The 2011 International Conference on Computer Distributed Control and Intelligent Environmental Monitoring (CDCIEM 2011) is a preeminent international forum for developments in distributed control systems, parallel systems, multiprocessor and multicore systems, intelligent measurement and environmental monitoring technology, DCS technology, and intelligent monitoring technology applications in the energy and environmental fields. CDCIEM 2011 provides the ideal forum to present your latest results in such fields. As part of the symposium, a technology exhibition will be held during the conference.

CDCIEM 2011 is cosponsored by Central South University, Purdue University (Calumet), the Hunan Provincial Electric Power Industry Association, and the China Metallurgical Industry Association. This first conference is being held in Changsha, Hunan, China, February 19–20, 2011, and now the organizers have planned to make the conference into an annual one, and welcome more and more nonprofit organizations take part in it.

CDCIEM 2011 received about 1600 submissions from several countries and regions. All papers went through a rigorous peer review procedure and each paper received at least two reviews. Based on the reviews, about 580 papers were accepted and have been included in the proceedings of CDCIEM 2011, published by IEEE Computer Society.

On behalf of the organizing committee, we thank Central South University, Purdue University (Calumet), the Hunan Provincial Electric Power Industry Association, and the China Metallurgical Industry Association. We also thank the members of organizing committee and the program committee. We wish to express our heartfelt appreciation to the keynote speakers, reviewers, and students who helped. Last but not least, we thank all authors and participants for their great contributions, which have made this conference possible and all the hard work worthwhile.

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