Preface

We are very pleased to hold the 16th International Conference on Computing in Civil and Building Engineering (ICCCBE2016) at Osaka International Convention Center (Grand Cube Osaka), Osaka, Japan. ICCCBE has been a very important series of gatherings of researchers and engineers in computing in civil and building engineering from academia, industry, and government all over the world. Japan is one of the founding nations of the organizing society, International Society for Computing in Civil and Building Engineering (ISCCBE) and held the 4th ICCCBE in Tokyo in 1991. The 16th ICCCBE is held for the first time in a quarter-century in Japan but this time in Osaka, which is historically and culturally different from Tokyo.

The conference theme of ICCCBE2016 is applications of Information and Communication Technology (ICT) to Civil, Building, and Environmental Engineering. It has a very wide spectrum of the research field, which includes the following topics: analysis, simulations, and sensing, Building Information Modeling (BIM), Civil (Construction) Information Modeling, urban planning and architecture, laser scanning and photogrammetry, visualization and Virtual Reality/Augmented Reality (VR/AR), automation and robotics for construction, asset management, facility management, big data, data mining, and machine learning, education, and others.

The objective of this conference is to report and disseminate ideas, progress, and products of innovative research activities in this exciting field and formulate strategies for future direction internationally. Proceedings of each ICCCBE have shown a snapshot of the newest and most advanced ideas and outcomes of this research field as well as the spectacular industry applications at the time of each conference held. It is our great honor to edit the proceedings of ICCCBE2016. In response to our Call for Papers, we received 389 abstracts and 300 full papers. Each abstract and each full paper was reviewed by at least two reviewers. 250 papers were finally accepted for publication after rigorous reviews and modification of the manuscripts.

We would like to express our sincere gratitude to all the authors for their contribution to ICCCBE2016. The publication of proceedings would not have been possible without the constructive reviews by the reviewers. We would like to thank all the members of the Board of Directors (BOD) of ISCCBE, the members of the Organizing Committee, and the members of the International Scientific Committee of ICCCBE2016. We also thank Japan Society of Civil Engineers (JSCE) and the Committee on Civil Engineering Informatics (CCEI) of JSCE for co-sponsoring this conference. Asian Group for Civil Engineering Informatics (AGCEI), which is a sister society of ISCCBE, is also acknowledged as a backer-up. We would like to acknowledge the financial support from all the corporate sponsors.

We hope that ICCCBE2016 and the publication of the proceedings will contribute to the development and dissemination of ICT applications to Civil and Building Engineering long into the future.

Nobuyoshi Yabuki, Ph.D.
Editor, Proceedings of ICCCBE2016
Chair, Organizing Committee of ICCCBE2016
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