

## Preface

Biocatalysis offers a number of advantages in selectivity, and thus is particularly valuable with respect to the preparative synthesis or conversion of complex fine chemicals. Biocatalytic processes are characterized by the mildness of their reaction conditions, which minimize energy consumption and waste generation, maximize exploitation of renewable resources, and thereby allow for the design of environmentally friendly products and sustainable syntheses. Moreover, with the advent of the genome age, an accelerated discovery of novel enzymes and a fine-tuning of desired properties now become practical.

On this background, the *BioTrans 2001 Symposium* has been held in Darmstadt (Germany) from September 2–7, 2001 at the Darmstadt University of Technology. From the seed planted by the first European biocatalysis meeting in Graz (Austria) 1993, and the pampering of the young growing plant by attractive sequels in Warwick (UK), La Grande Motte (France) and Giardini Naxos (Italy) in successive years, the 5th event of the biannual European Conference series in Biocatalysis and Biotransformation *BioTrans 2001* has gained further popularity by gathering more than 550 scientists from all over the world, and from all research disciplines involved in biocatalysis. More than 40 lectures and oral communications, and more than 300 posters from academic and industrial research laboratories have presented important and attractive advances to the field of applied biocatalysis, covering a broad range of interdisciplinary challenges.

As a tradition begun with prior conferences, a selection of those contributions is included in this special issue of the *Journal of Molecular Catalysis B: Enzymatic* for the scientific record. In addition to regular

full papers derived from all contributions, short personal reviews have been invited stemming from lectures and oral communications, to be written with a particular focus on the work of the authors. The contributions in this special issue have been grouped into the following topics:

- Accounts/personal reviews
- Enzymes in organic synthesis
- Enzyme characterization, immobilization, and performance improvement
- Biochemical engineering and process development
- Mechanistic biochemistry and computational modeling
- Biocatalysis for food and environment

The conference was coorganized by the Darmstadt University of Technology (TUD) and the Gesellschaft Deutscher Chemiker (GDCh), and was supported by the Deutsche Bundesstiftung Umwelt (DBU; “German Federal Environment Foundation”), the European Commission DGXII (5th framework programme and COST), the Deutsche Forschungsgemeinschaft (DFG) and the German Bundesministerium für Bildung und Forschung (bmbf), and sponsored by many industrial companies.

It is my particular pleasure to thank all those colleagues and friends that have been instrumental in shaping *BioTrans 2001* into a scientifically most rewarding event, the members of the Scientific Committee and the Organizing Committee for their invaluable assistance with the preparation and organization of this symposium, all the contributors to the scientific program, and the financial supporters.

Together with the next chairman, Prof. Vladimir Kren, it is my pleasure to invite the readers of

this special issue to participate in the *6th BioTrans* meeting which will be held in Olomouc (Czech Republic) in the period of June 28 to July 3, 2003. Further information on this conference, and on the series of *BioTrans* Symposia in general, can be gathered from the <http://www.biotrans.org> conference website.

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