# FOREWORD

## Special Section on Information and Communication Technology for Wellness and Medical Applications

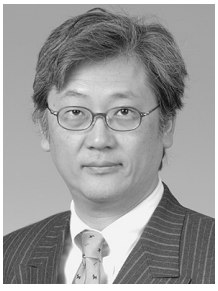
Advanced information and communications technologies (ICT) can be applied to provide solutions in wellness and medical healthcare corresponding to the demand for reducing medical expense, failure and regional gap. ICT applications to wellness and medical healthcare can create innovation in research, development, and business in academia and industry. IEICE established a new technical group on medical ICT in 2006 and technically sponsored national and international workshops and symposia, e.g. ISMICT2006 in Yokohama, Japan, ISMICT2007 in Oulu, Finland, ISMICT2009 in Montreal, Canada, and will co-sponsor ISMICT2010 (https://www.ismict2010.org/) in Taipei, Taiwan during March 22–25, 2010. National Institute of Information and Communication Technology (NICT) and its coordinated medical ICT consortium have been promoting an international wireless standard on Body Area Network (BAN) in IEEE 802.15.6. These Japanese activities lead up global emotion of research, service and business for ubiquitous medical healthcare based on ICT.

This special section is a regular promotion in collecting contributions to the IEICE transaction to reflect the most up-to-date R&D outcomes in the area. Total 17 papers and 5 letters were received. The editorial committee finally selected 4 papers and 5 letters through careful and fair reviews. Moreover, two invited papers were added. As a result, this special section covers a wide range of channel model, error control, multimedia access control (MAC) protocol of BAN, electro-magnetic compatibility issues, etc.

It is the editorial committee members' believe that this special section can provide worthwhile insights to the readers on the related areas and will accelerate further academic studies as well as R&D activities. As the guest editor-in-chief, I would like to express my sincere appreciation to all the authors for contributing their research results and to all the editorial committee members and reviewers for their diligent works.

Special Section Editorial Committee Members
Guest Editor: Huan-Bang Li (NICT)
Guest Associate Editors:
Takahiro Aoyagi (Tokyo Institute of Tech.), Tetsushi Ikegami (Meiji Univ.), Ichiro Ida (Fujitsu Lab.), Noriaki Oodachi (Toshiba), Tooru Kawada (National Cardiovascular Center Research Institute), Mitsuru Shinagawa (NTT), Masaharu Takahashi (Chiba Univ.) Yoshito Tobe (Tokyo Denki Univ.), Nobuo Nakajima (The Univ. of Electro-Commun.), Yoshio Nikawa (Kokushikan Univ.), Shinsuke Hara (Osaka City Univ.), Masayuki Miyazaki (Hitachi).

Ryuji Kohno, Guest Editor-in-Chief



***Ryuji Kohno*** *(Fellow)* received the Ph.D. degree in electrical engineering from the Univ. of Tokyo in 1984. Since 1998 he has been a Professor in YNU. During 1984–1985 he was a Visiting Scientist in Dept. EE, Univ. of Toronto. Since 2007, he has been a Finnish Distinguished Professor in Univ. of Oulu, Finland. Moreover, he was a director of SONY CSL/ATL during 1998–2002 and a director of the UWB Tech. Inst. during 2002–2006, and is a program coordinator of Medical ICT project of National Institute of Information and Communications Technology (NICT). He was the principal leader of 21st century COE of "Creation of Future Social Infrastructure Based on Information Telecommunications Technology" during 2002–2007, and currently that of global COE of "Innovative Integration between Medicine and Engineering Based on ICT" since 2008, and a director of Medical ICT Center in YNU. He was elected as a BoG member of the IEEE Information Theory Society in 2000, 2002, and 2006, respectively. He was an editor of the IEEE Trans. Information Theory, that of the IEEE Trans. Communications and that of the IEEE Trans. Intelligent Transport Systems. He was a vice-president of Engineering Sciences Society (ESS) and an editor-in-chief of Japanese volume of ESS of IEICE. He was awarded IEICE Greatest Contribution Award and NTT DoCoMo Mobile Science Award in 1999 and 2002, respectively.

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