The 2nd High-intensity Laser Facility Shared Promotion Seminar
Conference on Laser and Synchrotron Radiation Combination Experiment

LSC’14
Organized by
Institute of Laser Engineering, Osaka University
In cooperation with
The laser society of Japan

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Shinichi Adachi (KEK, Inst. Mat Struct Sci.)
Hiroaki Nishimura (Osaka Univ, Inst. Laser Eng.)
Shin-ichi Kimura (Osaka Univ. Grad Sch Frontier Biosc)

Tuesday, April 22

9:30-12:10 Plenary I Room 301 & 302
Opening
9:30 Opening Remarks of OPIC’14
Sadao Nakai, Organizer Greeting OPIC2014
Organizing Chair, President of Laser Society of Japan, Osaka University Professor Emeritus

Keynote Speeches by Congress Chairs
9:40 VCSEL Photonics -Small and Smart
Kenichi Iga
Tokyo Institute of Technology, Former President

10:10 Accelerator on a Chip and the Path to Coherent X-rays
Robert L. Byer
Stanford University, USA
----- Break (10:40-11:00) ----- 

11:00 Optical Tweezers as an Engineering Tool
Andreas Ostendorf
Ruhr-University Bochum, Germany

Special Talk
11:30 High-Field Laser and High Energy Physics
Atuto Suzuki
KEK, Director General

----- Lunch Break (12:10-13:30) ----- 

13:30-15:10 Plenary II Room 301 & 302

Session A
13:30 Advanced laser (ALPS)
Fumihiko Kannari
Keio Univ.

13:50 Optical manipulation (OMC)
Takashihe Omatsu
Chiba Univ.

14:10 Laser Damage (PLD)
Takahisa Itsuno
Osaka Univ.

14:30 Laser Ignition (LIC)
Takunori Taira
IMS

14:50 Bio-imaging (BISC)
Toyohio Yatagai
Utsunomiya Univ.

Session B Room 303
13:30 Industrial Appl. of LED (LEDIA)
Hiroshi Amano (Nagoya Univ.)

13:50 High Energy Density Science (HEDS)
Rysuke Kodama
Osaka Univ.

14:10 Laser & Synchrotron Radiation (LSC)
Hiroshi Azechi
Osaka Univ.

14:30 Laser Processing (SLPC)
Reinhart Poprawe
Fraunhofer Inst. for Laser Tech.

