

IMS Workshop on Generation and Applications of Intense THz Radiation

Date: January 13-14, 2011

**Place: Seminar Room (#201) of main building,
Institute for Molecular Science, Okazaki, Japan**

Program

January 13th (Thursday)

13:00-13:30 Registration

Chair: Masahiro Adachi (UVSOR)

13:30-13:40 **Shin-ichi Kimura** (UVSOR)

Introduction

13:40-14:20 **G. L. Carr** (BNL)

Coherent THz Pulses from the NSLS SDL Photo-injected Linac
and Applications in Ultra-fast Material Dynamics

14:20-14:40 **Miho Shimada** (KEK)

Terahertz light source expected at the Compact Energy Recovery Linac (cERL)

14:40-15:05 **Masahito Katoh** (UVSOR)

THz Radiation from Electron Storage Ring

15:05-15:30 **Masaaki Ashida** (Osaka Univ.)

Electric Field Detection of Terahertz Coherent synchrotron radiation
and Its Application

15:30-15:50 Coffee break

Chair: Shin-ichi Kimura (UVSOR)

15:50-16:15 **Koichi Tsukiyama** (Tokyo Univ. Sci.)

Present status of Free Electron Laser at
Tokyo University of Science (FEL-TUS)

16:15-16:40 **Shuji Sakabe** (Kyoto University)

Intense laser plasma radiations and THz generations

16:40-17:05 **Toshiaki Hattori** (Univ. Tsukuba)

Nonlinear Time-Domain Two-Dimensional Terahertz Spectroscopy:
Proposal of Experiments and a Theoretical Model

17:05-17:30 **Masayoshi Tonouchi** (Osaka Univ.)

Terahertz Spectroscopy of Advanced Electronic Materials

17:30-18:00 **Koichiro Tanaka** (Kyoto Univ.)

Terahertz Nonlinear Spectroscopy in Solids

18:30-20:30 Banquet (UVSOR Seminar room)

January 14th (Friday)

Chair: Heishun Zen (UVSOR)

09:00-09:25 **Ryunosuke Kuroda** (National Institute of Advanced Industrial Science and Technology)

Development of a high-power THz source using an S-band compact electron linac and its applications

09:25-09:50 **Goro Ioyama** (Osaka Univ.)

Development of THz FEL

09:50-10:10 **Toshiharu Takahashi** (Kyoto Univ.)

Development of Near-field sub-THz Microscopy using Coherent Transition Radiation

10:10-10:35 **Hiroyuki Hama** (Tohoku Univ.)

t-ACTS (test Accelerator as Coherent THz Source) project

10:35-10:55 Coffee break

Chair: Tatsuya Mori (UVSOR)

10:55-11:20 **Masanori Hangyo** (Osaka Univ.)

Terahertz waves and metamaterials

11:20-11:50 **Kodo Kawase** (Nagoya Univ.)

Novel terahertz wave source and imaging applications

11:50-12:15 **Masahiko Tani** (Univ. Fukui)

THz imaging using pulsed THz radiation

12:15-13:30 Lunch

Chair: Shin-ichi Kimura (UVSOR)

13:30-14:00 **Nobuhiko Sarukura** (Osaka Univ.)

Parametric amplification of THz waves, Possibility of CPA

14:00-14:25 **Ryo Shimano** (Univ. Tokyo)

Intense terahertz pulse induced phenomena in low dimensional electron systems: carbon nanotubes and organic conductors

14:25-14:50 **Tatsuya Mori** (UVSOR)

Terahertz time-domain spectroscopy of off-center rattling phonons in clathrate compounds

14:50-15:00 Closing remarks

UVSOR Lunch Seminar

FY2010

- Apr. 21 Dr. Hiroshi IWAYAMA, UVSOR Facility, Institute for Molecular Science
Coulomb explosion of rare gas clusters irradiated by extreme-ultraviolet free electron laser pulses
- May 12 Dr. Masaharu MATSUNAMI, UVSOR Facility, Institute for Molecular Science
Combination of Photoemission and Optical Spectroscopies for the Study of Strongly Correlated Electronic Structure
- May 26 Dr. Tatsuya MORI, UVSOR Facility, Institute for Molecular Science
Terahertz time-domain spectroscopy of rattling phonons in type-I clathrates
- Oct. 27 Mr. Yoshitaka TAIRA, Graduate School of Engineering, Nagoya University
Generation of ultra-short gamma ray pulses via laser Compton scattering and development of pulse width measurement technique
- Dec. 8 Dr. Naoto YAMAMOTO, Graduate School of Engineering, Nagoya University
Development of high brightness spin polarized electron source
- Mar. 30 Dr. Hidetoshi MIYAZAKI, UVSOR Facility, Institute for Molecular Science
Electronic structure of the ferromagnetic semiconductor EuO: A three-dimensional angle-resolved photoemission spectroscopic study

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