

PREFACE TO THE SPECIAL ISSUE ON MATHEMATICAL DECISION MAKING UNDER UNCERTAINTY

This special issue on Mathematical Decision Making under Uncertainty was planned by the official research group “Stochastic Model and its Application (SMA)” in Operations Research Society of Japan and the research group “Dynamic Programming (DP)” in Kyushu District in Japan. SMA is well-known as “DP Bukai” in Japanese which has over 40 years history and so is one of the most historical research groups in Operations Research Society of Japan. SMA and DP have collaborated for many years. Our research interest is in such areas as Stochastic Optimization, Dynamic Programming, Markov Decision Process, Sequential Statistical Decision, Optimal Stopping, Game Theory, Fuzzy Theory, Financial Engineering, Operations Research in Sports and so on.

Workshop on Mathematical Models of Decision Making under Uncertainty, which has been organized by our two research groups every year, was held in Research Institute of Mathematical Sciences, Kyoto University, on November 11-13, 2015. Invited sessions are organized by our research groups at both 20th Conference of the International Federation of Operational Research Societies held in Barcelona, on June 13-18, 2014, and at 27th European Conference on Operational Research held in Glasgow, on July 12-15, 2015. Based on not only the research results presented at these three nice occasions but also the latest achievements by non-participants of the conference, we planned to edit the special issue on Mathematical Decision Making under Uncertainty. We received many well-prepared and high quality submissions by February 27, 2016, and spent almost one year to complete our editing task. In accordance with the journal’s review discipline, each submission was reviewed by two referees without conflict to the authors. We regret to mention that we had to reject some good papers because of our tight review schedule.

The guest editors are pleased to publish this special issue on the most recent research results in mathematical decision making. Finally, we thank the former editor-in-chief, Dr. Shinji Mizuno, and the present editor-in-chief, Dr. Tetsuya Takine, for their helpful support and comments.

Katsunori Ano, Guest Editor
Yukihiro Maruyama, Guest Editor