

---

## Editorial

---

### Mohd Fadzli Bin Abdollah

Faculty of Mechanical Engineering,  
Universiti Teknikal Malaysia Melaka,  
Hang Tuah Jaya, 76100 Durian Tunggal,  
Melaka, Malaysia  
Email: mohdfadzli@utem.edu.my

**Biographical notes:** Mohd Fadzli Bin Abdollah is an Associate Professor in the Faculty of Mechanical Engineering at Universiti Teknikal Malaysia Melaka. He received his BEng (Hons.) and MEng in Mechanical Engineering from Universiti Kebangsaan Malaysia in 2004 and 2005, respectively. Later in 2011, he completed his DrEng in Mechanical Science and Engineering from Nagoya University, Japan. He has authored or co-authored more than 100 journal and conference papers, and obtained two intellectual properties. His current interests involve tribology of waste materials and surface engineering. He has served the tribology community in various capacities including, the Associate Editor-in-Chief for *Jurnal Tribologi* and appointed as the Guest Editor for several journals, including *Industrial Lubrication and Tribology*, *Journal of Materials Research*, *Transactions of the IMF*, *Tribology – Materials, Surfaces and Interfaces*, *Composite Interfaces* and *International Journal of Materials and Product Technology*.

---

Materials tribology is an area of research that focuses on measuring, modelling, and designing the origins of friction and wear, which is a universal occurrence within systems containing moving assemblies of contacting materials. In designing of a mechanical system, the properties of the materials selected by the engineer are as imperative as the design itself. Often, design engineers will use reference charts or other published data to select a material for application specific properties. As an engineer tries to optimise a design, accuracy of these properties becomes of crucial importance. This can be challenging when designing tribological components as friction coefficients and wear rates are not simply material properties. Friction and wear behaviour of materials depend on many parameters and conditions. Thus, the papers included here will inform colleagues in industry and academia about methods, analysis, design advances, and new materials concerning all kinds of materials design and development with improved tribological properties from fundamental research to applied uses, with the resulting benefits of longer product/component life, less energy consumption, and reduction in product development time and cost.

Renowned authors in the area of materials design, including excellent works presented at the Malaysian International Tribology Conference 2015 (MITC2015) were invited to submit their contributions to this special issue.

As a guest editor, I hope that the papers in this special issue will serve as a valuable reference for researchers and tribologists around the globe. I am also grateful to the editors and reviewers who worked very hard in reviewing papers and providing feedback for authors.