

Cornish-Bowden, A.: **Fundamentals of Enzyme Kinetics**. - Portland Press, London 1995. 343 pp. US\$ 29.00. ISBN 1-85578-072-0.

This is a revised edition within fifteen years after the first one was published. A survey of topics of enzyme catalysis mechanism is outlined in twelve chapters. The first chapter gives an excellent introduction into a general chemical kinetics. On this basis the second chapter then advances the kinetic ideas ensuing from Michaelis and Menten equation, and the graphical methods of its solution. The topics of "alternative enzymes" is mentioned also here, e.g. the catalytic RNA and catalytic antibodies. Further two chapters deal with practical aspects of enzyme assays and the methods for the deduction of reaction mechanisms under steady state. Relatively extensive chapters five and six describe enzyme inhibition and activation. Further, enzymatic reactions of more than one substrate are dealt with there. The next chapter is dedicated to the using of isotopes for studying of enzyme mechanisms. The eighth chapter describes environmental effects on enzymes such as pH, temperature, and ionization of the substrates. The ninth chapter deals with the regulation of enzymatic activity. It goes through mechanisms of substrate cycles, principles of cooperativity and allosteric regulations. The description of the problem of multienzymatic systems is the subject of the chapter ten and fast reactions are mentioned in the chapter eleven. The closing chapter supplies the mathematical methods for kinetic constant estimation. The book very clearly explains given topics and makes easy an understanding of basic principles of enzymatic kinetics. The whole elucidation is oriented toward praxis for obtaining and evaluating experimental data. Each chapter is finished with several problems to be solved by the students. The reader thus can immediately check whether properly understood the given topic. We recommend this book for postgraduate students in biological sciences as well as for practical use in enzyme kinetics measurements.

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