

# Preface

This book contains the accepted and presented paper at the 2nd International conference on Textile Engineering and Materials (ICTEM 2012), held on November 17th-18th 2012 at Changsha, Hunan, China. It was the second conference in this series; the first one was in 2011 in Tianjin, China. The general purpose of this conference is to provide a forum for the presentation and discussion of the latest research and technology on all aspects of textiles and materials. The topics addressed in this publication span the entire spectrum of research to applications for textile technology and textile materials. This book contains the accepted manuscripts from the areas of Textile Materials, Technology in Textile Industry, Textile Equipment, Apparel Design, Future Trends in Textile and Apparel Industry, Engineering Materials and Functional Materials, Engineering Education and Management.

We hope that you will enjoy the excellent work of our many authors and this volume brings you some new ideas and understanding of the magical textile technologies and textile composites world.

***The editors***

The 2012 International Conference on Textile Engineering and  
Materials  
(ICTEM 2012)

**Organized by:**

Hunan Province Textile Engineering Center

**Conference Organization**

**General Chairman**

Prof. Xungai Wang, Deakin University, Australia

**Technical and Organizing Committee**

Prof. Bowen Chen, Tianjin Polytechnic University, China

Prof. Li Chen, Tianjin Polytechnic University, China

Prof. Wenxing Chen, Zhejiang Sci-Tech University, China

Prof. Jianyong Chen, Zhejiang Sci-Tech University, China

Prof. Julie Chen, University of Massachusetts Lowell, USA

Prof. Li Chen, Tianjin Polytechnic University, China

Prof. Guoqiang Chen, Soochow University, China

Prof. Qinguo Fan, University of Massachusetts, USA

Prof. Xuerong Fan, Jiangnan University, China

Prof. Weidong Gao, Jiangnan University, China

Prof. Jia-horng Lin, Feng Chia University, Taiwan

Prof. Jialu Li, Tianjin Polytechnic University, China

Prof. Huawu Liu, Tianjin Polytechnic University, China

Prof. Ning Pan, University of California, USA

Prof. Xiaoming Qian, Tianjin Polytechnic University, China

Prof. Yiping Qiu, Donghua University, China

Prof. Rui Wang, Tianjin Polytechnic University, China

Prof. Xungai Wang, Deakin University, AU

Prof. Wenhao Xing, Chinese Culture University, Taiwan

Prof. Chunye Xu, University of Science and Technology of China

Prof. Weilin Xu, Wuhan Textile University, China

Prof. Xingchuan Yao, National Taipei University of Technology, Taiwan

Prof. Zhiyun Wu, Inner Mongolia University of Technology, China

## **Local Organizing Committee**

### **Chair**

Prof. Huawu Liu, Tianjin Polytechnic University, China

### **Members**

Prof. Yongxin Yang, Central Res. Insti. of Building and Construction Co., LTD

Prof. Shijie Shen, Beijing Forestry University, China

Prof. Zhili Zhong, Tianjin Polytechnic University, China

Prof. Yinhua Zhang, Hunan Province Textile Engineering Center