

the end of 1972 or so. What will make the pair of volumes somewhat ephemeral is that the shape of researches in this area has already shifted significantly since Jensen's unequivocal determination of the rubredoxin and ferredoxin structures, and the new emphasis is, understandably, not captured.

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Electrophilic Substitution at a Saturated Carbon Atom; by M.H. Abraham. *Comprehensive Chemical Kinetics*, Vol. 12; ed. by C.H. Bamford and C.F.H. Tipper, Elsevier, Amsterdam-London-New York, 1973, xiii + 256 pages, £12.60.

The organometallic approach to electrophilic substitution at saturated carbon developed during the 1960's largely through the efforts of Ingold, Reutov and their respective collaborators, working for the most part with organomercury compounds. Their results were summarised in a series of reviews (Reutov) and in the 2nd edition of Ingold's famous book, "Structure and Mechanism in Organic Chemistry", accounts which, whilst setting out the mechanistic basis of the problem, adopted a selective approach. Volume 12 in the Bamford-Tipper series, written entirely by Dr. Abraham, presents the first truly comprehensive in-depth survey of the subject covering all metals, electrophilic reagents and systems within the definition aliphatic. A series of opening chapters provides an excellent and lucid introduction as one could wish to find to the often subtle and bewildering nuances of mechanistic emphasis which have grown up around the topic. Notably, the quest for reactions conforming to S_E1 criteria has been fraught with danger and interpretive difficulties and the experimental evidence for and against the mechanism is carefully sifted and evaluated (Chapter 4). Subsequent chapters deal in turn with metal-for-metal exchanges, acidolysis and halogenolysis (the electrophilic conditions most often employed), and reactions involving miscellaneous electrophiles. Allylmetal compounds are then singled out for separate treatment and the book concludes with a chapter covering constitutional, salt and solvent effects, and the hotly-debated question of metal-metal bonding in S_E2 transition states. Interested readers should turn to Matteson's recent book "Organometallic Reaction Mechanisms" at this point!

The book is defective in one important respect. As stated, it has been written entirely by Dr. Abraham, yet this fact is only apparent from one single line statement on an inside page. His name is excluded in favour of the Editors' names on the spine of the book and even the dust cover, and the practice extends even to the biographical notes! The Editors must be rebuked for this most unfair treatment.

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