

Preface

This proceeding includes original and peer-reviewed research papers from the 4th International Symposium on the Frontiers of Biotechnology and Bioengineering (FBB 2023), in Hong Kong, China during October 14-15, 2023.

For thousands of years, humankind has used biotechnology in agriculture, food production, and medicine. Biotechnology is the research and development in the laboratory using bioinformatics for exploration, extraction, exploitation and production from any living organisms and any source of biomass by means of biochemical engineering. Bioengineering is the application of the principles of engineering and natural sciences to tissues, cells and molecules. FBB aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of Biotechnology and Bioengineering. It also provides a platform for academic scientists, researchers and research scholars, doctors, doctoral students and related professionals to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered and solutions adopted in the fields of Biotechnology and Bioengineering. All authors and participants are kindly encouraged to contribute to and help shape the conference through submissions of their research abstracts, papers and posters.

FBB 2023 received 57 submissions, and more than 20 of them had been accepted by our reviewers in FBB 2023. By submitting a paper to FBB 2023, the authors agreed to the review process and understood that papers undergo a peer-review process. Manuscripts were reviewed by appropriately qualified experts in the field selected by the Conference Committee, who gave detailed comments and-if the submission was accepted the authors would submit a revised version that took into account this feedback. All papers were reviewed using a double-blind review process: authors declared their names and affiliations in the manuscript for the reviewers to see, but reviewers did not know each other's identities, nor did the authors receive information about who had reviewed their manuscript. The Committees of FBB 2023 invested great efforts in reviewing the papers submitted to the conference and organizing the sessions to enable the participants to gain maximum benefit.

Hopefully, all participants and other interested readers will benefit scientifically from the proceedings and also find it stimulating in the process.

With our warmest regards,

F. C. Cheuk, Lv Yang

Conference Organizing Chair