Book Reviews *

Hazards XVI: Analysing the Past, Planning the Future. 3-Day Symposium and Exhibition and 1-Day Workshop, November 5−8, 2001, at UMIST, Manchester, UK. Institution of Chemical Engineers: Rugby, UK. 2002. £100. 902 pp. ISBN 0-85295-441-7.

Hazards XVI is the latest in a series of symposia run by the Institution of Chemical Engineers in the UK over the past 40 years, and this book contains the conference proceedings. By the time this is read, Hazards XVII should have taken place, too. The meeting has sections on chemical reaction hazards, transport and storage, dust explosions, safe process design, risk assessment and analysis, safety culture, lessons from COMAH, and a short index. There are some excellent papers, particularly those which describe a particular incident and its subsequent investigation. Process chemists and engineers will find much of interest in the general papers, but there is still a reluctance of companies to divulge important details. The paper from S. Partington (Holliday Dyes) and S. Waldram (HEL) on a Runaway Reaction during production of an azo dye intermediate was unusual in this respect, providing many details. It is a fascinating tale of an explosion, which occurred after 100 batches had been run, and the reasons why an accumulation occurred during this process. The subsequent investigation at HEL highlights important messages for all batch/semibatch manufacturers and also indicates the cost to the company of such an explosion.

I enjoyed reading the sections on safety culture which had important papers such as "Multiskilling − implications for safe operations", and "Analysing the past, planning the future for the hazard of management". At first I thought this must be a typo, and mean the management of hazards, but it is not. It describes the unwillingness of many managers to accept responsibility for safety and, when things go wrong, to delegate blame—a very worrying trend.

In summary, the Hazards XVI proceedings provide a useful record of the conference, and as in previous volumes, these contain vital information not available elsewhere.

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Organolithiums: Selectivity for Synthesis. By J. Clayden. Elsevier: the Netherlands. 2002. 384 pp. $125. ISBN 0-08-043262X. $45 (Paperback). ISBN 0-08-0432611.

Anyone working with organolithium reagents should purchase a copy of this book. At only 45 U.S. dollars for the paperback version, it represents outstanding value for the money. This is the 23rd volume in the Tetrahedron Organic Chemistry Series and continues the high standard of previous volumes.

The author takes a mechanistic viewpoint in his concerns about understanding selectivity in the reactions. This is particularly valuable for the process chemist who is interested in optimisation and scale-up.

Chapters include Regioselective Synthesis of Organolithiums by Deprotonation, by X-Li exchange, and by C−X reduction, Stereoselective and Stereospecific Synthesis of Organolithiums, Substitution Reactions, Addition Reactions and Rearrangements. The final chapter is on Organolithiums in Synthesis.

There is a vast amount of knowledge trapped in the 384 pages, not just on the synthesis of organolithiums, but also on their subsequent reactions. The emphasis is on the practical—understanding the mechanistics only sufficiently to be able to use this knowledge in a practical manner, i.e., in synthesis.

Process chemists will be disappointed in the absence of many examples of the scale-up of organolithiums, and in the absences of references to papers from *Organic Process Research & Development* (OPRD). For example the paper from Searle on Development of a Large-Scale Process for an HIV Protease Inhibitor (Liv, C. et al. *Org. Process Res. Dev.* **1997**, *1*, 45) would have made an excellent example for Chapter 9.

The book also fails to mention that hexyllithium has been commercially available in bulk for many years and in some countries, where venting by-product butane is not allowed, is used in preference to butyllithium.

Despite these relatively minor criticisms, I recommend all organic chemists to read this excellent monograph, and to purchase a copy for themselves or the library.

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*Unsigned book reviews are by the Editor.

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