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Foreword

Database theory and application and bio-science and bio-technology are areas that attract many professionals from academia and industry for research and development. The goal of the DTA and BSBT conferences is to bring together researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of database theory and application and bio-science and bio-technology.

We would like to express our gratitude to all of the authors of submitted papers and to all attendees for their contributions and participation.

We acknowledge the great effort of all the Chairs and the members of Advisory Boards and Program Committees of the above-listed event. Special thanks go to SERSC (Science and Engineering Research Support Society) for supporting this conference.

We are grateful in particular to the speakers who kindly accepted our invitation and, in this way, helped to meet the objectives of the conference.

December 2011 Chairs of DTA 2011 and BSBT 2011

Preface

We would like to welcome you to the proceedings of the 2011 Database Theory and Application (DTA 2011) and Bio-Science and Bio-Technology (BSBT 2011) conferences held during December 8–10, 2011, at Jeju Grand Hotel, Jeju Island, Korea.

DTA focused on various aspects of advances in database theory and application, while BSBT focused on various aspects of advances in bio-science and bio-technology. These conferences provided a chance for academic and industry professionals to discuss recent progress in the related areas. We expect that the conferences and their publications will be a trigger for further related research and technology improvements in this important subject.

We would like to acknowledge the great efforts of the DTA 2011 and BSBT 2011 Chairs, International Advisory Board, Committees, Special Session Co-chairs, as well as all the organizations and individuals who supported the idea of publishing this volume of proceedings, including the SERSC and Springer.

We are grateful to the following keynote, plenary and tutorial speakers who kindly accepted our invitation: Hsiao-Hwa Chen (National Cheng Kung University, Taiwan), Hamid R. Arabnia (University of Georgia, USA), Sabah Mohammed (Lakehead University, Canada), Ruay-Shiung Chang (National Dong Hwa University, Taiwan), Lei Li (Hosei University, Japan), Tadashi Dohi (Hiroshima University, Japan), Carlos Ramos (Polytechnic of Porto, Portugal), Marcin Szczuka (The University of Warsaw, Poland), Gerald Schaefer (Loughborough University, UK), Jinan Fiaidhi (Lakehead University, Canada) and Peter L. Stanchev (Kettering University, USA), Shusaku Tsumoto (Shimane University, Japan), Jemal H. Abawajy (Deakin University, Australia).

We would like to express our gratitude to all of the authors and reviewers of submitted papers and to all attendees for their contributions and participation, and for believing in the need to continue this undertaking in the future.

Last but not the least, we give special thanks to Ronnie D. Caytiles and Yvette E. Gelogo of the graduate school of Hannam University, who contributed to the editing process of this volume with great passion.

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