

# Preface

2012 International Conference on Measurement, Instrumentation and Automation (ICMIA 2012) was held in Guangzhou, China, September 15-16, 2012. The conference provide a platform to discuss measuring technology and its application, instrumentation, mechatronics, optoelectronics, network theory and applications, automatic control and robotics, modeling, power systems, data acquisition, signal processing etc. with participants from all over the world, both from academia and from industry. Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The present volumes collect accepted papers and represent an interesting output of this conference. This book covers these topics: instrument design and measurement theory, reliability of instrument and fault diagnosis, precision instruments and computer vision, automation instruments, electrical and electronic instruments and equipment, sensors and its application, control technologies and applications, fluid power transmission and control, mechatronics, modeling, analysis and simulation, artificial intelligence, industrial robot and automation, automotive control system, intelligent traffic control, CAD/CAM/CAE/CIM, optoelectronic technology, embedded systems, communication technology and network security, software development and mathematical modeling, computer applications in industry and engineering, the internet of things.

This conference can only succeed as a team effort, so the editors want to thank the international scientific committee and the reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

*The Editors*

2012 International Conference on  
Measurement, Instrumentation and Automation  
(ICMIA 2012)

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Inha University, Korea

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