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

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The 40th ISCIE International Symposium on Stochastic Systems Theory and Its Applications (SSS’08) was held at Kyodai Kaikan, Kyoto, Japan, on November 14 -15, 2008. The SSS has been held annually since 1968 and this time is its 40th 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’08 was very successful with nearly 120 attendees. The program consisted of two Sunahara Memorial Lectures and 66 contributed papers. The SSS’08 covered the following wide varieties of topics: Modeling and Control of Stochastic Systems, System Identification and Parameter Estimation, Recent Topics in System Identification, Signal Detection and Statistical Signal Processing, Chaos, Fractal and Neural Networks, Image Analysis, Medical and Biomedical Systems, Image Processing and Object Recognition, Sensor Signal Processing, Acoustic Systems, Mathematical Models, Signal Processing and Analysis, Stochastic Optimization Methods, Stochastic Models in Economics, Mathematical Finance.

For the Special Issue on Recent Advances in Stochastic Systems Theory and Its Applications for SSS’08 in International Journal of Innovative Computing, Information and Control (IJICIC), 18 submissions were selected from the above contributed papers. After peer reviews of these submissions 16 papers have been accepted with 4 papers on Modeling and Control of Stochastic Systems, 3 papers on System Identification and Parameter Estimation, two papers on Chaos, Fractal and Neural Networks, one paper on Image Analysis, one paper on Medical and Biomedical Systems, one paper on Sensor Signal Processing, two papers on Mathematical Models, one paper on Stochastic Models in Economics, and one paper on Mathematical Finance. I hope that this Special Issue will become a useful source for researchers and engineers for further studies.

Finally, I would like to express my sincere thanks to Prof. Yan Shi, Executive Editor of IJICIC and Prof. Masahiro Tanaka of Konan University for their helps for publication of this Special Issue.