

Preface

This volume of Materials Science Forum contains the selected papers presented at the 6th International Conference on High Speed Machining (ICHSM) held in Harbin, China, from 24 to 25 July 2014.

The ICHSM aims on the communication and cooperation of the research results and technology experiences about high-speed machining among the research institutions, academic organizations, machine tool industries and all kinds of manufacturing enterprises, which supply a new opportunity for the high-speed theory and practice in the field of science, engineering and industrial to reveal recent achievements, exchange experience of success, and to talk about the future development.

The first and the second conference of ICHSM were held separately in Nanjing in 2004 and in Suzhou in 2006 in China successfully. Also the third to the fifth annual conference were held successfully in 2008 Shanghai, 2010 Guangzhou and 2012 Jinan. The 6th International Conference on High Speed Machining is held in Harbin, located on the most active economic region applying high speed machining technology in China.

The conference covers a wide range of topics in high speed machining and high performance machining related fields from mechanisms and machining process, modeling and simulation of machining processes, machine tools and cutting tools, surface integrity of machining processes, CAD/CAM and process optimization, testing, measuring and monitoring of processing, micro-machining and non-traditional machining technologies and the relevant technology in industry.

On behalf of the conference committees, we would like to thanks Honorable-Chairmen, Prof. Xing Ai, Prof. Zhejun Yuan and Prof. Zhenjia Li, Co-Chairmen, Prof. Ning He, Prof. Dr. -Ing E. Abele, Prof. Ming Chen, Prof. Chuanzhen Huang, Prof. Chengyong Wang, Prof. Zhanqiang Liu, and all members of organizing committee scientific committee for their advices, supports and contributions. We would like to express our thanks to all paper reviewers for their contribution. We would also like to extend our acknowledgement to authors for sharing their results and experience in advance of high speed machining and high performance machining.

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