Record Nr. UNINA9910813193003321 Microbial applications: recent advancements and future developments **Titolo** // by Vijai Kumar Gupta [and 4 others] (eds.) Pubbl/distr/stampa Berlin; ; Boston:,: Walter de Gruyter GmbH,, [2017] ©2017 **ISBN** 3-11-041282-9 3-11-041278-0 1 online resource (408 pages): illustrations (chiefly color) Descrizione fisica Disciplina 660.6/2 Soggetti Industrial microbiology Microbial products Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Microbial applications in the food industry -- Microbial applications for fabric and textile industries -- Microbial peptides and peptibols --Introspecting bacteriophage specificity and decoding phage enzyme non-specificity for antimicrobial applications -- Microbial production of enzymes: an overview -- Microbial pigments -- Role of nutrient in microbial developments and microbial metabolic diversity -- Microbes in wine and beer industries -- Use of tetracyclines and [beta]-lactams in agriculture: fate in the environment and occurrence of antibioticresistance determinants -- Industrial microorganisms: tolerance to antibiotics and application of antimicrobial agents -- Microbial biofuel production: an overview on recent developments -- Fungal cell factories and it applications -- Evaluation of an indirect method for

Sommario/riassunto

Microbial applications encompass areas including biotechnology, chemical engineering, and alternative fuel development. Research on their technological developments cover many aspects of work using microbes as cell factories. The fields of biotechnology, chemical

rapid bacterial quantification in wastewaters -- Cyanobacteria : biotechnological and environmental applications -- Improvement of functional attributes of kernels of wild legume canavalia martima by

rhizopus oligosporus.

engineering, pharmaceuticals, diagnostics and medical device development also employ these microbial products. There is an urgent need to integrate all these disciplines that caters to the need of all those who are interested to work in the area of microbial technologies. This book is a step forward to integrate the aforesaid frontline branches into an interdisciplinary research work quenching the academic as well as research thirst of all those concerned about microbes in the respective area of biotechnology, chemical engineering, and pharmaceuticals. All the chapters in this book are related to important research on microbial applications, written by international specialists for researchers and academics in the concerned disciplines. This publication aims to provide a detailed compendium of experimental work and information used to investigate different aspects of microbial technologies, their products as well as interdisciplinary interactions including biochemistry of metabolites, in a manner that reflects the recent developments of relevance to researchers/scientists investigating microbes.