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Disciplina	660.63
Soggetti	Biochemical engineering Chemical engineering Biochemistry Environmental chemistry Biochemical Engineering Industrial Chemistry/Chemical Engineering Biochemistry, general Environmental Chemistry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Selection of Medium and Optimization of Process Parameters for Melanin Biosynthesis from Pseudomonas Stutzeri HMG-7 -- Unstructured Kinetic Modeling of Glutathione Production By Saccharomyces cerevisiae NCIM 3345 -- Statistical Optimization of Lactic Acid Extraction from Fermentation Broth Using Emulsion Liquid Membrane -- Optimization of microwave assisted extraction of pectin from Helianthus annuus head using response surface methodology -- Production and Characterization of Hydrophobins from Fungal Source -- Optimization of Na <sub>2</sub> CO <sub>3</sub> pre-treatment by RSM approach for releasing reducing sugars from cocoa pod shells -- Mixed surfactant based reverse micelle extraction of Lactose peroxidase from whey -- Comparison of solvent extraction and extraction using microorganism for estimation and isolation of total polyphenols from the peels of orange fruit -- Concentration of C-Phycocyanin from Spirulina platensis using forward osmosis membrane process -- Industrial

applications of caffeine degradation by *Pseudomonas* sp -- Nano-aptamer based quantitative detection of chloramphenicol -- Optimization of a glucocorticoid encapsulated PLGA nanoparticles for inflammatory diseases.

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## Sommario/riassunto

This book serves to highlight the seamless integration of the sciences leading to sustainable technologies. Chemical engineering is one of the major disciplines catering to the societal needs in the fields of energy, environment and materials. The chapters of this book have been selected to encompass the latest in industrial biotechnology and biochemical engineering principles and applications. The chapters are included here after careful review for content and depth. The book focuses on the relatively new areas of molecular biotechnology and nanotechnology which have a strong impact at the fundamental and process levels in chemical engineering. The book also covers analytical procedures, experimental techniques and process analysis in bioprocessing, bioremediation, green separation methods, and emerging nanoparticle applications. It should be useful to students, academicians, and practitioners alike.

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