EDITORIAL

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Preface

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The 5th Asian Conference on Mechanics of Functional Materials and Structures (ACMFMS) was held on October 14–17, 2016, in Shanghai, China. This conference was well attended by more than 130 representatives from all over the world such as Japan, Iran, India, Thailand, Russia, Ukraine, Germany, China Mainland, Taiwan, and Hong Kong. More than 100 oral presentations were delivered at the conference, among which 20 representative full-size manuscripts were invited to submit to *Acta Mechanica* for publication in this Special Issue. We hope the invited papers represent the current status of mechanics in functional materials and structure in Asia.

The ACMFMS was launched in 2008 in Matsue, Japan, aiming to provide an ideal platform and bring together scientists, researchers, engineers, and Ph.D. students working on Mechanics of Functional Materials and Structures in various science and engineering areas and interdisciplinary fields, including materials science and engineering, mechanics, materials processing and fabrication, physics and industries, etc., to exchange and share frontier research, technology innovations and practical experiences. The conference series of ACMFMS is held every two years. Following ACMFMS2008 in Matsue, Japan, ACMFMS 2010 was held in Nanjing, China; then, ACMFMS2012 in New Delhi, India; ACMFMS 2014 in Nara, Japan; and ACMFMS 2016 in Shanghai, China.

ACMFMS 2016 covers a wide range of mechanics of functional materials and structures, such as elasticity, plasticity, fracture, fatigue, creep, environment degradation of materials and structures, damage mechanics, micro-/nanomechanics, contact problems, wear and friction, vibrations and waves, control and automation, biomechanics. In particular, mechanics in energy materials, devices and structures attracts more and more attention from the participants.

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