

Biotechnological Production of Bioactive Compounds

Edited by

Madan L. Verma

Anuj K. Chandel

Highlights the production of bioactives from plants and microbes and outlines the efficiency in production of these molecules using nanobiotechnology techniques

Biotechnological Production of Bioactive Compounds provides insights into the most recent innovations, trends, concerns, and challenges in the production of bioactive materials. This book highlights the production of extra health benefits bioactives from plants and microbes provide and explains how recent advances in nanobiotechnology have improved the efficiency of extraction of bioactive molecules. Extraction methodology for bioactives production with enhanced efficiency has improved with the advancement in nanobiotechnology techniques.

At the outset of new nanobiotechnology applications, there is a need for a new resource in the bioactives field. *Biotechnological Production of Bioactive Compounds* delivers an overview of the health benefits of bioactives and the most up-to-date advances in nanobiotechnology to a diverse audience from postgraduate students to researchers in biochemical engineering, biotechnology, biomediation, and environmental studies and pharmaceutical professionals.

Key Features

- Outlines the most recent technological advances in bioactives extraction
- Covers bioflavonoids, biopigments, omega-3 fatty acids, and low-sugar substitutes
- Explains the mechanisms of green cargo of biogenic nanoparticles for the delivery of bioactive molecules

About the Editors

Dr. Madan Verma is a visiting researcher and professor in the Department of Biotechnology at Dr. Y. S. Parmar University of Horticulture and Forestry, Himachal Pradesh, India. Dr. Verma is an established senior researcher who has developed sustainable processes through his expertise in bioprocessing and nanobiotechnology. He employs nanotechnology approaches for enhancing the efficiency of various bioprocesses that have application in food biotechnology, pharmaceutical, and bioenergy sector. He has many international and national awards to his credit. Dr. Verma has published 46 research articles in peer-reviewed journals and 35 book chapters and has edited 7 books on industrial biotechnology.

Dr. Anuj Chandel is a visiting researcher and professor in the Department of Biotechnology, Engineering School of Lorena, University of São Paulo, Brazil. He has over 18 years' experience working on process optimization and large-scale production of industrial enzymes and on the production of vaccine particles, biofuels, and membrane-based separation of fats, proteins, and viruses. His primary research interest is developing sustainable processes for bioconversion of lignocellulosics into renewable fuels and biochemicals by bridging the gap between research laboratories and industries. He has published 61 articles in peer-reviewed journals and 30 book chapters and has edited 7 books on industrial biotechnology.



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