

Foreword

There is hardly any doubt that NMR is nowadays the most powerful and perhaps also the most beautiful analytical technique. Its versatility and its range of applications is truly unlimited.

NMR is unique in the sense that it derives its power largely from a quantum mechanical understanding of its foundations. Those who master a mathematical description of NMR experiments have an enormous advantage over users who blindly follow the rules of the instruction manuals.

The most elegant, most simple, and also most intuitive description developed so far is the product operator formalism that is the central subject treated in this book. This formalism is like a magic key that provides access to the enormous arsenal of NMR techniques available today and permits the user to select and properly apply the most suited tools as well as to develop himself novel, perhaps even more useful, techniques.

I am convinced that this pedagogically very well done book by Gheorghe D. Mateescu and Adrian Valeriu will serve its purpose exceptionally well in the hands of numerous novices that intend to enter this fascinating field of science.

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