

## MODERN ASPECTS OF SOLID STATE CHEMISTRY

Edited by **C. N. R. Rao**, *Professor of Chemistry, Indian Institute of Technology, Kanpur, India*

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Lectures given at a Winter School in Solid State Chemistry, held at Kanpur, India, November and December 1969

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Edited by **Helmut J. Schwarz**, *Rensselaer Polytechnic Institute, East Windsor Hill, Connecticut*

and **Heinrich Hora**, *Rensselaer Polytechnic Institute and Institut für Plasmaphysik (Max Planck Society), Garching, Germany*  
The rapid and dynamic development of laser technology and the use of magnetic methods in containing plasma have led researchers to create plasmas approaching conditions of nuclear fusion. This volume presents all the current information about lasers and their interaction and the related plasma phenomena and serves as a review, handbook, and summary of advances in this increasingly important field.

It introduces and explains the many uses of laser technology in the field of plasma physics, including thermonuclear physics, thermophysics, and spectroscopy. In these areas lasers are used not only as powerful means of acting on matter, but also as instruments for registering changes and diagnosing problems in such fields as high-speed photography, interferometry, and holography.

*Proceedings of the First Workshop, held at Rensselaer Polytechnic Institute, Hartford Graduate Center, East Windsor Hill, Connecticut, June 9-13, 1969*

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of equal but opposite charges." One is relieved to find that isospin escapes being described as nucleonic schizophrenia.

This book was designed, the author tells us, for a one-semester course in quantum mechanics to be given to physics majors in their senior year. This would have made it a rather busy semester, and I imagine that this text may come to be used with some supplementary material in a one-year course at that level. The explanations are complete but not verbose, and the problems at the end of each chapter are numerous and easy with solutions provided for the trickier ones. The book would consequently be especially useful in the type of seminar course often given to bright seniors in small colleges where the number of interested students does not permit a lecture course to be given.

There are enough introductory books on quantum mechanics available today that any new entrant in the field has to justify itself in fairly strong terms; there is really not room for another text whose light style and sloppy syntax make it just another colloquial mini-Schiff. Ziock passes this test through the directness of his approach and through his happy choice of problems in hyperfine structure to which he applies the concepts he develops.

PHILIP L. TAYLOR  
*Associate Professor of Physics  
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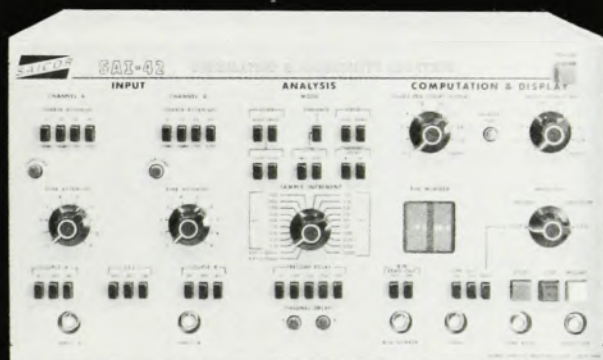
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