

Preface

The present volume contains selected papers from the 15th 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), School of Mechanical and Power Engineering at Henan Polytechnic University, School of Mechanical & Electrical Engineering at Henan University of Technology, and the Research Lab for Stone Machining at Huaqiao University.

The bi-annual conference was inaugurated in 1980. The past fourteen conferences were successfully held in Nanjing, Shanghai, Wuhan, Fuzhou, Shenyang, Nanning, Chongqing, Xi'an, Chengdu, Changsha, Quanzhou, Kunming, Shenyang, and Nanjing. 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 15th conference is sponsored by Henan Polytechnic University and Henan University of Technology, and will be held in Zhengzhou, the capital of Henan province in China, during August 15-17, 2009

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, simulation and optimization of abrasive processes, green and clean production in 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.

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