

Preface

The IUPAC-sponsored 13th International Biotechnology Symposium (IBS) and Exhibition was held successfully from 12 to 17 October 2008 in Dalian, China, with about 2500 participants, including 50 % international delegates from about 80 countries. More details of the conference are available in *Chemistry International* **31** (3), 28–29 (2009).

The theme of the conference was “Biotechnology for the sustainability of human society”, through which all key biotechnology topics closely related to the better living of human beings were discussed. Examples included biopharmaceuticals and advanced diagnostic and therapeutic technologies, green biotechnology for the improvement of agricultural production yield and efficiency, industrial biotechnology for the production of biofuels and bio-based chemicals from renewable biomass resources as alternatives to fossil-based feedstocks, bioremediation of pollutants and contaminants to save the continuously deteriorating eco-environment, and biosafety and biosecurity associated with the progress of advanced biotechnology.

With the sponsorships of international and domestic academic publishers, several special issues have been published for the conference, reporting or reviewing the frontiers of modern biotechnology with specific focus. It has been recognized that chemistry is the fundamental discipline to drive the progress of biotechnology R&D since its inception. This importance was highlighted by over half a century history of the IBS series dating back to as early as 1960 when the first IBS was initiated under the auspices of IUPAC in Rome, Italy, and continuously increased numbers of participants trained with chemistry backgrounds, which gives us, as the conference organizers, the pleasure of publishing this special issue in *Pure and Applied Chemistry* with a theme: “Building the bridge between chemistry and biotechnology”.

Invitations were issued to 42 Symposium presenters whose contributions were deemed to be directly relevant to the chosen theme, and resulted in this collection comprising 29 papers devoted to aspects of research progress in the interdisciplinary area of chemistry and biotechnology. Although the publication comes later than expected, we believe that its objective to highlight the critical role of chemistry in the development of biotechnology is never out of date. As the guest editors of this special issue, we are very pleased to share this publication with colleagues around the world, and we are also grateful to IUPAC, the authors, and the referees for all of their contributions toward this record of an important interdisciplinary feature of the IBS program.

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Conference Editors