

Preface

The study of fungi has become a valuable science in the last 100 years as it has provided to control a number of infectious diseases. In this direction, nanotechnology has emerged as a potential candidate. Nanotechnology is the study and application of extremely small things (1–100 nm) and can be used across all the other science fields, such as chemistry, biology, physics, materials science, and engineering. Biologically prepared tailored nanoparticles from fungi are gaining attention due to their cost-effective, sustainable, resource efficient, simplicity and eco-friendly nature.

In this book entitled *Advances and Applications Through Fungal Nanobiotechnology*, the editor has accumulated various advanced approaches for studying the fungal system for the benefit of humankind. The book covers synthesis of nanoparticles by fungi, the mechanism involved in the biosynthesis and unique template for synthesis of tailored nanoparticles targeted at therapeutic and diagnostic platform technologies.

This book should be immensely useful for microbiologists, nanotechnologists, researchers and teachers of fungal biology and those who are interested in fungal nanobiotechnology. I am honored that the leading scientists who have extensive, in-depth experience and expertise in fungal system and nanobiotechnology took the time and effort to develop these outstanding chapters. Each chapter is written by internationally recognized scientists so the reader is given an up-to-date and detailed account of our knowledge of the nanobiotechnology and various applications of fungi.

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