

Global COE International Symposium

- The International Workshop on Millimeter Wave Wireless Technology and Applications -

December 6, 2010, Tokyo Institute of Technology, Japan

<http://www-antenna.ee.titech.ac.jp/mmw-ws2010/>

Date: December 6, 2010

Venue: Tokyo Tech Front,

Tokyo Institute of Technology,

2-12-1 Ookayama, Meguro, Tokyo, Japan

Workshop Registration: Free (Pre-registration required.)

Sessions and Speakers (as of August 13, 2010)

Session 1: Key Note Speech

Prof. Makoto Ando (Tokyo Institute of Technology, Japan)

Prof. Akira Matsuzawa (Tokyo Institute of Technology, Japan)

Prof. Asad Abidi (UCLA, USA)

Session 2: Research and Development in the World

Prof. Roberto Sorrentino (Univ. Perugia, Italy)

Prof. Shuzo Kato (Tohoku Univ., Japan)

Prof. Wei Hong (Southeast Univ., China)

Lunch and Poster Session

Session 3: Millimeter-wave Communication Systems

Dr. Yorgos Palaskas (Intel, USA)

Prof. Shibani K. Koul (IIT Delhi, India)

Mr. Fumio Ozawa (JRC, Japan)

Dr. Makoto Noda (Sony, Japan)

Session 4: Constituent Technologies

Dr. Sohrab Emami (Sibeam, USA)

Prof. Jri Lee (National Taiwan University, Taiwan)

Dr. Duixian Liu (IBM Watson, USA)

Prof. Jiro Hirokawa (Tokyo Institute of Technology, Japan)

Prof. Kenichi Okada (Tokyo Institute of Technology, Japan)

Dr. Satoshi Suyama (Tokyo Institute of Technology, Japan)

Workshop Co-Chair:

Makoto Ando, Tokyo Institute of Technology

Akira Matsuzawa, Tokyo Institute of Technology

Technical Program Committee:

Chair: Hiroshi Suzuki, Tokyo Institute of Technology

Kei Sakaguchi, Jiro Hirokawa, Kenichi Okada, Masaya Miyahara,

Satoshi Suyama, Makoto Noda, Takuichi Hirano, Yoshinari Koyama,

Miao Zhang, Ryosuke Suga, Toshikazu Hori, Hiroyuki Arai, Koichi Ogawa

Organizing Committee:

Chair: Kenkichi Hirade

Kiyomichi Araki, Toru Taniguchi, Keiji Fukuzawa, Koji Matsunaga,

Yasutake Hirachi, Izumi Kurosawa, Fumio Koyama, Masayuki Izutsu

General Affairs:

Chair: Iwao Matsumoto,

Yoshinao Iwamoto, Akane Saito, Moto Sugano, Chikako Yoshida

APMC Representative: Kiyomichi Araki

Sponsored by Tokyo Institute of Technology,

in the framework of Global COE Program

--- Photonics Integration-Core Electronics (PICE) ---

Technically sponsored by

IEEE AP-S, IEEE AP-S Japan/Nagoya/Kansai Chapters, IEEE MTT-S

Japan/Nagoya/Kansai Chapters, IEEE SSCS Japan/Kansai Chapters,

IEEE MTT/AP Singapore Chapter, APMC2010, IEICE technical

committees of ICD and MW.

In cooperation with Ministry of Internal Affairs and Communications

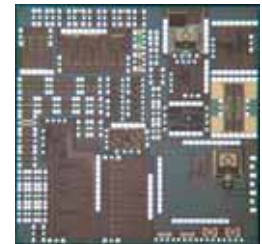
The International Workshop on Millimeter Wave Wireless Technology and Applications sponsored by Global COE Program "Photonics Integration-Core Electronics (PICE)", Tokyo Institute of Technology will be held on December 6, 2010 in Tokyo, Japan. It is technically sponsored by IEEE Antennas and Propagation Society, IEEE SSCS Japan/Kansai Chapter, IEEE AP-S Japan/Nagoya/Kansai Chapter, IEEE MTT-S Japan/Nagoya/Kansai Chapter and APMC2010, IEICE technical committees of ICD and MW. It is in cooperation with Ministry of Internal Affairs and Communications (MIC). Student Program is co-sponsored by GCOE/Graduate School of Science and Engineering, Tokyo Institute of Technology and IEEE MTT/AP Singapore Chapter.

