Special Section on Dynamic Spectrum Access

Recently the radio spectrum is becoming exhausted because of the growing demands for the radio spectrum. In this regard, the paradigm shift from the conventional exclusive use of frequency resources by the fixed allocation to the dynamic frequency utilization is indispensable for the future wireless networks. It brings an emerging paradigm of dynamic spectrum access (DSA). The dynamic spectrum access technology realizes the efficient use of different radio access networks heterogeneously, or even allows the secondary systems to use the unused spectrum allocated for the primary systems. The IEICE Technical Committee of Software Radio (TCSR) has contributed to promoting DSA, since it is best realized by utilizing the software radio technology. To facilitate the active discussion in the field, this special section was planned.

In reply to call for papers, 49 papers and 5 letters were received. After fair and square review, 1 invited paper on the application of fuzzy logic for cooperative spectrum sensing, 15 papers and 2 letters are accepted for the publication in this section. These papers cover the subjects such as spectrum allocation, spectrum sensing, MIMO mesh network, protocols, wideband RF systems, and multimode receivers. The editorial committee wishes this section will provide the useful information and new ideas to those interested in DSA.

As the guest editor-in-chief, I would like to express my sincere appreciation to all the authors for their contributions and to all the editors and reviewers for their voluntary activities.

Special Section Editorial Committee Members
Guest Editor-in-Chief:
Jun-ichi Takada (Tokyo Inst. Tech.)

Guest Editors:
Yukitoshi Sanada (Keio Univ.), Kenta Umebayashi (Tokyo Univ. of Agr. Tech.)

Guest Associate Editors:
Kazunori Akabane (NTT), Satoshi Denno (Kyoto Univ.), Takeo Fujii (Univ. Electro-Commun.), Seishi Hanaoka (Hitachi), Suguru Kameda (Tohoku Univ.), Kanshiro Kashiki (KDDI R&D Labs.), Minseok Kim (Tokyo Inst. Tech.), Go Miyamoto (NICT), Shigenobu Sasaki (Niigata Univ.), Makoto Taromaru (ATR), Tazuko Tomioka (Toshiba)

Jun-ichi Takada, Guest Editor-in-Chief