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experience but to contribute to the welfare of people. Positivism is ardently attacked, and the materialistic view of the universe is taken for granted.

Physicists may be interested in the article by V. Novacu on "La Méthode Dialectique et les Sciences Physiques." Here, the author provides a rapid review of the history of physics from the 19th century to contemporary high-energy physics. Leaving aside the continual emphasis on dialectical materialism, the treatment is superficial, though it is clear that the writer has read widely in contemporary physical literature.

Absorption Spectra in the Ultraviolet and Visible Region, Volume 3. L. Láng, ed. 424 pp. Academic, New York, 1962. \$20.00.

Reviewed by Stuart A. Rice, University of Chicago.

This book is a loose-leaf compilation of the absorption spectra of complex organic molecules. In each case there is a reproduction of the spectrum (usually over the range 2000 to 5000 angstroms) accompanied by a table of optical densities in one or two solvents. The book is provided with a celluloid over-leaf which permits accurate reading of the graphs.

In general, the spectra represented are of low resolution and show no vibronic structure. The compilation will primarily be of use for analytical purposes and not of great interest to physical chemists or physicists.

Fourier Analysis on Groups. By Walter Rudin. No. 12 in Tracts in Pure and Applied Mathematics, edited by L. Bers, R. Courant, and J. J. Stoker. 285 pp. Interscience, New York, 1962. \$9.50.

Reviewed by Dagmar Renate Henney, University of Maryland.

This is another superior book from the Interscience Tracts in Pure and Applied Mathematics, which takes its readers to the forefront of an interesting but advanced level of research done in modern mathematics. There are no exercises, and the material is too difficult for the undergraduate or beginning graduate student. But it is of great value to those who are actively doing research in the field of harmonic analysis. It is assumed that the reader has a background consisting

of courses in topology, topological groups, elements of functional analysis, and measure theory. Some essential topics concerning these background subjects are given in the appendix. Which means, of course, that a complete list of results and a complete proof (if one is given at all) cannot be achieved.

The first two chapters of the book cover essentially the development of the theory of Fourier analysis on locally compact Abelian groups. These two chapters are primarily introductory in nature. The remaining seven chapters consist of material which is presented for the first time in book form. These chapters are based on research papers which have only in recent years appeared in mathematical journals. The main object of study is the group algebra of all complex functions on a group which are integrable with respect to the Haar measure and the group algebra consisting of all bounded regular Borel measures on the group. Though the solutions of some of the problems under consideration are almost complete at the present time, various open questions remain and a graduate student might be tempted to select any one of them as a thesis project.

Introductory Statistical Mechanics for Physicists. By D. K. C. MacDonald. 176 pp. Wiley, New York, 1963. \$6.75.

Reviewed by William S. Bickel, Pennsylvania State University.

Ever since the fusion of two major theoretical sciences, thermodynamics and classical mechanics, into a new theoretical science — statistical mechanics, there has been a gradual evolution of both the mathematical elegance of its structure and of the techniques of demonstrating its application. Even with the classic texts on hand and many other books supplementing the classic texts, MacDonald's *Introductory Statistical Mechanics for Physicists* will still be welcome as a satisfying, almost entertaining introduction to this seemingly esoteric subject. Intended primarily as a modest introduction to the standard texts, especially for physicists working with the solid state and low temperatures, this book will fulfill this aim admir-