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## Editorial

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**Biographical notes:** Belal. F. Yousif is an Associate Professor, (Mechanical Engineering), University of Southern Queensland. Prior to this he was in the Faculty of Engineering and Technology, Multimedia University, Malaysia. He completed his PhD at the same institution. He received his MSc from National University of Malaysia (UKM) and his BSc from Al-Anbar University in Iraq. His current research is in tribological and mechanical characteristics of modern engineering materials based on natural fibres such as oil palm, coir, kenaf and betelnut.

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The purpose of this issue entitled 'Precision Engineering and Tribology', is to explore the relationship between tribology and precision in manufacturing. Authors were encouraged to submit papers relating to constraints imposed by tribology and precision manufacturing (in its current form) on the new environmental technologies (the new 'green economy').

Tribology is the science of friction, wear, and lubrication. The interaction of the asperities in the interfacial contact surface controls friction and wear behaviour of the rubbed bodies under the condition of dry or lubricant contact. Such contact mechanism in relative motion can be found in numerous industrial applications, which can be the main element in component design. Understanding the tribological performance of materials is becoming an essential consideration equal to the other fundamental properties in designing industrial components.

In the current decade, different approaches have been attempted to improve the tribological performance of engineering components. In this special issue, recent issues and approaches related to tribology are addressed. Coating of materials is one of the techniques that can be used to protect the bulk of the materials from wear and heat impact during the rubbing process. Mathematical modelling are the methods that have been used to simulate a special tribological condition; however, it is still an ongoing area of research in tribological science. On the other hand, there are new materials explored and their tribological performance needs to be studied as well.

The tribological behaviour of recycled aluminium is investigated and the findings are reported in this special issue. Detection of component failure due to tribological loading is also introduced in this issue, and wavelet transform is used as a detection method.

The guest editors wish to thank all the reviewers for their input and suggestions for improvement to the papers and also the Editor-in-Chief, Dr V.K. Jain for his invaluable support.