## **FOREWORD**

## **Special Section on Mathematical Systems Science and its Applications**

Mathematical Systems Science (MSS) is the study of design, analysis, verification, and control based on mathematical models and is expected to be applied to various engineering and scientific problems. This special section aims to clarify the state of the art of research on mathematical systems science and to promote future research.

This time, the editorial committee revised the interest topics from the former MSS special sections. They have received 11 papers and accepted 9 papers after a careful review process.

Especially, this special section invites the following paper:

"Extension of Counting LTL and Its Application to a Path Planning Problem for Heterogeneous Multi-Robot Systems" by Kotaro NAGAE, Toshimitsu USHIO. This paper is recommended as MSS's Best Paper award in 2022, and we hope that it will inspire readers.

On behalf of the editorial committee of the Special Section on Mathematical Systems Science and its Applications, I would like to express my appreciation to all the authors for their contributions and the referees for their cooperation in the whole process. I am also grateful to the following guest associate editors of the editorial committee for their kind cooperation.

## **Guest Associate Editors:**

Daisuke Ishii (Japan Advanced Institute of Science and Technology), Atsushi Ohta (Aichi Pref. University), Shun Kataoka (Otaru University of Commerce), Takafumi Kanazawa (Setsunan University), Yoshinobu Kawabe (Aichi Institute of Technology), Koichi Kobayashi (Hokkaido University), Norihiko Shinomiya (Soka University), Masashi Nomura (Mitsubishi Electric Corporation), Shingo Yamaguchi (Yamaguchi University), Tatsushi Yamasaki (Setsunan University), Liu Jianquan (NEC).

Ichiro Toyoshima, Guest Editor-in-Chief

*Ichiro Toyoshima* (*Member*) received the B.Sc., M.Sc. degrees from Waseda University, Japan, in 2002, 2004, and D.E. degree from Yamaguchi University, Japan, in 2015, respectively. He is currently a researcher in Toshiba Energy Systems & Solutions Corporation. His research interests are in the area of discrete mathematics, workflow net theory, mathematical optimization and its applications in energy management systems. He is a member of IEEE and IEEJ.

