

PREFACE

This book *Protein Purification* (Second Edition) remains a basic guide to the various protein purification techniques currently available, which enable scientists to enrich a protein of interest from extracts of prokaryotic and eukaryotic cells. It is designed for use in the laboratory and for self-study on the properties of proteins. The book has been expanded from the first edition with a starting chapter on the properties of water, pH and buffers. I have added a chapter on the structure and properties of proteins, which prior to a short description of chromatography. These introductory sections precede chapters on ion exchange, hydrophobic interaction, affinity and size exclusion chromatography, finishing with the techniques required to assess the purity of the prepared sample. I hope that the new organisation allows the reader to acquire progressively the information required for the successful chromatography of proteins. There are the usual flowcharts, diagrams, additional exercises and protocols to help in the analysis of any protein purification results obtained. The list of abbreviations and extensive glossary have been included to help the reader with the nomenclature. Throughout the book, there are comparisons drawn between the use of techniques in a laboratory with those in a larger-scale setting. The book is aimed at those who are relatively new to purifying proteins as well as providing a useful resource for more experienced scientists.

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