

and storage mechanisms, nuclear energy sources, nuclear systems design, and solar system design. Technical developments in the field will be illustrated by hardware that will tie in with actual devices, systems, and components discussed during the technical sessions.

Additional information can be obtained from Roderrick L. Hohl, American Rocket Society, 500 Fifth Avenue, New York 36, N. Y.

Astronautics

AN Air Force Symposium on Astronautics, open to the public, will be held October 12-14 at the Ambassador Hotel in Los Angeles under the cosponsorship of the Air Force Office of Scientific Research and the Society of Automotive Engineers. This will be the third in a series of symposia, the first such meeting having been held in February 1957 and the second in April 1958. The conference speakers will include investigators in various aspects of interplanetary flight. Further information can be obtained from the general chairman of the symposium, Dr. W. F. Ballhaus, Nortronics Division of Northrop Corporation, Hawthorne, Calif.

Rare Earth Research

FIVE sessions in the areas of solution chemistry, ceramic systems, and metals, alloys, and intermetallics are planned for a seminar on the subject of "Rare Earth Research", which is to be held October 23-26 at the Arrowhead Conference Center of the University of California, located in the San Bernardino Mountains about 85 miles from Los Angeles. The meeting will be jointly sponsored by the University of California, the Department of Defense, and the Research Chemicals Division of Nuclear Corporation of America.

The program will consist of invited papers, which will be preprinted and distributed to all those who attend. Each session will contain a brief summary by the authors followed by a general discussion period. Because of limited facilities (the Center can house about 100 persons) attendance will be restricted to those scientists actively interested in research involving the rare earth elements. Requests for reservations or further information should be sent either to Dr. E. V. Kleber, Research Chemicals, P. O. Box 431, 170 West Providencia, Burbank, Calif., or to Mr. Harry Tallman, University of California, Los Angeles 24, Calif.

APS Division of Plasma Physics

THE Second Annual Meeting of the Division of Plasma Physics of the American Physical Society will be held November 2-5 in the Gatlinburg Civic Auditorium, Gatlinburg, Tenn., under the joint sponsorship of the APS and the Oak Ridge National Laboratory. The Division was formally organized last year, with the approval of the Society's Council, and is concerned with "the advancement and diffusion of knowl-

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The technical program of the meeting will include invited papers on subjects of current interest in these areas, as well as ten-minute papers contributed by members of the APS. In addition, plans have been made to reserve Saturday, November 5, for a guided tour of the Oak Ridge National Laboratory.

Abstracts of contributed papers, prepared in accordance with the rules and instructions set forth in any recent issue of the *Bulletin of the American Physical Society*, should be submitted before September 26 to Dr. Albert Simon, Oak Ridge National Laboratory, P. O. Box X, Oak Ridge, Tenn. Further information concerning the meeting can be obtained from Dr. A. H. Snell at the same address.

Solid-State Circuits

CIRCUIT properties and design techniques related to a wide variety of solid-state devices will be discussed at the 1961 International Solid-State Circuits Conference, which is to be held February 15-17, 1961, on the campus of the University of Pennsylvania and at the Sheraton Hotel in Philadelphia. The conference will be sponsored jointly by the Institute of Radio Engineers, the American Institute of Electrical Engineers, and the University of Pennsylvania.

Among the general areas to be covered by the program are (1) solid-state memory, storage, and logic elements (such as twistors, thin-film memories and associated circuits, photoelectronic circuitry, etc.); (2) solid-state microwave amplifying mechanisms (such as parametric amplifiers and masers); (3) solid-state devices performing an integrated circuit function; (4) cryogenic digital and linear applications; (5) novel types of solid-state devices (such as those utilizing the Hall effect, high-temperature circuit elements, and solid-state filters and delay lines); and (6) advanced circuitry, with emphasis on significant developments in the art, to the exclusion of data on equipment design. Papers representing original contributions in these and related fields are invited.

Abstracts (300-500 words) which can be accompanied by key illustrations, and 50-word summaries for advance program mailings, should be submitted in double-spaced typewritten form (in triplicate) by October 14, 1960, to the program chairman, Jerome J. Suran, Building 3, Room 115, General Electric Company, Electronics Park, Syracuse, N. Y., and should be accompanied by the author's name, affiliation, position title, business and home addresses (including telephone number), and a brief biographical sketch.

Additional information on the meeting can be obtained from the secretary of the conference committee, F. H. Blecher, Bell Telephone Laboratories, Murray Hill, N. J.