



2006. 8.22-8.26

中国·杭州

HANGZHOU, CHINA

# 第35届纺织科学 国际学术研讨会论文集

浙江理工大学  
日本纤维机械学会纺织科学研究会

Zhejiang Sci-Tech University  
Textile Science Research Group of TMSJ

PROCEEDINGS OF  
THE 35th TEXTILE  
RESEARCH  
SYMPOSIUM



ZHEJIANG UNIVERSITY PRESS

浙江大學出版社

# 第 35 届纺织科学国际学术研讨会论文集

## Proceedings of the 35th Textile Research Symposium in Hangzhou (2006)

浙江理工大学先进纺织材料与制备技术  
教育部重点实验室 编

浙江大學出版社

第 35 届纺织科学国际学术研讨会论文集

浙江理工大学

日本纤维机械学会纺织科学研究会

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责任编辑 周永秋 诸葛勤

出版发行 浙江大学出版社

(杭州天目山路 148 号 邮政编码 310028)

(E-mail: zupress@mail. hz. zj. cn)

(网址: <http://www.zjupress.com>)

排 版 浙江大学出版社电脑排版中心

印 刷 杭州浙大同济教育彩印有限公司

开 本 889mm×1194mm 1/16

印 张 46.5

字 数 1715 千

版 次 2007 年 1 月第 1 版 2007 年 1 月第 1 次印刷

书 号 ISBN 978-7-89490-343-3

定 价 84.00 元

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# PREFACE

To promote the progress and innovation of textile science and technology, strengthen the communication and cooperation of researchers all over the world in textile area, the 35th Textile Research Symposium, organized by the Textile Science Research Group of the Textile Machinery Society of Japan and Zhejiang Sci-Tech University, was held in Hangzhou, China, from 22<sup>nd</sup> to 26<sup>th</sup>, August 2006. The Economic & Trade Commission of Zhejiang Province and the Zhejiang Textile Society also assisted the Symposium.

Professor Jianyong Chen, Vice-President of Zhejiang Sci-Tech University, emceed the 35th Textile Research Symposium. Prof. Songliang Qiu, President of Zhejiang Sci-Tech University attended the Symposium and gave a welcome address. Prof. Yoshiyuki Iemoto, Vice-Chairman of the Textile Machinery Society of Japan, and Prof. Shinji Yamaguchi, Chairman of the Textile Science Research Group of the Textile Machinery Society of Japan, and Mr. Yifang Zheng, Vice-Director of Economic & Trade Commission of Zhejiang Province, attended the Symposium and gave an address.

A total of 139 specialists and scholars from 41 universities, research institutes and enterprises in Japan, China, Hong Kong(China), R. O. Korea, the USA, Czech and India participated in the Symposium.

In the Symposium, 76 oral presentations and 62 posters presentations were presented around following topics:

1. Fiber, Textile Science and Engineering;
2. Application of Nano Technology in Fibers and Textiles;
3. Smart Textiles;
4. Industrial Textiles and Composites;
5. Design and Quality of Textiles;
6. Clothing Science and Technology;
7. New Textile Technology and Equipment.

The Organizer of the 35th Textile Research Symposium  
The Key Laboratory of Advanced Textile Materials and Manufacturing Technology,  
Ministry of Education, China  
Zhejiang Sci-Tech University  
October 2006

# 前 言

为了进一步促进纺织科技进步和知识创新,加强世界各国专家学者在纺织科学领域的学术交流与合作,由日本纤维机械学会纺织科学研究会(Textile Science Research Group of the Textile Machinery Society of Japan)和浙江理工大学共同主办,浙江省经贸委、浙江省纺织工程学会协办的“第35届纺织科学国际学术研讨会(The 35th Textile Research Symposium)”于2006年8月22日至26日在浙江理工大学召开。会议由浙江理工大学副校长陈建勇教授主持,浙江理工大学校长裘松良教授出席会议并致欢迎词,日本纤维机械学会副会长家元良幸(Yoshiyuki Iemoto)、日本纺织科学研究会会长山口新司(Shinji Yamaguchi)、浙江省经贸委郑一方副主任到会致词。共有来自日本、中国、中国香港、韩国、美国、捷克、印度等41所高校、研究所及企业的139位专家学者参加了会议。

会议期间,纺织科学领域的专家学者就①纤维、纺织科学与技术;②纳米技术在纤维、纺织中的应用;③智能纺织品;④复合材料与产业用纺织品;⑤纺织品设计与性能;⑥服装工程与加工技术;⑦纺织新技术、新工艺与新设备等项议题展开了全面而广泛的交流。与会代表为会议带来了76场精彩的口头报告,会上气氛热烈,专家们畅所欲言,就纺织科学领域最新科研成果、发展方向、报告所提出的问题等发表了精辟的见解和建议,令与会听众受益匪浅。同时还展出了62个墙报,为与会代表提供了又一个广泛的讨论和交流空间,受到了他们的一致好评。这一切都说明,本次会议为世界各国纺织科学工作者搭建了一个充分交流合作的平台。

为了方便世界各国纺织科学工作者进一步的交流与合作,特编此论文集以供参考。

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先进纺织材料与制备技术教育部重点实验室  
2006年10月

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