Special Issue

Modular Structures of Carbohydrate-Active Enzymes and Their Applications

Message from the Guest Editors

The bioconversion of lignocellulosic biomass into simple sugars for subsequent fermentation is an essential platform for the sustainable production of biofuels and biochemicals. This Special Issue focuses on the modular structure of carbohydrate-active enzymes, the architecture of the entire protein structures, and their biological functions during catalysis. We welcome the submission of research articles, reviews, and perspectives related, but not limited to, the following themes of interest:

- Protein expression and development of hosts for expressing enzymes
- Enzymology of carbohydrates active enzymes and the cellulosome system
- Application of CBMs in protein purification, biomass characterization, or biomarker/reporter
- Application of carbohydrate-active enzymes in agriculture, food, feed, and the biofuel/chemical industry
- Modular structures and substrate-enzyme interactions
- Techniques for increasing enzymatic activity and stability
- Computational tools for designing enzymes
- Effects of pretreatment methods on biomass structure and enzymactic acitivity

Guest Editors

Dr. Paripok Phitsuwan

Division of Biochemical Technology, School of Bioresources and Technology, King Mongkut's University of Technology Thonburi, Bangkok 10150, Thailand

Dr. Ken-Lin Chang

Institute of Environmental Engineering, National Sun Yat-Sen University, Kaohsiung 80424, Taiwan

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Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

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Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

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