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ICIMCS 2011 Preface

2011 International Conference on Instrumentation, Measurement, Circuits and Systems (ICIMCS 2011) will be held on December 12–13, 2011, Hong Kong.

Instrumentation is defined as the art and science of measurement and control of systems. An instrument is a device that measures or regulates physical quantity/process variables such as flow, temperature, level, or pressure. Instruments include many varied contrivances that can be as simple as valves and transmitters, and as complex as analyzers. Instruments often comprise control systems of varied processes such as refineries, factories, and vehicles. The control of processes is one of the main branches of applied instrumentation. Instrumentation can also refer to handheld devices that measure some desired variable. Diverse handheld instrumentation is common in laboratories, but can be found in the household as well.

Measurement is the process or the result of determining the ratio of a physical quantity, such as a length or a mass, to a unit of measurement, such as the meter or the kilogram. The science of measurement is called metrology.

The research area of the Circuits and Systems covers the theory and applications of circuits and systems, signal processing, and VLSI circuit and system design methodology.

ICIMCS 2011 will be the most comprehensive Conference focused on the various aspects of advances in Instrumentation, Measurement, Circuits and Systems. Our Conference provides a chance for academic and industry professionals to discuss recent progress in the area of Instrumentation, Measurement, Circuits and Systems. The goal of this Conference is to bring together the researchers from academia and industry as well as practitioners to share ideas, problems and solutions relating to the multifaceted aspects of Instrumentation, Measurement, Circuits and Systems.

To our satisfaction, our conference encompasses a large number of research topics and applications: from Instrumentation to Network Theory and Applications; from Human-Machine Systems and Cybernetics to Geometric modeling and Fractals and other related topics are included in the scope of this conference. In order to ensure high-quality of our international conference, we have high-quality reviewing course, each paper will be reviewed by at least two reviewers, who are experts and professors from home and abroad and low-quality papers have been refused. All accepted papers will be published by Springer.

We are proud to invite Professor Jun Wong, a Professor and the Director of the Computational Intelligence Laboratory in the Department of Mechanical and Automation Engineering at the Chinese University of Hong Kong, as our Keynote speaker. Therefore, I am sure you will gain more information than expected from the proceedings.

I very sincerely thank the authors who have contributed to the proceedings and the referees who reviewed the quality of the submitted contributions. Our sponsors' support, either financial or moral, is gratefully acknowledged. The members of the Organizing Committee as well as other numerous individuals behind the scenes are greatly appreciated for their tireless effort and dedication in the organization of the conference.

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