

Introduction

This book contains a compilation of papers presented at the II International Conference on Environmental, Industrial and Applied Microbiology (BioMicroWorld2007) held in Seville (Spain) on 28 November–1 December 2007, where over 550 researchers of about 60 countries attended and presented their cutting edge research.

The main goals of this meeting were to 1) identify new approaches and research opportunities in applied microbiology presenting works which linked microbiology with research areas usually related with other scientific and engineering disciplines, 2) consolidate international collaborative efforts and 3) communicate current research priorities and progress in the field. In other words, the focus of the meeting was not only to present current science but also to discuss and synthesize research priorities and directions for the future. The contents of this book mirror this focus.

There were many excellent presentations in the several conference sessions and plenary lectures. The conference was structured in four main sessions covering the topics: 1) Environmental, Marine, Aquatic Microbiology/ Geomicrobiology 2) Agriculture, Soil, Forest Microbiology 3) Food Microbiology 4) Industrial Microbiology/ Future Bioindustries. And four additional special sessions dedicated to: 1) Bioremediation 2) Microbial Production of Chemicals and Pharmaceuticals/ Biosurfactants/ Biotechnologically Relevant Enzymes and Proteins 3) Medical and Pharmaceutical Microbiology 4) Techniques and Methods/ Microbiology Education.

The lectures presented by the three plenary speakers can be highlighted as good examples of modern interdisciplinary applied microbiology: Dr. J.L. Ramos Martín, from the CSIC-Spanish National Research Council (Granada, Spain), presented the lecture titled “*The toluene paradox: to eat, to tolerate or to run away*”. Dr. M.L. González-Martín, from the Biosurfaces and Interfacial Phenomena Group of the Department of Applied Physics, UEX (Badajoz, Spain), expounded on “*Physico-chemistry of microbial adhesion to materials: from macroscopic surface thermodynamics to modern nano-scale technology*”. Finally, Dr. Riitta Puupponen-Pimiä, from the VTT Technical Research Centre of Finland (Espoo, Finland), presented the lecture titled: “*Antimicrobial and antiadhesion properties of bioactive berry compounds*”

This book is made up of the works presented in all the above mentioned sessions. As a result of it, a complete and heterogeneous book is presented here.

We would like to thank all members of the Organizing and Scientific Advisory Committees for the work made during the conference preparation. We would also like to thank all the contributing authors for sharing their knowledge and research, as well as all the reviewers for their advice, which certainly helped to improve the quality, accuracy and relevance of the conference program and publications. Lastly, we would like to thank EVONIK INDUSTRIES, BIOLOG, AES CHEMUNEX and HORIZON SCIENTIFIC PRESS for sponsoring the conference.

We hope readers will find this book interesting and helpful to their research purposes and it helps to consolidate the conference as a regular research meeting in the field.

Antonio Mendez-Vilas
BioMicroWorld2007 General Chairman

Formatex Research Center
Zurbaran 1, 2nd floor, 1st office
06002 Badajoz
Spain