
The majority of this book highlights developments in heterocyclic chemistry in 2001. It systematically approaches this huge topic in order of increasing ring-size and the heteroatoms present. This is preceded by two specialist reviews, one on sulfur-containing indoles and the second on 5-endo cyclisations. As is the nature of such books, each chapter has a different emphasis depending on the contributor’s perspective on their topic. Thus some chapters give an excellent critique of the literature covered whilst others present a more comprehensive source of references.

The first two chapters may be too specialised for the general reader, but are thorough introductions to these areas. The first looks at indole systems with sulfur functionality at either C-2, C-3 or both positions. Broken down into sections on the synthesis, reactivity and presence of this moiety in natural products, it offers an excellent overview without going into much detail. The second chapter covers electrophile-induced 5-endo cyclisations. Having worked on 5-endo-trig cyclisations during my Ph.D. I found this a fascinating account. Concentrating on the authors work in this area, the chapter offers both a more in depth analysis of the field than the previous section and gives more explanation. As such it makes it an easier read for the casual reader.

As a resource for chemists to keep abreast of recent advances in most aspects of heterocyclic chemistry, the rest of the book is excellent. Each of the chapters is concise, the judicious choice of material means the relevant information is at hand without having to wade through much routine chemistry. There is a fair balance between the synthesis of heterocycles, their derivatisation, their reactivity and their presence in biologically relevant products and materials. The information is set out clearly, I particularly like the incorporation of references within the text, and it makes all the material more accessible. Personally I would have preferred the inclusion of more diagrams. There are numerous written descriptions of chemistry and compounds that would be more informative backed up with a scheme. Also, with reviews I prefer to skim the pictures to find the relevant material and not have to read the entire text.

Starting with three-membered rings and proceeding through to eight-membered and larger systems, each chapter presents a descriptive list of the major advances. There is a little inconsistency in how each section is structured. For instance, the chapter on furans starts with a detailed synopsis of natural products containing this motif whilst the chapter on pyrroles only briefly mentions their role in natural products at the end of the account. As a result, the casual reader may find it hard to just dip into the book. The descriptive nature of each chapter is excellent as purely a source of factual information; the sections on furans and N and O five-membered rings are excellent examples of this. Unfortunately, there is little explanation or commentary about much of the work reported which may be a little off-putting to someone new to a particular area. The exception to this was the section on three-membered rings. This is a rapidly evolving area due to the ubiquitous nature of epoxides and aziridines as synthetic intermediates and structural motifs. Yet the authors have done an excellent job in giving a detailed overview of the many advances and, more rewardingly, offer both an explanation and a critical analysis of the material.

Overall the book is extremely well written and is an admirable reference material for those wanting to keep up to date with developments in heterocyclic chemistry or even for those wanting to reacquaint themselves with the field.

Gareth Rowlands, University of Sussex, UK.