

Preface

This proceeding contains the accepted papers from The 2012 International Conference on Civil, Architectural and Hydraulic Engineering (ICCAHE2012). The conference was held at the Zhangjiajie, China on 10–12 August 2012 and was organized by Changsha University of Science and Technology, Hunan University, Xiangtan University, Nanhua University, Hunan University of Science and Technology and Hunan City University. This conference is a forum for enhancing mutual understanding between scientists, engineers, policymakers and experts in the civil, architectural and hydraulic engineering field. The theme of this conference is “innovation in construction”. This proceeding is enriched by contributions from many experts representing many industry and academic establishments worldwide. Authors from more than 30 different countries have pooled their rich multidisciplinary up-to-date knowledge, in order to share their invaluable experience with the community.

All papers published in this volume have been peer reviewed through processes administered by the proceedings editors. Reviews were conducted by expert referees to the professional and scientific standards. This book covers the subject areas of geological and geotechnical engineering, structural engineering, tunnel, subway and underground facilities, road and railway engineering, bridge engineering, coastal engineering, seismic engineering, surveying engineering, cartography and geographic information system, monitoring and control of structures, reliability and durability of structures, natural and technogenic disasters prevention and mitigation, building science and technology, traditional construction materials, novel constructional materials and functional materials, heating, gas supply, ventilation and air conditioning works, applied and computational mechanics, computer application, mathematical modeling and analysis.

We would like to express our deep gratitude to all the keynote speakers, authors, referees, exhibitors, technical co-sponsoring organizations, committee members, and many others on whom the success of this prestigious event depends.

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