This book contains a compilation of papers presented at the II International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld 2007) held in Seville, Spain on 28 November – 1 December 2007, where over 550 researchers from about 60 countries attended and presented their cutting-edge research.

The main goals of this book are to: (1) identify new approaches and research opportunities in applied microbiology, presenting works that link microbiology with research areas usually related to other scientific and engineering disciplines; and (2) communicate current research priorities and progress in the field. The contents of this book mirror this focus.

Microbiologists interested in environmental, industrial and applied microbiology and, in general, scientists whose research fields are related to applied microbiology can find an overview of the current state of the art in the topic. In addition to the more general topic, some chapters are devoted to specific branches of microbiology research, such as bioremediation; biosurfactants; microbial factories; biotechnologically relevant enzymes and proteins; microbial physiology, metabolism and gene expression; and future bioindustries.