
Editorial

Yongbo Wu*

Department of Machine Intelligence and Systems Engineering,
Akita Prefectural University,
84-4 Tsuchiya-Ebinokuchi, Yurihonjo,
Akita 015-0055, Japan
E-mail: wuyb@akita-pu.ac.jp
*Corresponding author

Sunglim Ko

Department of Mechanical Engineering,
Konkuk University,
1 Hwayang-dong, Kwangjin-gu,
Seoul 143-701, Korea
E-mail: slko@konkuk.ac.kr

Pei-Lum Tso

Department of Power Mechanical Engineering,
National Tsing Hua University,
Hsin-Chu, Taiwan
E-mail: pltso@pme.nthu.edu.tw

Biographical notes: Yongbo Wu is a Professor of Precision Engineering at Akita Prefectural University, Japan. He received his BE and ME in Mechanical and Manufacturing Engineering from Hefei University of Technology and Beijing University of Aeronautics and Astronautics, China in 1982 and 1985, respectively and a PhD in Precision Engineering from Tohoku University, Japan in 1997. After completing his PhD, he worked in NIKON Corporation in Tokyo as a Senior Engineer and then in Tohoku University as a Research Associate before moving to Akita Prefectural University in 2000. His current research interests include centreless grinding, ultrasonically assisted machining, and field-assisted fine finishing.

Sunglim Ko is a Professor of the Department of Mechanical Engineering at Konkuk university at Seoul, Korea. He received his BE and MS at the Department of Mechanical Engineering of Seoul National University in 1980 and 1983, respectively and PhD at the University of California, Berkeley in 1989. His major interests are the burr related technology such as burr formation mechanism and deburring technology. Recently a measurement system for microburrs has been developed, which shows the quantitative description of burr geometry. New deburring tools for the burrs at intersecting holes is invented and to be patented. More than 170 papers have been published in English and Korean which cover the burr related technology, expert system for burr minimisation and deburring technology. His recent interests are related to measurement and deburring for the microburrs at intersecting holes and the development of advanced CAM software for burr minimisation and precision machining for deep pockets.

Pei-Lum Tso is a Professor of the Department of Power Mechanical Engineering at National Tsing Hua University Hsin-Chu, Taiwan. He received BS in Mechanical Engineering from Tatung Institute of Technology Taipei Taiwan in 1976. He entered the Machine Tools Center, Industrial Technology Research Institute in Hsin-Chu Taiwan as a supervisor in the grinding division of the machine shop. He also had more than two years experience in the Department of Machine Tools Design as a project leader for surface grinder development. He received his PhD in Mechanical Engineering from University of Missouri-Rolla, USA in 1988. His current research interests include abrasive machining and mechanism design.

In recent years, information technology equipment and devices such as laptop computers and cell phones have rapidly become popularised worldwide as a result of the advances in electronics and manufacturing technology. Abrasive machining, such as grinding and polishing, has played an essential role in the fabrication of the components used for such equipment and devices. As the demand for compact, miniaturised and multifunctional optoelectronic instruments increases, it is expected that the requirements for micro/nanoprecision abrasive machining of engineered components from both metallic and advanced materials will increase significantly.

This Special Issue presents a collection of papers mainly on ultra-precision grinding and polishing of both metallic and advanced materials such as die steel, optical materials and silicon. The topics concern the material removal mechanism in grinding and polishing, the proposal and development of advanced abrasive machining techniques and practical applications of abrasive technologies. It includes papers authored by academic researchers, industrial practitioners and university students in abrasive processes and related fields worldwide.

The Guest Editors of this Special Issue of *International Journal of Abrasive Technology* would like to express our appreciation to the authors for their valuable contributions and the reviewers whose efforts improved the quality of these papers. Special thanks are also due to the Inderscience Publishers technical and publication staff as well as Dr. J. Wang, Editor-in-Chief of the *IJAT*, for their assistance in publishing this Special Issue.