

.....DIRECTOR OF APPLIED SEMICONDUCTOR RESEARCH

THE TRANSISTOR Division of the Minneapolis-Honeywell Regulator Company is in the process of relocating and expanding its operations in Boston. As a result, a top-level position in semiconductor research and development is available for an exceptional and experienced solid state physicist. This position carries with it the responsibility for establishing a diversified semiconductor research program in its entirety.

The man we are seeking for this position should be primarily interested in the fundamental electrical, optical, and magnetic properties of semiconductors and must also be able to recognize the device potential of these properties.

Honeywell is a pioneer in the power transistor field and has a reputation for the quality of its product.

We invite qualified scientists to submit a résumé to Jerre V. Manning, General Manager, Honeywell Transistor Division, Dept. PY-12-234, 2753 Fourth Ave. S., Minneapolis 8, Minnesota. Your inquiry will be held strictly confidential.

MINNEAPOLIS Honeywell

First in Controls

Physicist

NUCLEAR THEORY

Reactor and Shield Development for Nuclear Flight

The qualified physicist we are looking for to fill this extraordinary position is as much at home with major analog and digital computing installations as he is with old-fashioned paper, pencil and cerebration . . . that unique quality of it that makes him a creative force to be reckoned with.

The position involves the use of the most advanced techniques of mathematical physics and high speed computing machinery in the development of the fundamental neutron and gamma ray physics technology of high performance reactors and shields of nuclear aircraft. A PhD in theoretical physics or applied mathematics or equivalent is preferred.

Experience in neutron and gamma ray physics is desired, but interest, ability and potential are considered more important.

Publication of research results in the appropriate classified or open literature is encouraged.

Openings at Cincinnati, Ohio
and Idaho Falls, Idaho

Address replies stating salary requirements to location you prefer

J. R. Rosselot
P. O. Box 132
Cincinnati, O.

L. A. Munther
P. O. Box 535
Idaho Falls, Idaho

GENERAL  ELECTRIC

mass coordinates, that is necessary for complete understanding.

The price of the book will probably discourage students from buying it unless compelled to, which is a pity since they are more likely to benefit from it than their more prosperous elders.

Solid State Physics: Advances in Research and Applications. Vol. 2. Edited by Frederick Seitz and David Turnbull. 468 pp. Academic Press Inc., New York, 1956. \$10.00. Reviewed by J. A. Cowen, Michigan State University.

Solid state physics is growing at such a rate that even the specialist in the field can appreciate well written concise articles on those phases of the study of solids which lie outside of his own immediate interests. Having started quite late among the various annual review volumes which are so popular today, *Solid State Physics* as a unit will satisfy the most demanding reader.

The two articles by Pake and Knight—one a review of the general technique and theory of nuclear magnetic resonance, the other on the specific problem of magnetic resonance in metals—complement each other. Intentionally or otherwise, this juxtaposition makes both articles more valuable and might well represent an aim of the editors in future volumes.

Nearly half of Shull and Wollans' article on neutron diffraction is devoted to the application of neutron diffraction to the study of magnetic ordering and the superlattice. This is as it should be for much of what we know about antiferromagnetism and ferrimagnetism is due to these experiments and their explanation.

The remaining half of the volume contains two papers, "The Theory of Specific Heats and Lattice Vibrations" by J. de Launay and "Displacement of Atoms by Irradiation" by F. Seitz and J. S. Koehler. Speaking as a nonspecialist, both of these were readable and interesting.

This reviewer feels that the summary included by Knight which indicated the direction of current research and the place of the topics which he discussed in the general scheme of magnetic resonance in metals was a very useful addition and hopes that the editors of the series will encourage future authors to include such summaries.

Control of Nuclear Reactors and Power Plants. By M. A. Schultz. 313 pp. McGraw-Hill Book Co., Inc., New York, 1955. \$7.50. Reviewed by T. Teichmann, Lockheed Aircraft Corporation.

Over the recent years the analysis and design of electronic feedback circuits and to a large extent of electronic control systems have become almost mechanical due to the wide-spread use of the Laplace Transform Methods and of Bode and Nyquist diagrams. The use of a transfer function to describe the behavior of systems has become almost second nature to electronics people but there is a great deal of work to be done yet