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.

We are indebted to the many people who helped to bring this book to light. I wish to thank series editors Dr. Vijai Kumar Gupta and Dr. Maria G. Tuohy; Eric Stannard, Senior Editor, Botany, Springer; and Hemalatha Gunasekaran and Jaspher Jasmine, Springer, for generous assistance, constant support and patience in initializing the volume. I particularly thank Dr. Ishan Barman, Biophotonics Laboratory, Whiting School of Engineering, Department of Mechanical Engineering, Johns Hopkins University, USA, for providing necessary facilities for editing the book during my visit to his institute. I am also thankful to UICC and American Cancer Society for financial assistance to visit the Barman Laboratory. Special thanks go to my lovely wife Dr. Avita Maurya for her constant support and motivations in putting everything
together. Dr. Prasad in particular is very thankful to Professors Ajit Varma and Narendra Tuteja, Amity University, for the kind support and constant encouragement. Special thanks are due to my esteemed friend and well-wisher Dr. Rishikesh Pandey, Laser Biomedical Research Center, Massachusetts Institute of Technology, USA; Drs. Vivek Kumar, Manoj Kumar, Devendra Kumar Choudhary, Neeraj Shrivastava, Amity Institute of Microbial Technology, all faculty colleagues of Amity University and my Ph.D. student Nafe Aziz.

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Advances and Applications Through Fungal Nanobiotechnology
Prasad, R. (Ed.)
2016, XIII, 340 p. 72 illus., 48 illus. in color., Hardcover
ISBN: 978-3-319-42989-2