

Preface

In 1981, under the direction of the great scientist Xuesen Qian, an integrated frontier science—Man–Machine–Environment System Engineering (MMESE)—came into being in China. Xuesen Qian gave high praise to this emerging science. In a letter to Shengzhao Long, he pointed out, **“You are creating this very important modern science and technology in China!”** on October 22, 1993.

In the congratulation letter to the commemoration meeting of the twentieth anniversary of establishing the Man–Machine–Environment System Engineering, the great scientist Xuesen Qian stated, “You have made active development and exploration in this new emerging science of MMESE, and obtained encouraging achievements. I am sincerely pleased and hope you can do even more to make prosper development in the theory and application of MMESE, and **make positive contribution to the progress of science and technology in China, and even in the whole world**” on June 26, 2001.

October 22, which is the day the great scientist Xuesen Qian gave high praise to MMESE, was determined to be the Foundation Commemoration Day of MMESE by the second conference of the 5th MMESE Committee on October 22, 2010. On this very special day, the great scientist Xuesen Qian pointed out in a letter to Shengzhao Long, **“You are creating this very important modern science and technology in China!”** and the conference also determined that the annual conference on MMESE would be held from October 21–23 to cherish the memory of the great contributions that the great scientist Xuesen Qian had made to the MMESE!

The 15th International Conference on MMESE will be held in Hangzhou, China on October 21–23 of this year; hence, we will dedicate *Proceedings of the 15th International Conference on Man–Machine–Environment System Engineering* to our readers.

Proceedings of the 15th International Conference on Man–Machine–Environment System Engineering is the academic showcase of the 15th International Conference on MMESE joint held by MMESE Committee of China and Beijing KeCui Academe of MMESE in Guilin, China. The conference

proceedings consisted of 85 excellent papers selected from more than 400 papers. Due to limitations of space, some excellent papers have been left out, and we feel deeply sorry for that. Crudeness in contents and possible incorrectness are inevitable due to the somewhat pressing editing time and we hope you kindly point them out promptly, and your valuable comments and suggestions are also welcome.

Proceedings of the 15th International Conference on Man–Machine–Environment System Engineering will be published by Springer-Verlag, German. Springer-Verlag is also responsible for the related matters on index of Index to EI, so that the world can know the research quality and development trend of MMESE theory and application. Therefore, the publication of *Proceedings of the 15th International Conference on Man–Machine–Environment System Engineering* will greatly promote the vigorous development of MMESE in the world, and realize the grand object of **“making positive contribution to the progress of science and technology in China, and even in the whole world”** proposed by Xuesen Qian.

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Beijing
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Prof. Shengzhao Long

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