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## FOREWORD

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### Special Section on Technologies and Proof-of-Concept Activities for 5G Advanced and 6G

The 5th generation (5G) cellular communication systems are just launched in 2019 and it is expected to provide various services utilizing 5G technology such as enhanced mobile broadband (eMBB), ultra-reliable and low latency communications (URLLC), and massive machine type communication (mMTC). In the 5G standardization, key enabling technologies such as massive MIMO, beamforming, radio access technology, and frame designs are specified, and related advanced technologies are still being developed. Meanwhile, new technology concepts for the next generation mobile communications including 5G advanced and 6G are about to be investigated in many research entities. On top of that, research and development activities of key technologies for next generation mobile communications are about to be initiated.

From above points of view, the IEICE Technical Committee on Radio Communication Systems planned this special section with the aim of to provide opportunities to present the latest technologies and the proof-of-concept activities for next generation mobile communications.

For this special section, a total of six papers were accepted after going through a rigorous and fair peer-review process. These accepted papers present most-advanced research results in the field of 5G-advanced and 6G. Moreover, two invited papers are solicited to cover latest research trends in this field. We are very pleased that this Special Section has been able to capture a wide and balanced range of fundamental and practical research topics for 5G-advanced and 6G.

The guest editor-in-chief of this special section would like to first thank all the authors who submitted their manuscript for their contributions. I also thank to all the anonymous reviewers and editorial committee members for their careful review and their feedback to authors. Finally, the guest editor-in-chief would like to state special thanks to the guest editors of the special section, Dr. Kazushi Muraoka and Dr. Tetsuya Yamamoto, for their hard works on publishing this special section.

#### Special Section Editorial Committee Members

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Eiji Okamoto, Guest Editor-in-Chief

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**Eiji Okamoto** (*Fellow*) received the B.E., M.S., and Ph.D. degrees in Electrical Engineering from Kyoto University in 1993, 1995, and 2003, respectively. In 1995 he joined the Communications Research Laboratory (CRL), Japan. Currently, he is an associate professor at Nagoya Institute of Technology. In 2004 he was a guest researcher at Simon Fraser University. He received the Young Researchers' Award in 1999 from IEICE, and the FUNAI Information Technology Award for Young Researchers in 2008. His current research interests are in the areas of wireless technologies, mobile communication systems, wireless security, and satellite communications. He is a member of IEEE.

