

## Forward

Motion and vibration control is a fundamental technology for the development of advanced mechanical and structural systems such as mechatronics, vehicle systems, robots, spacecraft, and rotating machinery. Often the implementation of high performance, low power consumption designs can only be possible with the use of this technology. It is also vital to the mitigation of natural hazards for large structures such as high-rise buildings and tall bridges, and to the application of flexible structures such as space stations and satellites. Recent innovations in relevant hardware, sensors, actuators, and software have facilitated new research in this area.

The International Conference on Motion and Vibration Control (MOVIC) is held every two years. The goal is to stimulate interactions between researchers active in the area of motion and vibration control. Since the MOVIC conference was launched by Japan in 1992, it has been successfully held in Japan in 1994 and 1996, Switzerland in 1998, Australia in 2000, Japan in 2002 and USA in 2004. The conference has developed into a very productive international event for the advancement of motion and vibration control technology.

226 participants from 13 nations, including 81 Korean participants, attended the eighth conference, MOVIC 2006, which took place in KAIST Daejeon campus, Korea, from August 28~30, 2006. The primary purposes of MOVIC 2006 are to promote scientific and technological exchange between researchers from around the world, and to enhance the understanding and the dissemination of relevant research in this area.

Among the 180 papers presented in the conference, 26 papers are selected to be published in the special issue of Journal of Mechanical Science and Technology. I would like to express our sincere gratitude to authors and anonymous reviewers, whose contribution is essential to our endeavor in publishing the archival type journal and to editors-in chief, editor in charge of dynamics, control and vibration field and staffs at KSME (Korean Society of Mechanical Engineers), whose valuable suggestions and efforts made this special issue possible, on behalf of the organizing committee (Chairpersons: Chong Won Lee & Chung Bang Yun, KAIST) of MOVIC 2006.