

Book review

Inorganic Aspects of Biological and Organic Chemistry, Robert P. Hanzlik, Academic Press (New York), 1976, 402 pages, \$37.00.

As indicated by its title, the goal of this textbook is to cover many of the "interdisciplinary aspects of inorganic chemistry". This goal is certainly accomplished as is indicated by the following overview of its contents. First, main group, or to be more exact, alkali metal and alkaline earth structure and bonding are discussed. The emphasis here is on relevance to biological systems (metal ion effects on protein structure, membrane ion transport etc). Next, transition metal bonding theory, ligand substitution and oxidation-reduction reactions are discussed, again with the major emphasis being placed on their relation to bioinorganic chemistry. For example, the "entatic state" of Vallee and Williams and the electron transport chain are covered in these sections. Then the use of metal ions in synthesis and catalysis is covered, followed by a long review of transition metal oxygen and nitrogen complexes. These chapters are more strongly concerned with the inorganic chemistry which is presented in some detail for specific examples. Finally, the last two chapters (one fourth of the book) are devoted to organometallic chemistry.

Both the strengths and weaknesses of this book are based on its attempt to cover quite a lot of ground. Of necessity, the approach and level of the presentation vary from being quite introductory on some topics ("working with redox potentials") to being rather detailed on others ("reactions of Schiff Base Ligand Systems"). This book probably would not be appropriate for use in a special topics course in organometallic or bioinorganic chemistry for inorganic majors. However, Inorganic Aspects of Biological and Organic Chemistry would be a quite reasonable presentation of relevant inorganic chemistry for students in other chemical disciplines, providing the lecturer smoothes over some of the more detailed discussions.

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