## SPECIAL ISSUE ON RECENT ADVANCES IN STOCHASTIC SYSTEMS THEORY AND ITS APPLICATIONS

Masahiro Tanaka<sup>1</sup>

Department of Intelligence and Informatics Konan University 8-9-1 Okamoto, Higashinada, Kobe 658-8501, Japan m\_tanaka@konan-u.ac.jp

Received November 2010

The 41st ISCIE International Symposium on Stochastic Systems Theory and Its Applications (SSS'09) was held at Konan University, Kobe, Japan, on November 13-14, 2009. The SSS has been held annually since 1968 and this time is its 41st anniversary.

The purpose of the SSS is to provide a forum for discussing recent advances in all aspects of stochastic systems theory and to bring together researchers and engineers in this field for fruitful collaborations.

The SSS'09 was very successful with more than 110 attendees. The program consisted of one Sunahara Memorial Lecture and 61 contributed papers. The SSS'09 covered the following wide varieties of topics: System Identification, Applications in Engineering, Neural Networks and Learning, Signal Detection and Statistical Signal Processing, Sensing and Pattern Recognition, Modeling, Analysis and Control of Stochastic Systems and Stochastic Processes, Stochastic Optimization and Evolutionary Methods, Chaos and Fractals, Image Processing and Robot Vision, Time Series Analysis and Spectral Estimation, Mathematical Finance, and Stability Analysis.

For the Special Issue on Recent Advances in Stochastic Systems Theory and Its Applications for SSS'09 of this journal, IJICIC, we have received 14 submissions from the above contributed papers. After peer reviews of these submissions 12 papers have been accepted with two papers on System Identification, one paper on Applications in Engineering, one paper on Neural Networks and Learning, one paper on Signal Detection and Statistical Signal Processing, one paper on Modeling, Analysis and Control of Stochastic Systems and Stochastic Processes, one paper on Image Processing and Robot Vision, one paper on Time Series Analysis and Spectral Estimation, three papers on Mathematical Finance, and one paper on Stability Analysis. I hope that this Special Issue will become a useful source for researchers and engineers for further studies on stochastic theory and applications.

Finally, I would like to express my sincere thanks to Prof. Yan SHI, Executive Editor of IJICIC and the local committee members of SSS'09 for their helps for publication of this Special Issue.

<sup>&</sup>lt;sup>1</sup>Chairman of the Program and Steering Committee of SSS'09.