

tion for the cyclic phosphazenes 33 pp. Geometrical and optical isomerism for phosphorus in various coordinations is considered in Chapter 13 and the possibilities for binuclear tetrahedral, trigonal bipyramidal and octahedral geometry are tabulated. The author then returns to other monocyclic systems and treats the cyclic polyphosphines and systems containing heteroatoms such as S, B, C and O and ends with structures based on cages. A tabulation of unit cell and space group data is included as an appendix.

Although structural data are now abstracted and listed in a number of publications, the need for books of this calibre will always exist. They point to a unity which is not apparent in a simple listing of solved structures and for phosphorus chemists of all persuasions a substantial gap in the literature has now been effectively filled.

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**Atlas of stereochemistry. Absolute configurations of organic molecules.** By W. KLYNE and J. BUCKINGHAM. Pp. xv + 311. London: Chapman & Hall, 1974. Price £15.00.

The purpose of this monumental work is to bring together in a readily available form a part of the enormous mass of data in the literature concerning the absolute configurations of chiral molecules. This is the first such extensive compilation, as previous surveys were relatively brief and more selective. Even so, the approximately 3000 compounds

contained in this *Atlas* still represent only an outline of the field. The emphasis is on fundamental chiral compounds containing one or two chiral centers (68 pp.) and on natural products (for which key compounds only are listed for each group), *viz.* carbohydrates (6 pp.), terpenes and steroids (52 pp.), alkaloids (40 pp.), and miscellaneous (34 pp.). Special sections deal with chirality due to isotopic substitution (4 pp.), configurations around chiral axes and planes (14 pp.), and chiral centers other than at carbon atoms (12 pp.).

Each page of the *Atlas* shows numerous correlations among the configurations of related compounds, with a clearly and carefully explained symbolism used to denote how the configurations are linked. The over 260 compounds for which the absolute configurations have been determined by the Bijvoet method are enclosed by grey frames. As pointed out by the authors, these are the fundamental 'triangulation points' of their survey. The authors have done a thorough job of untangling the complex interrelationships among the various classes of compounds. The indices, 44 pp. of formulas, 16 pp. of authors, and 11 pp. of subject, are a most useful feature and make it relatively easy to locate a desired compound or derivative.

If you are the kind of structural chemist who looks at a stereochemical formula and says 'Well, if it isn't *R*, then it must be *S*' this book is not for you. On the other hand, if you are interested in absolute configurations of only a few of the categories of compounds included in this *Atlas*, then this well produced and inexpensive (for its size) volume is a must for your library.

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