



Introduction to Magnetic Resonance Spectroscopy ESR, NMR, NQR, 3/e

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2020	18 x 24	516 pp	Paperback	ISBN: 9789386768926	Price: 995.00
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About the Book

This book brings together the three branches of magnetic resonance spectroscopy namely, electron spin resonance (ESR), nuclear magnetic resonance (NMR) and nuclear quadrupole resonance (NQR) and presents a coherent and progressive coverage of the subject in a simple and lucid style. Each part covers the physical basis of a spectroscopic method and its chemical applications. The emphasis is on obtaining and interpreting some types of spectra often met in solving problems related to structure and behaviour of organic and inorganic molecules. Each part concludes with references to advanced literature and exercises that test the readers' understanding. This text may be used for self study. The text will benefit students at M.Sc., M.Phil. and research levels in chemistry, physics, biology and pharmacology.

Salient Features

- Use of Huckel and crystal field theory as tools in the interpretation of spectra
- Extended coverage of 2D NMR spectroscopy
- NMR spectroscopy of nuclei such as ^{13}C , ^{19}F and ^{31}P
- Detailed description of the experiments
- Development of the subject in a clear step-by-step manner
- Illustrations, over 270, to aid conceptual understanding
- The exercises have been revised and their number increased to over 150 and fully worked out to illustrate the strategy.

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