

TST2022 PROGRAM

March 5

Opening Session

09:00 - 09:15 (Japan, UTC+9)
16:00 - 16:15 (-1) (Pacific Standard Time, UTC-8)
01:00 - 01:15 (Central European Time, UTC+1)

F1. Opening Address

Koichiro Tanaka (Kyoto University)

Session 1 (THz communication & Semiconductor device 1)

09:15 - 11:15 (Japan, UTC+9)
16:15 - 18:15 (-1) (Pacific Standard Time, UTC-8)
01:15 - 03:15 (Central European Time, UTC+1)

Chair: Koichiro Tanaka (Kyoto University)

F2. "IC, Module, and Systems Design for 100-300GHz MIMO Communications"

09:15 - 09:45
16:15 - 16:45 (-1)
01:15 - 01:45

Mark Rodwell (UCSB)

F3. "Key challenges of THz Communications for 6G Era"

09:45 - 10:15
16:45 - 17:15 (-1)
01:45 - 02:15

Ho-Jin Song (POSTECH)

F4. "Laser-free Fully-electronic Generation and Detection of Broadband THz Pulses"

10:15 - 10:45

17:15 - 17:45 (-1)

02:15 - 02:45

Aydin Babakhani (UCLA ECE)

F5. "GaN HEMT Scaling for High-Frequency and High-Power Applications"

10:45 - 11:15

17:45 - 18:15 (-1)

02:45 - 03:15

Keisuke Shinohara (Teledyne Scientific & Imaging)

ACCEL Project Poster session

11:15 - 12:15 (Japan, UTC+9)

18:15 - 19:15 (-1) (Pacific Standard Time, UTC-8)

03:15 - 04:15 (Central European Time, UTC+1)

Chair: Takashi Arikawa (Kyoto University)

Lunch (12:15 – 13:15)

Lab. tour on Kyoto University (13:15 – 14:15)

Tour guide: Takashi Arikawa, Yuta Inose (Kyoto University)

Session 2 (THz communication & Semiconductor device 2)

14:15 - 16:15 (Japan, UTC+9)

21:15 - 23:15 (-1) (Pacific Standard Time, UTC-8)

06:15 - 08:15 (Central European Time, UTC+1)

Chair: Tadao Nagatsuma (Osaka University)

F6. "InP-based Tera-Hertz-IC Fabrication Process Technologies for Beyond 5G/6G System"

14:15 - 14:45

21:15 - 21:45 (-1)

06:15 - 06:45

Takuya Tsutsumi (NTT)

F7. "Recent Progress of Resonant-Tunneling-Diode THz Emitters"

14:45 - 15:15

21:45 - 22:15 (-1)

06:45 - 07:15

Masahiro Asada (Tokyo Institute of Technology)

F8. "THz CMOS Phased-Array Transceiver for 6G"

15:15 - 15:45

22:15 - 22:45 (-1)

07:15 - 07:45

Kenichi Okada (Tokyo Institute of Technology)

F9. "THz communication and instrumentation using photonic devices in the 300 GHz band"

15:45 - 16:15

22:45 - 23:15 (-1)

07:45 - 08:15

G. Ducournau (IEMN)

Break (16:15 – 16:30)

Session 3 (Sensing and imaging)

16:30 - 18:30 (Japan, UTC+9)

23:30(-1) - 01:30 (Pacific Standard Time, UTC-8)

08:30 - 10:30 (Central European Time, UTC+1)

Chair: Hiroaki Minamide (RIKEN)

F10. "Development of 300 GHz walk-through body scanner for the security-gate application"

16:30 - 17:00

23:30(-1) - 00:00

08:30 - 09:00

Chiko Otani (Riken)

F11. "Frequency modulated (sub-)terahertz imaging systems and their applications"

17:00 - 17:30

00:00 - 00:30

09:00 - 09:30

Fabian Friederich (Fraunhofer Institute)

F12. "Applications of THz time-domain spectroscopy"

17:30 - 18:00

00:30 - 01:00

09:30 - 10:00

Martin Koch (University of Marburg)

F13. "CMOS Dielectric sensors and Their Applications Created by Terahertz Spectroscopy Research"