The workshop will provide an overview of the state of the art millimeter wave wireless technologies and applications, in the areas of antennas, devices, components, circuits, signal processing and systems, with the aim of fostering exchange of ideas between the people from academy and industries.



Based upon the downscaling of silicon technologies, highly integrated millimeter wave systems with the reduced cost and increased functionality will be available for consumer mass applications. As a result, attractive services using millimeter wave such as the high bit-rate wireless last one mile access and the multi-gigabit/s low-cost wireless links for home, become in reality.

For realizing millimeter wave systems with high potential on market, a 5-year project named "RF Coexisting Technology on High Speed Baseband IC for Millimeter Wave Radio Systems" (FY2007 - FY2011) is promoted in Tokyo Institute of Technology, which is supported by MIC funding as well as Industry's participation. The objective of this project is to develop high speed baseband CMOS-IC together with the associated technologies mentioned above, for outdoor and indoor millimeter wave radio communication systems beyond Giga bit/s. The model network has been constructed in Tokyo Tech Ookayama campus for testing the outdoor system as the entrance link between mobile base stations.



The oral session consists of two components. The invited talks by world's leading scientists cover the state of the art highlighting the latest developments in millimeter wave technologies, where the future directions of researches in Asia Pacific Countries are also discussed. The current results of the project "RF Coexisting Technology on High Speed Baseband IC for Millimeter Wave Radio Systems" will also be introduced by the project members.

This workshop is one of the series of G-COE program in Tokyo Tech and includes poster presentations by the PhD students about the related topics in wireless technology.

The workshop will be held just one day before Asia Pacific Microwave Conference 2010 (APMC2010; 7-10 Dec.) in nearby Yokohama, which includes related topics of millimeter waves, so that many of the workshop participants may enjoy a combined stay for attending both meetings.



Sessions and Speakers
Global COE International Symposium

--- The International Workshop on Millimeter Wave Wireless Technology and Applications, December 6,
2010, Tokyo Tech Front, Japan ---

Opening Session:

(8:50-9:00) Prof. Makoto Ando (Tokyo Institute of Technology, Japan)

Session 1: Key Note Speech (Kuramae Hall)

(9:00-9:20) Prof. Makoto Ando (Tokyo Institute of Technology, Japan)

(9:20-9:40) Prof. Akira Matsuzawa (Tokyo Institute of Technology, Japan)

(9:40-10:15) Prof. Asad Abidi (UCLA, USA)

Coffee Break

Session 2: Research and Development in the World (Kuramae Hall)

(10:35-11:10) Prof. Roberto Sorrentino (Univ., Perugia, Italy)

(11:10-11:45) Prof. Shuzo Kato (Tohoku Univ., Japan)

(11:45-12:20) Prof. Wei Hong (Southeast Univ., China)

(12:20-13:40) **Lunch and Poster Session (Royal Blue Hall)**

Session 3: Millimeter-wave Communication Systems (Kuramae Hall)

(13:40-14:15) Ph.D Yorgos Palaskas (Intel, USA)

(14:15-14:50) Prof. Shibani K. Koul (IIT Delhi, India)

(14:50-15:15) Mr. Fumio Ozawa (JRC, Japan)

(15:15-15:40) Dr. Makoto Noda (Sony, Japan)

Coffee Break

Session 4: Constituent Technologies (Kuramae Hall)

(16:00-16:35) Dr. Sohrab Emami (Sibeam, USA)

(16:35-17:10) Prof. Jri Lee (National Taiwan Univ., Taiwan)

(17:10-17:45) Dr. Duixian Liu (IBM Watson, USA)

(17:45-18:05) Prof. Jiro Hirokawa (Tokyo Institute of Technology, Japan)

(18:05-18:25) Prof. Kenichi Okada (Tokyo Institute of Technology, Japan)

(18:25-18:45) Dr. Satoshi Suyama (Tokyo Institute of Technology, Japan)

Closing Session:

(18:45-19:00) Prof. Makoto Ando (Tokyo Institute of Technology, Japan)