

Preface

Grinding and abrasive processing of materials are the machining processes that use bonded or loose abrasives to remove workpiece materials. Due to the well-known advantages of grinding and abrasive processes, advances in abrasive and grinding technology are of importance to enhance both productivity and part quality. In order to introduce the progresses in this field, the vice president of Trans Tech Publications, Thomas Wohlbier, invited me to edit this special volume last year. I have invited 21 contributions from different countries and regions in an attempt to gather together the achievements of different researchers into a single publication.

The 21 invited papers, review or research, are from Australia, China, Germany, Japan, Singapore, Taiwan (China), UK, and USA. The abrasive processes addressed in the volume involve not only grinding and polishing, but also wire sawing and abrasive waterjet machining. The topics include either fundamental aspects or novel techniques. It is therefore the hope of the editor that this volume will be valuable to production and research engineers, research students and academics in the area.

At the completion of this volume, I am grateful to all the contributors for the enthusiasm with which they wrote about their topics. Thanks are also given to Mr. Guoqin Huang at HuaQiao University for his secretarial and editing work; and Trans Tech Publications for publishing the volume.

Xipeng Xu Ph.D

Professor in Manufacturing Engineering
HuaQiao University

Quanzhou, Fujian 362021, China

Tel.: +86-595-22693598; fax: +86-595-22692667

E-mail address: xpxu@hqu.edu.cn