Χαρακτηριστικά:

- Provides a detailed overview of diverse secondary metabolites and their sources
- Illustrates classical and modern approaches for the detection and purification of secondary metabolites
- Describes the biological mechanisms of utilization for products counteracting stress and disease in humans and plants

Περιεχόμενα:

Section I: Diversity and Production Strategies

- 1. Secondary Metabolites from Plants
- 2. Microbial Secondary Metabolites
- 3. Microalgae as a Rich Source of Secondary Metabolites for Food, Feed and Pharmaceutical Applications
- 4. Cyanobacteria as a Source of Secondary Metabolites
- 5. Exploring the Untapped Reservoir of Secondary Metabolites in the Indian Subcontinent
- 6. Extraction, Purification and Identification Strategies
- 7. Genetic Engineering as a Means to Maximize Secondary Metabolite Production
- 8. Enhanced Production of Medicinally Valuable Plant Secondary Metabolites through In Vitro Techniques
- 9. Bioinformatics as a Tool for Secondary Metabolite Research

Section II: ROLE OF SECONDARY METABOLITES IN PLANT STRESS MANAGEMENT

- 10. Harnessing Rhizospheric Interactions for Root Disease Control in Plants
- 11. Influence of Environmental Stress on Secondary Metabolites in Plants
- 12. Plant-Fungal Interactions and Secondary Metabolites
- 13. Role of Secondary Metabolites in Plant Defense Against Bacterial and Viral Pathogens
- 14. Nature's Defense: The Role of Secondary Metabolites in Combating Herbivory

Section III: ROLE OF SECONDARY METABOLITES IN HUMAN HEALTH

- 15. Secondary Metabolites for Improvement of Human Health
- 16. Role of Secondary Metabolites in Neurodegenerative Disorders
- 17. Potential Application of Secondary Metabolites in Cancer
- 18. Potential Application of Secondary Metabolites in Diabetes
- 19. Therapeutic outcome of Secondary Metabolites Against Contagious and Non-Contagious Human Diseases
- 20. Therapeutic Potential of Indian Medicinal Plants: A Recent Progress
- 21. Clinical Research of Indigenous Medicinal Florae and their Pharmaceutical Formulation for Unlocking the Management of COVID-19