard Form 57, which may be obtained from any Post Office or Federal Agency. should be forwarded to Board of U.S. Civil Service Examiners, Aberdeen Proving Ground, Maryland.

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from the Meetings Officer, The Institute of Physics and The Physical Society, 47 Belgrave Square, London SW 1, England.

Two-photon processes

The American Physical Society's Division of Electron Physics has announced the following program for a symposium it is holding during this month's APS meeting: two-photon interaction cross sections, J. J. Hopfield: two-photon decay of metastable hydrogen atoms, R. Novick; laser two-quantum photodetachment of iodine, J. L. Hall: two-photon absorption and stimulated emission, I. D. Abella.

Mössbauer effect

New England Nuclear Corporation and Technical Measurement Corporation will hold a symposium on research and industrial applications of the Mössbauer effect in the Mercury Ballroom of the New York Hilton on Jan. 25. Registration information can be obtained from New England Nuclear Corporation, 575 Albany Street, Boston, Mass.

Astronautics

Papers are being solicited for the seventeenth congress of the International Astronautical Federation, which meets Oct. 9 to 15 in Madrid. General sessions of the meeting will include propulsion, theoretical and technical aspects of guidance, control, and tracking, reëntry physics, systems design, satellites, and space-related life science. There will also be three special sessions: the international lunar laboratory (invited papers only), the role of astronautics in education, and the ninth colloquium of the International Institute of Space Law. Session chairmen, to be named later this year, will consider abstracts until May 15.

Inquiries should be directed to the International Astronautical Federation, 250, rue Saint-Jacques, Paris 5, France.

Solids

A conference on electronic processes in low-mobility solids will be held in the department of physics of the University of Sheffield April 18 to 20.

The purpose of the meeting is to discuss transport phenomena, optical. dielectric, and other properties associated with electron (or polaron) hopping and tunneling in solids. Typical materials are the transition metal oxides, ferrites, amorphous solids and molecular crystals. Review papers will include the following: amorphous semiconductors, fessor N. F. Mott, (Cambridge); small polaron theory, Dr. G. L. Sewell, (London): experimental investigation of low-mobility transport properties, Dr. W. E. Spear (Leicester). Short contributions on theoretical and experimental aspects are invited, and titles are due by Feb. 21. Advance registration will be necessary and accommodation will be available in a residence hall. Correspondence should be sent to Dr. I. G. Austin, Department of Physics, The University, Sheffield 3, England.

Semiconductor physics

Britain's Institute of Physics and the Physical Society is planning to hold a conference on the physics of semiconducting compounds at the University College of Swansea, University of Wales, from September 21 to 23. Detailed papers on device technology will be excluded but contributions on all other aspects of the topic will be considered with preference given to papers related to the character of semiconducting compounds. Threehundred-word outlines of contributions, in triplicate, should be sent by July 1 to R. H. Jones, Department of Physics, University College of Swansea, Singleton Park, Swansea, Wales. Further information will be available in May from the Meetings Officer, The Institute of Physics and Physical Society, 47 Belgrave Square, London SW 1, England.

Organic Scintillators

Argonne National Laboratory will sponsor a symposium on organic scintillators from June 20 to 22. The program will cover three major categories: theory and mechanisms (light production, response, excited states,















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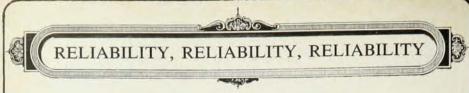
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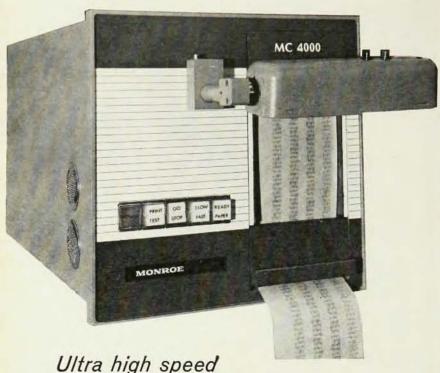
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quenching, transfer, migration, and lifetimes); applications (nuclear, dating, neutron counting, pulse-shape discrimination, and large volumes); and other recent advances (chemistry and synthesis, radiation damage, new multiplier phototubes, and nanosecond circuits). Papers dealing mainly with biological and medical applications are excluded from this meeting.

Abstracts of contributed papers (500 words or less) are due by April 15, and advance registration to facilitate the arrangement of accommodations is desired. Correspondence should be directed to Dr. Donald L. Horrocks, Chemistry Division, Argonne National Laboratory, 9700 South Cass Avenue, Argonne, Ill. 60440.

Low temperatures

Engineering below 150°K will be the subject of this year's cryogenic engineering conference. Sponsored by the University of Colorado and the National Bureau of Standards, the meeting will be held in Boulder June 13 to 15 and deal generally with applications of liquid hydrogen. Abstracts (200 words) and preliminary manuscripts must be sent by March 1 to K. D. Timmerhaus, Engineering Research Center, University of Colorado, Boulder, Colo.

The University and the NBS will also be hosts to the meeting of Commission 1 of the International Institute of Refrigeration in Boulder, June 16 to 18. This meeting will be on liquid-helium technology, including temperature measurement and control, liquefaction, storage and transport, cryomagnetics, and applications to space, missiles, and nuclear physics. Abstracts of 500 to 1000 words are due by March 1. These and other correspondence should be sent to IIR Commission 1 Symposium, Cryogenic Division, National Bureau of Standards, Boulder Colo.

Materials

The British Institute of Physics and the Physical Society Materials and Testing Group, in cooperation with the National Physical Laboratory, is arranging a conference on the early