18:00 - 18:30

01:00 - 01:30

10:00 - 10:30

Yuichi Ogawa (Kyoto University)

~~Banquet (Onsite)~~ [Banquet is cancelled]

19:00 -

March 6

Keynote Talk 1

09:00 - 09:45 (Japan, UTC+9)

16:00 - 16:45 (-1) (Pacific Standard Time, UTC-8)

01:00 - 01:45 (Central European Time, UTC+1)

Chair: Chiko Otani (RIKEN)

S1. "Industrial Deployments of Photoconductive THz Systems"

09:00 - 09:45
16:00 - 16:45(-1)
01:00 - 01:45

Irl Duling (Luna Innovations, Inc.)

Break (9:45 – 10:00)

Session 4 (THz system and others)

10:00 - 12:00 (Japan, UTC+9)
17:00 - 19:00 (-1) (Pacific Standard Time, UTC-8)
02:00 - 04:00 (Central European Time, UTC+1)

Chair: Iwao Hosako (NICT)

S2. "Physical-layer security in terahertz wireless links"

10:00 - 10:30
17:00 - 17:30(-1)
02:00 - 02:30

Daniel M. Mittleman (Brown University)

S3. "Recent Developments in Schottky Diode Based THz Instrumentation"

10:30 - 11:00
17:30 - 18:00(-1)
02:30 - 03:00

Jeffrey Hesler (Virginia Diodes, Inc)

S4. "Substrateless terahertz integrated platform: low-cross-talk waveguide crossing"

11:00 - 11:30
18:00 - 18:30(-1)
03:00 - 03:30

Withawat Withayachumnankul (The University of Adelaide)

S5. "Research and Development toward ALMA Upgrades"

11:30 - 12:00

18:30 - 19:00(-1)

03:30 - 04:00

Yoshinori Uzawa (National Astronomical Observatory of Japan)

Lunch (12:00 – 13:00)

ACCEL Project Poster session

13:00 - 14:00 (Japan, UTC+9)

20:00 - 21:00 (-1) (Pacific Standard Time, UTC-8)

05:00 - 06:00 (Central European Time, UTC+1)

Chair: Yuta Inose (Kyoto University)

Keynote Talk 2 + Panel Discussion (Japanese session)

14:00 - 15:45

Chair: Koichiro Tanaka (Kyoto University), Masayuki Fujita (Osaka University)

S6. “Road to Tera-Photonics - Progress and Prospects - テラフォトンクスへの道”

14:00 - 14:45

Hiromasa Ito (Riken)

S7. Panel Discussion

14:45 - 15:45

Break (15:45 - 16:00)

Session 5 (Semiconductor device 3)

16:00 - 18:00 (Japan, UTC+9)

23:00(-1) - 01:00 (Pacific Standard Time, UTC-8)

08:00 - 10:00 (Central European Time, UTC+1)

Chair: Akira Satou (Tohoku University)

S8. “Quantum cascade laser sources based on intra-cavity difference-frequency mixing: the challenge of outcoupling efficiency”

16:00 - 16:30

23:00 - 23:30(-1)

08:00 - 08:30

Mikhail Belkin (Technical University of Munich)

S9. "Sub-THz circuits in advanced SiGe:BiCMOS technologies for communication and sensing"

16:30 - 17:00

23:30(-1) - 00:00

08:30 - 09:00

Mohamed Hussein Eissa (IHP GmbH)

S10. "Low-Noise Terahertz-Wave Detector: Fermi-Level Managed Barrier Diode"

17:00 - 17:30

00:00 - 00:30

09:00 - 09:30

Hiroshi Ito (Kitasato University)

S11. "Field-effect transistors as detectors of THz radiation: Sensitivity, frequency coverage, and their application for coherent detection in Fourier imaging and s-SNOM nanoscopy"

17:30 – 18:00

00:30 - 01:00

09:30 - 10:00

Hartmut Roskos (Johann Wolfgang Goethe-Universität)

Closing Session

18:00 - 18:10

(Japan, UTC+9)

01:00 - 01:10

(Pacific Standard Time, UTC-8)

10:00 - 10:10

(Central European Time, UTC+1)

S12. Closing Address

Koichiro Tanaka (Kyoto University)