

## Book review

---

*Advances in Heterocyclic Chemistry*; edited by A.R. Katritzky, *Vol 41*. Academic Press, Orlando, 1987; US \$85.00. ISBN 0-12-020641-2.

The latest volume in this valuable and long-running series consists of six chapters covering: synthesis of heterocycles from hydrogen cyanide derivatives; ring-opening of five-membered heteroaromatic anions; conformations of acyl groups in heterocyclic compounds; basicity and acidity of azoles; oxidative transformations of heteroaromatic iminium salts; and chemistry of pyrazolopyrimidines. A great deal of the chemistry in the first chapter refers to the patent literature and it is useful to have this reviewed for the first time. The interesting biological activity of pyrazolopyrimidines, purine antagonists, makes this review timely.

The organometallic content of this volume is not high. The chapter by T.L. Gilchrist on ring-opening of five-membered heteroaromatic anions is a valuable follow-up to reviews on metallation of five-membered heteroaromatic compounds and, apart from base-catalysed ring-opening, deals almost entirely with ring-opening of lithium salts of five-membered heteroaromatic anions in monocyclic and polycyclic ring systems. A further chapter on basicity and acidity of azoles may be of use to organometallic chemists, providing, as it does, comprehensive lists of gas-phase and solution  $pK_a$ s of pyrroles, indoles, carbazoles, imidazoles, benzimidazoles, pyrazoles, indazoles, triazoles, benzotriazoles, tetrazoles, and pentazoles.

The volume maintains the standard set by previous volumes in the series. The referencing system is that used by Professor Katritzky in *Comprehensive Heterocyclic Chemistry*, but full references are given at the end of each chapter for those who, like myself, prefer not to have to familiarise themselves with a new set of abbreviated Journal names.

*School of Chemistry and Molecular Sciences,  
University of Sussex, Brighton BN1 9QJ (Great Britain)*

**D.W. Young**