## Preface: International Workshop on "Development and Advancement of Computational Mechanics", April 22-23, 2005

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The International Workshop on "Development and Advancement of Computational Mechanics" was held in Kobe, Japan. The workshop was to celebrate the 60th birthday of Prof. Satya N. Atluri. Professor Satya N. Atluri is a distinguished and world-renowned scholar based at UCI, where he is the holder of the Samueli/von Karman Chair in Aerospace Engineering, and the Director of the Center for Aerospace Education & Research. He has been associated with a number of other universities: Georgia Institute of Technology; Massachusetts Institute of Technology; UCLA; Indian Institute of Science; Tsinghua University; and the Korea Advanced Institute of Science & Technology. In these Universities and Institutes, he devoted himself to the education of the students, and to perform collaborative research with post doctoral associates and visiting scholars from foreign countries especially from Asia. His friends, former doctoral students, post doctoral associates and visiting scholars presented their most recent achievements in the workshop.

As the memory of the workshop, the participants of the workshop contributed their most recent works to the special issues of CMES: Computer Modeling in Engineering & Sciences. The contents of the papers span a wide range of topics; computational fracture mechanics and its related topics [Nishioka (2006); Lee et al. (2006); Perl et al. (2006); Kikuchi (2006); Fujimoto and Nishioka (2006); Okada and Kamibeppu (2006); Lee et al. (2006)], computational multiscale analysis and micro/nano-mechanics of materials [Matsumoto and Nakagakai (2006); Nakagaki et al. (2006); Tomita and Uchida (2006); Park et al. (2006); Yashiro et al. (2006); Hasebe (2006)], civil engineering applications [Yoda and Kodama (2006); Ishizawa and Iura (2006)], software foundations in computational mechanics [Nikishkov (2006); Kawai (2006)], computational traffic simulation [Yoshimura (2006)], constitutive laws [Akamatsu et al. (2006)], meshfree method [Masuda and Noguchi (2006)] and inverse analysis methodology to detect material defects [Shiozawa et al. (2006)]. Many of the authors are former doctoral students and post doctoral associates who studied with Professor Satya N. Atluri in their earlier stages of their professional/research careers. Then, they have explored various research fields as presented in this and several forth coming special issues of CMES. These issues of CMES are dedicated not only to Professor Satya N. Atluri's 60th anniversary and his successful academic/professional carrier but also to the successful

## Organizing committee of The International Workshop on "Development and Advancement of Computational Mechanics"

scientific achievement of each of the contributors.

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