



Special Issue

Ultraprecision Machining Technology—Manufacture and Metrology of Structured and Freeform Surfaces for Functional Applications

Guest Editors:

Prof. Dr. Benny C.F. Cheung

Partner State Key Laboratory of Ultraprecision Machining Technology, Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong

benny.cheung@polyu.edu.hk

Prof. Dr. W.B. Lee

Partner State Key Laboratory of Ultraprecision Machining Technology, Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Kowloon, Hong Kong

wb.lee@polyu.edu.hk

*Deadline for manuscript submissions:
31 July 2017*

Message from the Guest Editors

Structured and freeform surfaces with functional characteristics have been widely used in many mission-critical applications. These surfaces have non-rotational symmetry with sub-micrometre form accuracy and nanometric surface finishing. Due to their geometrical complexity and high precision requirements, this leads to numerous research challenges in different fields including ultraprecision machining technologies, cutting mechanics, surface generation mechanisms, novel machine design, accurate control of the machining process through modelling and simulation of ultraprecision machining processes, error compensation, freeform measurement and on-machine metrology. This Special Issue aims to provide a good collection of the latest research results and findings in design, ultraprecision machining and measurement of structured and freeform surfaces and their functional characteristics. This Special Issue will also contain selected papers from the ASPEN/ASPE Spring Topical Meeting 2017 (www.aspen-aspe2017-topical.com/index.php) which will be held from 14–17 March 2017, in Hong Kong, China.

Author Benefits

Open Access: free for readers, with publishing fees paid by authors or their institutions.

High visibility: indexed by the Science Citation Index Expanded (Web of Science), Compendex (EI), Scopus and other databases.

Rapid publication: manuscripts are peer-reviewed and a first decision provided to authors approximately 22 days after submission; acceptance to publication is undertaken in 7 days (median values for papers published in this journal in 2015).

