

# Preface

2016 International Conference on Civil and Building Materials was held first time in October 15-17, 2016, in Hong Kong. This volume consists of the selected papers presented at ICCBM 2016, which are addressing diverse topics related to recent trends in area of building materials. We hope the volume will offer the readers a good opportunity to access the state-of-the-art developments and future directions of researches on building materials.

This conference covered recent trends and progresses made in the field of civil and building materials. The technical objective of this conference is to address key issues associated with science and technology in this rapidly evolving field of research and to promote contact between basic researcher and technological needs for real industrial applications.

This event is intended as a vehicle for the dissemination of research results on latest advances made in the area of civil and building materials, which gave an excellent opportunity for the scientists and researchers around the world to have a common platform to exchange their findings and to discuss the developments and make a base for starting collaborations in the national and international level. It was also aimed at promoting contacts amongst researchers and research groups for the creation of multinational thematic and research networks, as well as promoting contacts for future collaborative joint projects within some of the international funding programs.

The conference program offered invited, oral and poster presentations. The invited talks were focused on the potential application of civil and building materials in various fields of application. Among the 32 full length articles submitted to the conference, about 14 manuscripts were selected after peer review and were recommended for publication in this volume, topics cover performance test and analysis of building materials, preparation and characterization of building materials, structural engineering and architectural design.

We would like to thank the members of the conference committee, the reviewers who spared their valuable time, for their advice which have certainly helped to improve the quality, accuracy, relevance and the sincere efforts to maintain the quality of each paper selected for this conference program and volume for publication. And thank every author and participant who has contributed to the success of the conference.

Prof. C.W. Lim

City University of Hong Kong, Hong Kong

October/25/2016

# **Committees**

## **International Advisory Committees**

Prof. George C. Manos, Department of Civil Engineering, Aristotle University of Thessaloniki, Greece

## **Conference Committee Chairs**

Prof. C.W. Lim, City University of Hong Kong, Hong Kong

Prof. Kyoung Sun Moon, Yale University School of Architecture, USA

## **Program Committee Chairs**

Prof. Shigeyuki Haruyama, Yamaguchi University, Japan

Prof. Yasuyuki Kato, College of Science & Technology Nihon University, Japan

Prof. Ahmed B. Shuraim, College of Engineering, King Saud University, Saudi Arabia

Prof. Syh-Shiuh Yeh, Department Mechanical Engineering, National Taipei University of Technology, Taiwan

Prof. Dui Ye, Zhejiang University, China

## **International Technical Committees Chairs**

Duangkamol Ruen-Ngam, King Mongkut's Institute of Technology Ladkrabang, Thailand

Assoc. Prof. Wiroj Taweeprawadej, Khon Kaen University, Thailand

Tao Feng, Northwestern Polytechnical University, China

Dr. Pan Wang, A\*STAR, Singapore

Dr. Wai Jack Sin, A\*STAR, Singapore

Xin-Dang He, Northwestern Polytechnical University, China

Asst. Prof. Debabrata Bhadra, Bhairab Ganguly College, India

Tanvir Ahmed, The University of Newcastle, Australia

Ahmad Salihin Samsudin, Universiti Malaysia Pahang, Malaysia

Shabnam Hosseini, Islamic Azad University, Iran

Assistant Professor Dr. Szu-Hsien Peng, Department of Spatial Design, Chienkuo Technology University, Taiwan

Prof. Dr. Ahmed El-Shafie, Department of Civil Engineering, University of Malaya (UM), Malaysia

Associate Professor Tam Chat Tim, Department of Civil and Environmental Engineering, National University of Singapore, Singapore

Assistant Professor Dr. Sérgio D.N. Lourenço, Department of Civil Engineering, The University of Hong Kong, Hong Kong

Dr. Kulkarni Ankur A., Research Fellow, Protective Technology Research Centre, Singapore

Prof. Antoine Gergess, University of Balamand, Lebanon

Assoc. Prof. Nariman Khalil, University of Balamand, Lebanon