Preface

The papers in this volume were selected from the 4th International Conference of Asian Society for Precision Engineering and Nanotechnology (ASPEN 2011). ASPEN 2011 was organized by the Partner State Key Laboratory of Ultra-precision Machining Technology of The Hong Kong Polytechnic University and co-organized by Chinese Mechanical Engineering Society (CMES), Japan Society for Precision Engineering (JSPE), Korean Society for Precision Engineering (KSPE) and the State Key Laboratory of Precision Measurement Technology and Instruments of Tianjin University and Tsinghua University. The Asian Society for Precision Engineering and Nanotechnology (ASPEN) is a consortium of academic societies in the Asian region to promote the collaboration among scientists and researchers in Asia.

The scope and level of the ASPEN 2011 is the first of its kinds in Hong Kong in the area of precision engineering including precision/ultra-precision machining, non-traditional machining, manufacturing systems and machine tools, nano & micro metrology and surface characterization, MEMS/NEMS, advanced moulding and forming, high precision mechatronics and other technologies associated with micro/nano manufacturing. The conference is composed of various sessions and activities including keynote presentations, invited presentations, oral and poster presentations as well as industrial sessions. This year, about 200 papers were submitted to the conference from over 50 institutes and organizations in 10 countries of different regions. We hope the present volume provides readers a broad overview of the recent advances in the field of precision engineering.

Here I would like to express my deepest appreciation to the generous contribution from all the authors as well as the kind support from the conference co-organizers, reviewers, sponsors, members of the Organizing Committee, Program Committee, and International Scientific Committee of ASEPN2011. Special thanks also go to Trans Tech Publications for producing the volume.

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