

**CONTENT**

Chapter 1 Fermentation Technology	1
Chapter 2 An Introduction to Recombinant DNA Technology	23
Chapter 3 The Polymerase Chain Reaction	51
Chapter 4 The Expresssion of Foreign DNA in Bacteria	63
Chapter 5 Yeast Cloning and Biotechnology	85
Chapter 6 Cloning Genes in Mammalian Cell-lines	103
Chapter 7 Plant Biotechnology	123
Chapter 8 Molecular Biology in the Pharmaceutical Industry	155
Chapter 9 The Current Impact of Recombinant DNA Technology in the Food Industry	177
Chapter 10 DNA Profiling in Forensic Science	191
Chapter 11 Molecular Diagnosis of Inherited Disease	203
Chapter 12 Vaccination and Gene Manipulation	213
Chapter 13 Transgenesis	237
Chapter 14 Enzyme Engineering	251
Chapter 15 Stability of Enzymes and Cells	267
Chapter 16 Immobilized Biocatalysts	305
Chapter 17 Downstream Processing : Protein Extraction and Purification	327
Chapter 18 Monoclonal Antibodies	357
Chapter 19 Biosensors	387
Subject Index	417