

Preface

The present volume contains selected papers from the 14th Conference of Abrasive Technology in China, which was previously called Grinding and Machining Conference in China (GMC). The conference is organized and co-organized by The China Committee of Abrasive Technology (CCAT), previously the Grinding Institute, of the China Mechanical Engineering Society (CMES), College of Mechanical Engineering at Nanjing University of Aeronautics and Astronautics, and the Research Lab for Stone Machining at HuaQiao University.

The Conference of Abrasive Technology in China or the Grinding and Machining Conference in China is a bi-annual conference inaugurated in 1980. The past thirteen conferences were successfully held in Nanjing, Shanghai, Wuhan, Fuzhou, Shenyang, Nanning, Chongqing, Xi'an, Chengdu, Changsha, Quanzhou, Kunming, and Shenyang. They have provided excellent platforms for participants to exchange their new ideas and have brought forth new research opportunities and collaborations. With the support of CMES, the 14th conference is sponsored by Nanjing University of Aeronautics and Astronautics and HuaQiao University, and will be held in Nanjing, the capital of eastern China's Jiangsu province during October 26-28, 2007

This volume presents a selection from more than 300 papers submitted to the conference from universities and industries. All of the papers were subjected to peer reviewing by at least two expert referees. The papers selected for this volume depended on their quality and their relevancy to the conference. The volume tends to present to the reader the recent advances in the field of abrasive technology including the mechanics and control of abrasive processes, modeling and simulation of abrasive processes, measurement and surface quality assessment, cooling and coolants, polishing, wheel truing and dressing, novel abrasive techniques, and novel machining techniques. It is therefore valuable to production and research engineers, research students and academics in the field.

The Organizing Committee is grateful to all of the contributors who made this volume possible. As the guest editors of the volume, we wish to acknowledge all of those who have updated and reviewed the papers submitted to the conference. Thanks are also given to Dr. Yuan Li, Mr. Guoqin Huang and Mr. Jianyi Chen at HuaQiao University for their secretarial and editing work; and Trans Tech Publications for producing the volume.

The Organizing Committee of the conference and the China Committee of Abrasive Technology would like to dedicate this volume to Prof. Hongjun Xu for his outstanding contributions to education and academic research in the field of abrasive technologies. As an honorary member of the China Committee of Abrasive Technology, Prof. Xu works in the College of Mechanical Engineering at Nanjing University of Aeronautics and Astronautics.

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