

Preface

Dealing with life sciences, we are accustomed to concentrate on new developments and so, for preparing a new edition, the most important question is: what should be actualized? However, focusing on recent outcomes let easily overlook the fact that any progress in science rests on fundamental rules, which are not subject to rapid changes. Their profound knowledge is an inevitable prerequisite for sound practices. This holds just for enzyme kinetics. Its essential relationships were derived already during the middle of the twentieth century, and striking new developments are not to be expected. Therefore, the theoretical part could largely be adopted from the previous edition. Extensively revised and extended is the chapter about ribozymes in order to illustrate analogies and divergences of these RNA enzymes in comparison to protein enzymes. Further changes concern the methodical part. Additional methods are included, such as the application of the NMR technique for binding and enzyme kinetics and the fluorescence correlation spectroscopy.

Special attention is paid to the comprehensibility of the not-always-easy matter. Larger passages of the text are revised in order to make the subject readily understandable. In this regard, many figures were redrawn in color not only to make them more attractive but also to enable a more differentiated representation of the subject. Only the graphs with exactly calculated curve progressions remained unchanged.

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