

Proceedings of the First International Conference on
Advances in Civil Infrastructure and Construction Materials
14-15 December 2015, MIST, Dhaka, Bangladesh

Published by:
Department of Civil Engineering
Military Institute of Science and Technology (MIST)
Dhaka-1216, Bangladesh

December 2015

ISBN: 978-984-33-9965-6

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Book Design & Composition: Publication Committee, CICM-2015

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PREFACE

Bangladesh is gradually transforming towards a developed country where several mega projects have been initiated recently including Padma Bridge, Metro Rail, Deep Sea Port and several large scale power plants etc. Civil engineering related to design, analysis, materials and construction has been a major driving force over the past decades, which often suffers lack of technical innovation. Recent advancements in construction materials, analysis & design, construction techniques and structural health monitoring have been achieved through a globally engaged research communities. Such newly developed smart materials and their applications, innovative technology and construction techniques can substantially benefit such mega projects. They will not only be able to help improve the performance of such structures under multiple hazards but can also improve their long-term durability, and potentially reduce repair and maintenance costs.

The First International Conference on Advances in Civil Infrastructure and Construction Materials (CICM) 2015 is a major technical event held in Dhaka, Bangladesh. It provides an outstanding forum to facilitate international exchange of the-state-of-the-art in research and practices in civil infrastructure and construction materials. The conference was organized by Military Institute of Science and Technology (MIST) Dhaka and it took place in MIST campus from 14 to 15 December 2015. The conference was also supported by the Mechanics and Materials Division of Canadian Society for Civil Engineering (CSCE). Some major co-sponsors include IABSE, CSI and S-FRAME. The Conference provided an excellent opportunity for the participants from 11 different countries including United States, Canada, UK, Australia, Japan, Malaysia, Hong Kong, India, Pakistan etc. Productive discussions among world leading researchers and local practitioners on the recent advancements in construction sectors in terms of materials, design, analysis, construction techniques and structural health monitoring of bridges, buildings, steel and concrete structures, bracing systems, fiber reinforced plastic (FRP), advanced cement composites, green technology, recycled concrete were the key features of this conference.

The CICM 2015 program covers all aspects of structural design, analysis, construction management, construction techniques, advanced construction

materials, structural control, smart structures, structural health monitoring, natural hazards, improved resistance to multiple hazards related to civil infrastructure systems. In total, about 100 full papers from 11 countries in all key topics in terms of experimental, numerical, analytical studies, and their integration are covered in this volume of conference proceedings.

The editors feel honored to be asked to write a Preface for the CICM 2015 proceedings. The huge success of the CICM 2015 would not have been easy without the wholehearted participation and substantial contributions from a large number of experts coming from different parts of the world. The conference could not have been organized without the financial support from many industrial sectors and private firms in Dhaka (e.g. Shah Cement, RSRM, DIRD, KSRM, ICON, Mirpur Ceramic, Labib Group BD, ASBRM, Poly Cables etc). The contributions of keynote and distinguished speaker series are also highly appreciated, which made the conference attractive and lively. The extremely efficient organizational efforts put together for this Conference by Col Shah Md Muniruzzaman, the Head of the Department of Civil Engineering and his colleagues represent a work of high class quality. Acknowledgements are also due to the reviewers especially the review team from the University of British Columbia's Okanagan campus. We express our sincerest gratitude for their time and energy for making the CICM 2015 a first class major technical event for the international and local participants.

We are looking forward to the 2nd International Conference on Advances in Civil Infrastructure and Construction Materials (CICM) that will be held from Dec 21-22, 2017 at the same city. We look forward to welcoming you again in CICM 2017, Dhaka.

14 December 2015
Dhaka, Bangladesh

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