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Molecular magnetism occupies a crossing point between two fields of research-materials science and metal biochemistry – and plays an important role in the field of molecular electronics. The “Fundamentals of molecular magnetism” is the textbook to comprehensively address both the experimental and theoretical aspects of the relatively new field of research. It introduces the basic concepts concerning magnetization and magnetic susceptibility, establishes the fundamental equations of molecular magnetism and examines molecules containing a unique magnetic center, including the high-spin- low- spin transition compounds. The textbook highlights poly-metallic species, reviews the phenomenon of interaction between spin carriers from a theoretical point of view and includes numerous examples throughout to illustrate the topics discussed. An essential part of the textbook is devoted to novel class of magneto active materials- single molecular magnets (SMMs)

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