

## Book Review

**Diazo Chemistry I: Aromatic and Heteroatomic Compounds.** VCH Verlagsgesellschaft, Weinheim, FRG, 1994. xiv + 453 pp. ISBN 3-527-29213-6 (Weinheim); 1-56081-878-6 (New York). Price: DM 198; £79.50.

Few colour chemists can be unfamiliar with the book *Diazo and Azo Chemistry. Aromatic and Aliphatic Compounds* (Interscience/Wiley, 1961) by Heinrich Zollinger, and although now long out of print it remains an invaluable reference source for anyone with an interest in these groups of compounds. This new book by the same author is therefore a most welcome update of the chemistry of diazo compounds, and although the absence of any specific treatment of azo chemistry is sadly missed, the reasons for restricting the text to diazo chemistry are compelling in that no single volume could do justice to both topics. Indeed, developments have been so rapid that adequate coverage of diazo chemistry itself cannot be fully covered in one volume, and this text has been designated *Diazo Chemistry I*, the author indicating that a second (textually independent) volume should appear some twelve months after the appearance of the present work. This volume covers aromatic and heteroatomic diazo compounds only, and aliphatic and inorganic analogues will be dealt with in the second volume.

This book does not purport to provide a comprehensive coverage of diazo chemistry, and the author in his preface states that his object was to produce a 'personal *interpretation* of a selected group of experimental and theoretical data, which should be capable of providing the reader with a basis for their *understanding*'. In this the author has succeeded admirably, and as much attention is given to the interpretation and rationalisation of experimental data as to the selection of specific examples, old and new, from the literature. The author has also indulged himself somewhat with the narrative style, the inclusion of historical material, and in one chapter with an 'interlude' on the philosophy of scientific advancement, and far from detracting from the book, this makes it very readable and a welcome change from the extremely dry and factual monographs that we have now come to accept. Thus one is introduced to diazo chemistry painlessly, and brought up to date with the more important developments at the same time. Although not an exhaustive text, coverage of the literature is excellent, with well over 1500 references.

After a short chapter on the history and nomenclature of aromatic and heteroatomic diazo compounds there follow chapters on preparative and kinetic aspects of their formation, and on their molecular structure. Chemical reactions of these compounds are covered in subsequent chapters, notably acid–base reactions, additions of nucleophiles, dediazonation and its synthetic applications, host–guest complexation, and, of special interest to the colour chemist, C- and N- coupling reactions.

This book serves a multitude of interests: it is a very readable introduction to the theoretical basis of diazo chemistry; its coverage of the literature is sufficient to bring the organic chemist up to date with developments in the field; and it is sufficiently well referenced to make it an important library source text. It makes an admirable successor to the author's 1961 work, and I look forward to the publication of the second volume.

**J. Griffiths**