
Editorial

A. Kiet Tieu*, Hongtao Zhu and Qiang Zhu

School of Mechanical, Materials and Mechatronic Engineering,
University of Wollongong,
Wollongong NSW 2522, Australia
E-mail: ktieu@uow.edu.au
E-mail: hongtao@uow.edu.au
E-mail: qiangz@uow.edu.au
*Corresponding author

Biographical notes: A. Kiet Tieu is a Professor of Mechanical Engineering at the School of Mechanical, Materials and Mechatronic Engineering, University of Wollongong (UOW), Australia. He is a Fellow of the Australian Academy of Technological Science and Engineering. He has published more than 510 refereed papers. He has attracted significant funding from the Australian Research Council, several cooperative research centres and major contract research in rolling mechanics and tribology from Australian and major overseas steel, transport and oil companies.

Hongtao Zhu obtained his BEng degree in 1993, MEng degree in 1996 and PhD degree in 2000 from Northeastern University, China. He is a Lecturer at the School of Mechanical, Materials and Mechatronic Engineering, University of Wollongong (UOW), Australia. His major interests include tribology and lubrication, plate/strip rolling theory, fracture control in pipeline, numerical modeling, wheel and rail contact, and battery management system for electric vehicles. He has authored/co-authored 82 refereed journal and 45 conference papers. As a CI, he has been awarded national competitive research grants with a total funding of 1.8 million from the Australian Research Council (ARC) and Cooperative Research Centre (CRC).

Qiang Zhu obtained his BEng degree in 2002 and MEng degree in 2005 from Northeastern University, China and his PhD degree in 2012 from the University of Wollongong, Australia. He is an Associate Research Fellow at the School of Mechanical, Materials and Mechatronic Engineering, University of Wollongong (UOW), Australia. His major research interests include high temperature oxidation of metals, wear of materials and tribology, nano-indentation technology. He has published over 30 refereed papers in journals and conferences. He has participated in three Australian Research Council Discovery Projects (ARC DP) and two industrial projects as a main researcher since 2008.

We are pleased to present this special issue of *International Journal of Manufacturing and Product Technology* containing selected papers from the 15th International Conference on Advances in Materials and Processing Technologies (AMPT2012) held in Wollongong, Australia, 23–26 September 2012. The conference program covered over 450 papers in 72 technical sessions and 100 poster presentations with a broad range of topics such as materials, deformation processing, materials removal process, processing of new and advanced materials, welding and joining, surface engineering and other related processes.

Part one of this special issue contains 19 papers selected from those presented at the conference that covered aspects of deformation processes, advanced materials, materials removal processes, welding and computer aided engineering/computational mechanics. All papers were peer-reviewed and we are very thankful to the numerous reviewers for their effort in reviewing all the manuscripts and selected the quality papers for this special issue.

We extend our gratitude to Dr. M.A. Dorgham, Editor-in-Chief of *IJMPT* for the opportunity to publish this special issue.