ering every aspect of schistosomiasis and its control. It is designed to be used in the farming areas, where 80 percent of the population lives and the place where snails and schistosomiasis flourish.

So the Chinese display an intention to control schistosomiasis whatever the human cost. The mobilization of human energy is unbelievable, and at times it is hard for Westerners to comprehend.

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Metals for Theorists

Introduction to the Theory of Normal Metals. A. A. ABRIKOSOV. Translated by Alexis Baratoff. Academic Press, New York, 1972. xii, 294 pp., illus. $16.50. Solid State Physics, vol. 12.

Abrikosov has produced a clearly written and self-contained book whose content is rather aptly described by the title. As an introduction it stops distinctly short of the level of serious research papers in both the detail and the sophistication of the treatment. (It does, however, assume a good knowledge of quantum physics.) It is a book for theorists, by which is meant not only that most references to experiment are omitted but that the theory is presented as if the author expected to follow up this course with a more sophisticated treatment. Results that could be obtained by a neat trick or physical argument are often presented in a more formal and elaborate manner as if in preparation for the application of the methods to more difficult situations.

The book makes no attempt to give a balanced coverage of all topics important to the theory of normal metals. It lays relatively more stress on transport phenomena, particularly those historically central to the understanding of the Fermi surface. It includes also a discussion of certain quantum effects that are of importance. However, there are some topics central to a complete theory of normal metals which Abrikosov chooses to give minimal treatment, including band structure calculational methods and results, pseudopotential theory, and practically all the theory of electron-electron, electron-phonon, and electron-impurity interaction.

While reflecting on the author's choice of topics and level of coverage, I discovered that the book is an outgrowth of a series of lectures given in India in 1966. Seen as a limited lecture series to a specialized audience, the choice makes considerable sense. (It does not retain the colloquial style of the usual lecture series book, however.) There are a few topics added later dating from about 1968, but by and large the material and its treatment are no more contemporary than those of Ziman's book on solid state theory.

In spite of the date of writing, there does not seem to be a direct competitor (in English) to the monograph, although nearly all of the material can be found in other books. However, those interested in this field of research should watch for a work (now only in Russian) of I. M. Lifschitz, M. Ya. Azbel, and M. F. Kaganov ("Electron Theory of Metals," Science Publishing House, Moscow, 1971). If that work receives as felicitous a translation as that provided for Abrikosov by Alexis Baratoff, it will be very interesting, because of its more modern choice of topics.

Baratoff has provided, in addition to a very readable translation, a number of valuable footnotes clarifying otherwise confusing points. All in all, it is unfortunate that publication of the book was delayed so long after completion of the manuscript, but many students of the subject will still want to add it to their libraries.

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Vibrational Properties

Thermal Expansion. BERNARD YATES. Plenum, New York, 1972. x, 122 pp., illus. $12.50. Monographs in Low-Temperature Physics.

According to the publisher, this is the first volume of a new monograph series being edited by John G. Daunt and K. Mendelssohn. The audience at which the series as a whole is to be aimed is not specified, but the volume under review comes reasonably close to its stated mark of being suitable for undergraduates and postgraduate workers "who wish to gain an introduction to the vibrational properties of solids."

The chief difficulty with the general subject of vibrations in solids is that either too much or too little information is at hand. The well-known texts in solid state physics, such as Kittel's, usually give satisfactory introductory treatments of crystal structures, reciprocal lattices, and quantization of lattice vibrations for one-, two-, or three-dimensional systems. But when it comes to the analysis of experimental data for real solids the reader has to be satisfied with a few short paragraphs at the end of a chapter. At the other extreme, there are available comprehensive reviews of lattice theory and its applications that can easily frighten the beginner and the average experimentalist.

Yates has chosen to stay close to the realm of actual physical measurements on solids and to describe how information about their vibrational structure can be derived from measured thermodynamic properties, including thermal expansivities. Actually, detailed discussion of thermal expansion is given only one chapter, and in this respect the title of the book is somewhat misleading. A more appropriate one might have been "Thermodynamic and Vibrational Properties of Solids."

Most of the analytical procedures that are described are based on the quasiharmonic model and were developed originally by T. H. K. Barron. The examples given are mainly of insulating crystals such as the alkali halides. Metals, alloys, polymers, and other types of solids are dealt with much more briefly.

To sum up: *Thermal Expansion* meets adequately its limited objective of being post-Kittel but pre-Chocquard. It can be used with confidence.

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Soviet Pronouncements

Science and Technology as an Instrument of Soviet Policy. MOSE L. HARVEY, LEON GOURE, and VLADIMIR PROKOFIEFF. University of Miami Center for Advanced International Studies, Coral Gables, Fla., 1972 (available from its Washington research division, 1225 Connecticut Ave. NW, Washington, D.C. 20036). xvi, 218 pp., illus. Cloth, $5.95; paper, $4.95. Monographs in International Affairs.

This book has two parts, one consisting of translated extracts from Soviet articles and official documents on science and technology, the other an analysis by the authors of "specific issues