

## *Recensio*

**Structure and Bonding, Volume 2.** Editors: C. K. Jørgensen, J. B. Neilands, R. S. Nyholm, D. Reinen, R. J. P. Williams. With 79 figures. IV, 250 pages 8 vo. Springer-Verlag: Berlin-Heidelberg-New York 1967. Soft cover binding DM 48,—; US \$ 12.00

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This volume is composed of four papers. The first one on the Physics of Hemoglobin by M. Weissbluth (125 pages) is a thorough and an outstanding account of the subject. Dealing successively with the chemistry, spectroscopy, magnetic properties and Mössbauer resonance it combines a precise description of the experimental results with their detailed theoretical discussion. The clarity of the whole presentation is remarkable.

The second paper on Chlorophyll Triplet States by Maggiora and Ingraham (33 pages) combines again in a very successful way the presentation of the experimental data and their theoretical discussion within the framework of the molecular orbital methodology. Interesting considerations are being developed on the "fitness" of chlorophyll, its particular ability of producing long-lived triplets which can act as intermediates in photochemical sensitized reactions.

A short paper (20 pages) follows on the Chemistry and Structure of some Borate Polyol Compounds of Biochemical Interest by Weser. It describes the structure of these molecules and reviews some of their interactions with compounds of biological interest such as the nucleotides of the purine bases.

The last paper (70 pages, in German) by Bayer and Schretzman is devoted to the problem of the Reversible Oxidation of Metal Complexes. It is again a paper of a very high standard combining the description of experimental status with an elaborate theoretical discussion. It covers the field from the inorganic metal complexes to the biologically important ones of heme-proteins.

On the whole the volume may be considered as a remarkable success. It illustrates in particular the power and the advantages of utilizing physical and quantum mechanical methods in problems of biophysics.

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