

本セミナーでは「小電力無線通信技術の応用」と題して、近年注目を集めている短距離無線通信(TVホワイトスペース,ワイヤレスボディエリアネットワーク,ミリ波ワイヤレスLAN)とその標準 化アップデートについて、IEEE802国際標準化で活躍している研究者の方々にご講演いただく。

## 2012 3rd RIEC Seminar on "Short Range Wireless Communications and its Standardization Update"

- · Date: Sept. 5, 2012
- Time:13:00 18:00
- · Place: Sakura Hall, Katahira Campus, Tohoku University
- Participation fee: free
- Working language: English (Questions in Japanese possible)

## Agenda

- 13:00-13:05 Opening remark
- 13:05-13:50 Invited 1 "TVWS: IEEE802.11af Standardization and Update" Zhou Lan (NICT)
- 13:50-14:35 Invited 2 "TVWS: IEEE802.19 Standardization and Update" Tuncer Baykas (NICT)
- 14:35-15:25 Invited 3 "TVWS: IEEE802.22 and White Space Standardization Update" Shigenobu Sasaki (Niigata Univ.)
- 15:25-15:40 Coffee break
- 15:40-16:25 Invited 4 "BANの標準化状況とNICTの研究開発紹介" Huan-Bang Li (NICT)
- 16:25-17:10 Invited 5 "Millimeter-wave WLAN: IEEE802.11ad and WiGig Standardization and Update"

Kazuaki Takahashi (Panasonic)

17:10-17:55 [Panel Discussion] "How should Japanese engineers approach the international standardization of future wireless communications?" Chair: Shuzo Kato(Tohoku Univ.), Panelist: Zhou Lan (NICT), Tuncer Baykas (NICT), Shigenobu Sasaki (Niigata Univ.),

Huan-Bang Li (NICT), Kazuaki Takahashi (Panasonic)

17:55–18:00 Closing remark

Reception 18:00-19:00 Fee: ¥1,000 (free for students) Registration/参加申込: Ms. Naomi Aizawa / 東北大学電気通信研究所 加藤研究室(相澤なおみ) Tel:+81-22 / 022-217-5477 E-mail: katolab@riec.tohoku.ac.jp

## **Speakers**

Dr. Zhou Lan received his B.S. and Ph.D. degrees in electrical engineering from Beijing University of Posts and Telecommunications (BUPT), Beijing, China, in 2000 and 2005, respectively. He is currently with National Institute of Information and Communications Technology (NICT) of Japan as an expert researcher. His research interests include cognitive radio and mmWave short range communication systems. Dr. Lan has published over 30 papers in major IEEE journals and conferences. He has been serving as TPC vice chair of IEEE PIMRC 2009, TPC member of IEEE Globecom, ICC and WCNC. Dr. Lan has been working closely with industry. He served as assistant editor of IEEE 802.15.3c mmWave WPAN task group and is currently serving as vice chair and secretary of IEEE 802.11af task group working on WiFi for TVWS. He is the recipient of the IEEE Working Group Chairs Awards for the IEEE 802.15.3c Standard. Dr. Lan has more than 100 technical contributions in IEEE 802.11, 802.15 standards and WiFi alliance. Dr. Lan is a member of IEEE. He is also the secretary of IEICE Short Range Wireless Communication (SRW) committee.

Dr. Tuncer Baykas received his B.A.Sc. degree in electrical engineering from Bogazici University, Istanbul, Turkey, in 2000. He received his M.A.Sc. and Ph.D. degrees, both in electrical engineering, from the University of Ottawa, Ontario, Canada in2002 and 2007, respectively. In 2007 he joined NICT as an expert researcher. He served as secretary and subeditor for the IEEE 802.15 WPAN Task Group 3c (802.15.3c) Millimeter Wave Alternative PHY group and as the chair of IEEE 802.19 Task Group 1, Wireless Coexistence in the TV White Space. He made contributions to 802.11ad, 802.11af and 1900.7 standardization activities. In 2012 he joined Tohoku University as postdoctoral research fellow. His research interests include receiver design, interference mitigation and cognitive radio systems.

Prof. Shigenobu Sasaki received B.E., M.E. and Ph.D. degrees from Nagaoka University of Technology, Nagaoka, Japan, in 1987, 1989 and 1993, respectively. Since 1992, he has been with Niigata University, where he is now a Professor at the Department of Electrical and Electronic Engineering. From 1999 to 2000, he was a visiting scholar at the Department of Electrical and Computer Engineering, University of California, San Diego. From 2003 to 2006, he was with the UWB technology institute. National Institute of Information and Communication Technology (NICT) as an expert researcher, where he was involved the R&D on UWB wireless communications and standardization activities in ITU-R TG1/8. His research interests are in the area of wideband digital communications including spread spectrum systems, ultra-wideband wireless communications and cognitive radio technology. He is also actively involved in the IEEE 802 standardization on wireless communications over white space, such as the IEEE 802.15.4m and the IEEE 802.22. He is a member of IEEE.

Dr. Hung Bang Li(李還幇)平6名古屋工業大学大学院博士後期課程了.博士(工学).同 年郵政省通信総合研究所(現独立行政法人情報通信研究機構)入所. 以来, 技術試験衛星 ETS-VIやCOMETSなど用いた移動体衛星通信の実験研究、ウルトラワイドバンドとボディエリア ネットワークの研究開発および標準化活動などに従事.現在,同ディペンダブルワイヤレス研究 室主任研究員. 平11~12,米国スタンフォード大客員研究員. 平14より電通大客員准教授,平 21年より同客員教授. 平18~24, IEEE802.15.6副議長. 平23より電子情報通信学会通信ソサ エティ研専運営会議副議長, 平7年度電子情報通信学会学術奨励賞, 平9年度同論文賞, 平12 年科学技術庁注目発明, 平19年電子情報通信学会活動功労賞, 平21年NICT個人成績優秀賞, 平24年IEEE-SA Standards Board acknowledges with appreciation 各受賞. 著書「ビタビ復号 を用いたブロック符号化変調方式」、「Wireless Body Area Network」(共著)など.

Dr. Kazuaki Takahashi received the B.E. and M.E. degrees in electrical and computer engineering, and the Ph.D. degree in electrical engineering from Yokohama National University, Yokohama, Japan, in 1986, 1988 and 2006, respectively. In 1988, he joined the Tokyo Research Laboratory, Matsushita Electric Industrial Co. Ltd., Kawasaki Japan, where he was engaged in research and development of monolithic microwave ICs, millimeter wave ICs based on Si and GaAs for mobile communication equipment. Also he was engaged in Si micromachined packaging technology for millimeter wave system integration. His current research interests include the development of short range multi-gigabit wireless system and high resolution radar system in millimeter wave. He is currently an ICT Expert with Communication Core Devices Development Center, Panasonic Corporation., Yokohama Japan. Dr. Takahashi is a member of the IEEE.







