# FOREWORD

## Special Section on Integration Technologies of Ambient Intelligence and Sensor Networks

Sensor networks enable ambient information to be gathered from people, products, and sensing devices in real spaces. Ambient intelligence, sensed data that has been processed and analyzed, will be applied to enhance or assist human activities. Ambient Sensor Networks are sensor networks that interactively cooperate with ambient intelligence. It is expected that desirable social infrastructures such as smart grids for efficient electric power usage and effective transportation systems will be established through ambient sensor networks. Applied research is being driven to create technologies that support ambient sensor networks. Toward future generations of ambient sensor networks, it is important to support this research and promote further collaboration with other fields.

Given the importance of these trends, the IEICE Technical Committee on Ambient Intelligence and Sensor Networks created the "Special Section on Integration Technologies of Ambient Intelligence and Sensor Networks."

For this special section, we received 19 paper submissions. A total of nine papers were accepted after a very careful and fair peer-review process. These accepted papers cover the wide technical fields of research related to this special section and so are very useful in advancing ambient intelligence and sensor networks.

In addition, we invited two papers for this special section on related subjects. One details a wireless access network for wide-area IoT/M2M services and the other a network-type brain machine interface (BMI).

The editorial committee members believe that these special section papers describe very important technologies, related research and integration issues related to ambient intelligence and sensor networks.

Finally, as the guest editor-in-chief, I would like to express our sincerely appreciation to all the authors, all the reviewers, and special section editorial committee members for their great effort in making publication of this special section possible.

Special Section Editorial Committee
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Hiroshi Tohjo (NTT), Guest Editor-in-Chief

**Hiroshi Tohjo** (*Senior Member*) is a Senior Manager of NTT Network Innovation Laboratories. He received the B.S. and M.S. degrees in electronics engineering from Nagaoka University of Technology, Niigata, and a Ph.D. degree from Osaka University, Osaka, in 1989, 1991, and 1999, respectively. He joined NTT Transmission Systems Laboratories in 1991. He has been researching object oriented TMN based operation systems development platform, wide area ubiquitous network systems and service systems. He moved to the Visual Communication Division of NTT Bizlink Inc., where he developed and managed the visual communication services and high-quality live-image distribution services using the Next Generation Network (NGN). His current research interests include network architectures, software-defined networking (SDN), network functions virtualization (NFV), disaster-resilient networking, content distribution systems, collaboration systems and technologies.