

# Contents

1	Introduction	7
2	The regulation of amino acid and nucleotide biosynthesis in bacteria, by end product inhibition	8
3	The initiation of biological function by limited proteolysis	20
4	The regulation of glycogen metabolism and the molecular basis of hormone action	32
5	Control of enzyme activity by covalent modifications other than limited proteolysis or phosphorylation	51
6	The nature of the allosteric transition	60

## Index

for a given group of a metabolic pathway are found to be controlled by changing the activity of the rate limiting enzyme in that pathway. This can be achieved by either increasing and decreasing the number of enzyme molecules (induction and repression), or by changing the activity of pre-existing enzyme molecules. This book is concerned solely with the latter type of effect.

The study of enzyme regulation has two major goals.

- To identify the enzyme in a pathway which is rate limiting at a particular state of metabolic activity.
- To characterize the mechanisms which regulate the activity of the rate limiting enzyme *in vivo*, and to understand how such controls

## References

- [1] Atkinson, D. and Cori, C. F. (1951). *Proc. Roy. Soc. B*, **139**, 107.
- [2] Devries, J. L. and Brown, C. L. (1974). *Enzyme Regulation*. Chapman and Hall, London.