--- Special Section on Technologies for Effective Utilization of Spectrum White Space ---

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Technologies for Effective Utilization of Spectrum White Space" in February 2014. Spectrum scarcity is one of the significant problems for emerging wireless services, and it requires urgent solution. Among the approaches proposed to tackle this problem, cognitive radio techniques have been paid much attention for enabling the utilization of the television (TV) white space. In this approach, for the effective utilization of TV white space and protection of TV receivers, high accuracy/reliable environment recognition techniques, and dynamic spectrum management/allocation technique have been investigated. In addition, for enabling TV white space utilization by cognitive radio network, development of laws, and discussions among TV operators, regulatory agencies and emerging wireless service providers are required. For utilizing the white spaces also in other bands than the TV bands, fundamental investigations from information theoretic aspects, investigations of applications of white space and implementation/experiment techniques are also required. Because of these reasons, a special section is being planned (scheduled to appear in the February 2014 issue) to further promote research and development of technologies for effective utilization of spectrum white space which is not limited to TV white space.

1. Scope
The general scope of this section includes, but is not limited to, the following:

- Experimental prototypes/Measurement results/Modeling for effective utilization of spectrum white space
- Architecture and Implementations/Hardware issues/Software defined radio
- Spectrum sensing/measurement for effective utilization of spectrum white space
- White space database/Radio environment map
- Resource management/sharing/allocation for effective utilization of spectrum white space
- PHY/MAC layer techniques for effective utilization of spectrum white space
- Network issues for effective utilization of spectrum white space
- Security issues for effective utilization of spectrum white space
- Information theory for effective utilization of spectrum white space
- Applications of white space (sensor network, intelligent transportation system, cellular system)
- Regulations and standardizations (IEEE 802.22, 802.11af, 802.19, P1900.4a)

2. Submission Instructions
The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Prospective authors are requested to follow carefully the submission process described below.

1. Submit a manuscript and electronic source files (TeX/Word files, figures, authors' photos and biographies) via the IEICE Web site [https://review.ieice.org/regist_e.aspx by June 5, 2013 (Japan time)]. Authors should choose the [Special-WS] Technologies for Effective Utilization of Spectrum White Space as a "Type of Section (Issue)/Transactions" on the online screen. Do not choose [Regular-EB].
2. Send "Copyright Transfer and Page Charge Agreement" and “Confirmation Sheet of Manuscript Registration” by E-mail, FAX or postal mail to the following address (guest editor of the special section) by the above due date. We may withdraw the submission if these documents have not been received by the due date, even if the manuscript has been received by electronic submission. For additional guidelines on manuscript preparation, please visit: http://www.ieice.org/eng/shiori/mokuji_cs.html

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