

# The 1<sup>st</sup> Korea-Japan Joint Workshop on THz Technology

Date: Aug 25<sup>th</sup>(Sat.), 2007 13:00 – 18:00

Venue: Korea Institute of Science & Technology (KIST; <http://www.kist.re.kr>)

International Cooperation Building

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Organized by: Korea THz Forum

In cooperation with (Co-organized by): Optical Society of Korea

Korea Electromagnetic Engineering Society

Korea Physical Society

Terahertz Technology Forum (Japan)

Supported by: Korea Science and Engineering Foundation

Technically Supported by: Terahertz Technology Professional Group, Japan Society of Applied Physics (JSAP)

Technical Group on Terahertz Application Systems, Institute of Electronics, Information and Communication Engineers (IEICE)

Japan Society of Infrared Science and Technology (JSIR)

Workshop chair: Prof. H. Lim (Korea, KOSEF)

Co-chair: Dr. K. Sakai (Japan, NICT/SCAT)

Program Chairs: Yun-Sik Jin (Korea Electrotechnology Res. Institute; KERI)

Norihisa Hiromoto (Shizuoka Univ.)

Advisors:

Se-Young Ann (Solco Biomedical)

Jin-Koo Rhee (Dongguk Univ)

Jongmin Lee (Advanced Photonics Research Institute; APRI)

Yoshizumi Yasuoka (National Defense Academy)

Susumu Komiyama (Univ. Tokyo)

Yoshikazu Yoshida (Shimadzu Co.)

Hideyuki Ishida (Toray Research Center, Inc.)

Tetsuo Mori (Infrared Co.)

Steering committee:

<Korea>

Gun-Sik Park (Seoul National Univ.)

Ikmo Park (Ajou Univ.)

Joo-Hiuk Son (Univ. Seoul)

Hae-Wook Han (POSTECH)

Tae-In Jeon (Korea Maritime Univ.)

Jung-II Lee (KIST)

Won-Jun Choi (KIST)

Young-Uk Jung (KAERI)

Chul-Sik Kee (APRI)

Il-Bum Kwon (KRISS)

Kwang-Yong Kang (ETRI)

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Masahiro Asada (Tokyo Inst. of Technology)

Ryoichi Fukasawa (Spectra Design Ltd.)

Kazuhiko Hirakawa (Univ. Tokyo)

Tomoya Hirosumi (Aishin Seiki Co.)

Iwao Hosako (NICT)

Yutaka Kadoya (Hiroshima Univ.)

Kodo Kawase (Nagoya Univ.)

Tadao Nagatsuma (Osaka Univ.)

Chiko Otani (RIKEN)

Taiichi Otsuji (Tohoku Univ.)

Koichiro Tanaka (Kyoto Univ.)

Registration: Free

Application: Please send an e-mail to the [TeraTech secretariat](mailto:TeraTech_secretariat) until August 9, 2007, including your name, company/institute name and address, phone number and e-mail address.

Timetable:

|                             |  |
|-----------------------------|--|
| 12:00 – 16:00               | Registration   |
| 13:00 - 13:10               | Opening Ceremony<br>Welcome address, H. Lim  |
|                             | Technical Sessions   |
| 13:10 - 14:25               | <p>Session 1 : THz devices &amp; sources<br/>Co-Chairs; Jung-Il Lee (KIST), Y. Yasuoka (National Defense Academy)</p> <ul style="list-style-type: none"> <li>● Young-Uk. Jeong (Korea Atomic Energy Research Institute), "Generation of Intense THz Radiation by Using a Compact Free Electron Laser and Relativistic Plasma"</li> <li>● Masahiro Asada (Tokyo Institute of Technology), "Terahertz oscillation of resonant tunneling diodes at room temperature"</li> <li>● Chul-Sik Kee (Advanced Photonics Research Institute), "THz devices based on periodic structures"</li> <li>● Iwao Hosako (NICT), "QCLs and QWIPs in the terahertz range - For a compact, robust, and cost-effective imaging system"</li> <li>● Il-Ki Han (Korea Institute of Science and Technology), "GaAs/AlGaAs mid-IR Quantum Cascade Lasers"</li> </ul> |
| 14:25 - 14:40               | Break  |
| 14:40-15:40                 | <p>Session 2: THz-TDS<br/>Co-Chairs; K. Sakai (Japan, NICT/SCAT), Tae-In Jeon (Korea Maritime Univ.)</p> <ul style="list-style-type: none"> <li>● Yutaka Kadoya (Hiroshima Univ.), "Solid state strip line chips for THz time domain spectroscopy"</li> <li>● Joo-Hiuk Son (Univ. of Seoul), "Application of Terahertz Spectroscopy to the Characterization of Nano-materials"</li> <li>● Koichiro Tanaka (Kyoto Univ.), "Terahertz attenuated total reflection spectroscopy"</li> <li>● Gun-Sik Park (Seoul National Univ.), "Evanescent Phase Transmission of Effective Surface Plasmon Excited by Convection Electrons"</li> </ul>  |
| 15:40 - 16:00               | Break  |
| 16:00-16:45                 | <p>Session 3: THz Applications<br/>Co-Chairs; Kwang-Yong Kang (ETRI), Norihisa Hiromoto (Shizuoka Univ.)</p> <ul style="list-style-type: none"> <li>● Chiko Otani (RIKEN), "Terahertz sensing and imaging for security and other applications"</li> <li>● Hae-Wook Han (Pohang Univ. of Sci. and Tech.), " Terahertz Near-Field Microscopy"</li> <li>● Tadao Nagatsuma (Osaka Univ.), "Challenge and Strategy for Sub-THz Wireless Communications"</li> </ul>  |
| 16:45-17:00                 | Break  |
| 17:00-18:00                 | Non-Technical Session<br>"Discussions on the future cooperation"   |
| 19:00 – 21:00 Welcome Party |  |

\* Speakers in this workshop are only invited persons.