topics being introduced into new chapters. Each chapter in the book starts with a general overview of the topic and then goes into more depth, allowing the reader to acquire a better understanding of the material. There are also comprehensive sets of references at the end of each chapter, and lists of problems to be solved, with the answers included at the back of the book.

*Biochemistry and Molecular Biology, 2nd ed.* is a well structured and clearly written and presented compendium, equally of value as a textbook or as an essential reference tool for students and newcomers starting in the field of biochemistry and molecular biology. The text is suitable for most modern courses, and also contains numerous clearly presented full-coloured illustrations and diagrams.

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**Stereochemistry**
D.G. Roberts, The Royal Society of Chemistry, Cambridge, UK, 2001, vii + 170 pp, ISBN: 0-85404-602-X £9.95

Stereochemistry is defined as the study of the three-dimensional structure of molecules. An understanding of stereochemistry is necessary in terms of both the relevant conventions and definitions that are in use, and what is happening at a molecular level during a reaction. The relative three-dimensional orientation of the reacting particles at any given time in the reaction is an important aspect of the reaction mechanism. This volume is part of The Royal Society of Chemistry 'Tutorial Chemistry Texts' series, which consists of texts that concentrate upon the fundamental areas of chemistry, providing a concise account of the basic principles underlying a given subject.

'Stereochemistry' contains eight concise chapters, the first of which discusses simple molecules, hybridisation, conformation and configuration. The next two chapters cover chiral molecules with one or with two (or more) stereogenic centres, respectively. Definitions and discussions of a variety of terms, such as chirality, enantiomers, optical activity, racemisation, D/L and R/S conventions, homochirality, diastereoisomers, *meso* and *syn/anti* configurations, and epimerisation, are provided in these two chapters. The fourth chapter details the stereochemistry of carbon–carbon and carbon–nitrogen double bonds, and introduces geometric isomers and the Cahn–Ingold–Prelog (CIP) convention (more commonly known as the E/Z convention), and canonical forms. Alkenes, dienes, and amides are used as examples, and hydroxylation, addition, and hydration (Markovnikov and anti-Markovnikov addition) reactions are used to explore specific stereochemical aspects.

Chirality without stereogenic carbon is discussed in the fifth chapter, and covers allenes, biphenyls, hexahelicene, silicon, germanium and tin compounds, amines, ammonium salts, phosphorus and arsenic compounds, sulfoxides, sulfonium salts and selenoxides. The next chapter covers stereoisomerism in cyclic structures and discusses configurational assignment and strain (angle strain, torsion strain and steric strain). Substituted cyclohexanes, decalins, and steroids are used as examples. The penultimate chapter focuses upon substitution reactions of saturated carbon, and details the stereochemistry of $S_N1$, $S_N2$ and $S_N2^1$ reactions. The final chapter covers prochirality, enantiotopic and diastereotopic groups and faces, and introduces Re/Si conventions for $sp^2$ hybridised carbon atoms. The use of NMR spectroscopy in stereochemistry, vicinal coupling constants and the nuclear Overhauser effect, are also covered in this chapter. Whilst the primary goal of this self-contained text is to make undergraduate students conversant with stereochemistry, it is also of use as a refresher course for all organic chemists, particularly those whose memories of stereochemistry are very distant!

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