18:00-20:00 OPIC 2014 Conference Banquet Room 501 & 502
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>9:00-9:15</td>
<td>Opening</td>
<td>Opening Remarks</td>
<td>H. Azech, Conference Chair of LSC’ 14&lt;br&gt; Institute of Laser Engineering, Osaka University, Osaka, Japan</td>
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<tr>
<td>9:00-9:15</td>
<td>LSC1</td>
<td>(Invited) Tracking the chemical reactions with combined ultrafast x-ray spectroscopies and scattering</td>
<td>Christian Bressler&lt;br&gt; European XFEL, Germany</td>
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<tr>
<td>9:45</td>
<td>LSC1</td>
<td>(Invited) Structural Dynamics in Chemistry Investigated by Pulsed, High Flux X-ray Radiation</td>
<td>Simone A. Teichert&lt;br&gt; DESY, Hamburg, Germany / MPIbPC, Germany</td>
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<tr>
<td>10:30</td>
<td>LSC1</td>
<td>(Invited) SR &amp; XFELs’ Challenges to Time Resolved Structural Visualization of Optical Recording Process</td>
<td>Masaki Takata&lt;br&gt; RIKEN SPring-8 Center, Japan</td>
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<tr>
<td>11:00</td>
<td>LSC1</td>
<td>(Invited) Time-resolved X-ray Diffraction Experiment on Crystal Lattice Dynamics Using Optical Laser and Accelerator-based X-ray Source</td>
<td>Yoshiiito Tanaka&lt;br&gt; University of Hyogo / RIKEN SPring-8 Center, Japan</td>
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<tr>
<td>11:30</td>
<td>LSC1</td>
<td>(Invited) Towards femtosecond time-resolved hard x-ray photoelectron spectroscopy as a probe of transient electronic states in condensed matter</td>
<td>Masaki Oura&lt;br&gt; RIKEN SPring-8 Center, Japan</td>
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<td>13:00-18:00</td>
<td>LSC2</td>
<td>(Invited) Time-resolved X-ray spectroscopy at 3rd and 4th generation light sources</td>
<td>Chris Milne&lt;br&gt; Paul Scherrer Institute, Switzerland</td>
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<td>13:30</td>
<td>LSC2</td>
<td>(Invited) EUV+IR two-color experiments at FELs</td>
<td>Kiyoshi Ueda&lt;br&gt; IMRAM, Tohoku University, Japan</td>
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<tr>
<td>14:00</td>
<td>LSC2</td>
<td>(Invited) Femtosecond time-resolved X-ray absorption spectroscopy using SPring-8 Angstrom Compact Free Electron laser (SACLA)</td>
<td>Kazuhiko Misawa&lt;br&gt; Tokyo University of Agriculture and Technology, Japan</td>
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<tr>
<td>14:30</td>
<td>LSC2</td>
<td>Exploring Possible Pathways to Non-Thermal Sub-Picosecond Phase-Switching in the Phase Change Alloy Ge2Sb2Te5 using a Free-Electron Laser</td>
<td>Kirill Mitrofanov&lt;br&gt; National Institute of Advanced Industrial Science and Technology, Japan</td>
</tr>
<tr>
<td>15:15</td>
<td>LSC2</td>
<td>PicoSecond Lattice Deformation in Ge2Sb2Te5 Revealed by X-ray Free-Electron Laser</td>
<td>Eiichiro Matsubara&lt;br&gt; Dept. Materials Science &amp; Engineering, Kyoto University, Japan</td>
</tr>
<tr>
<td>15:45</td>
<td>LSC2</td>
<td>Ultrafast lattice dynamics of phase change materials by coherent phonons</td>
<td>Muneaki Hase&lt;br&gt; Institute of Applied Physics, University of Tsukuba, Japan</td>
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<tr>
<td>16:15</td>
<td>LSC2</td>
<td>Generation of Kilo-Tesla Magnetic Field with High-Power Laser for LSC Experiments</td>
<td>Shinsuke Fujikawa&lt;br&gt; Institute of Laser Engineering, Osaka University, Japan</td>
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<tr>
<td>16:45</td>
<td>LSC2</td>
<td>Relaxation of the Surface Photovoltage Effect on ZnO(0001) Studied by Time-resolved Soft X-ray Photoemission Spectroscopy</td>
<td>Ryu Yukawa&lt;br&gt; ISSP, the University of Tokyo, Japan</td>
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<tr>
<td>17:00</td>
<td>LSC2</td>
<td>Optical properties of lanthanide-doped APLF crystals as neutron scintillators</td>
<td>Melvin John F. Empizo&lt;br&gt; Institute of Laser Engineering, Osaka University, Japan</td>
</tr>
<tr>
<td>17:15</td>
<td>LSC2</td>
<td>Investigation of the spatial resolution of a ZnO crystal as a EUV imaging device scintillator</td>
<td>Ren Arita&lt;br&gt; Institute of Laser Engineering, Osaka University, Japan</td>
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<tr>
<td>17:45</td>
<td>LSC2</td>
<td>Vacuum ultraviolet (VUV) fluorescence of KMgF3 and BaLiF3 crystals for short wavelength devices</td>
<td>Luong Viet Mui&lt;br&gt; Institute of Laser Engineering, Osaka University, Japan</td>
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Thursday, April 24
Room 416 & 417

9:00-12:15  LSC3
Chair: Shinya Koshihara, CREST, JST and Department of Materials Science, Tokyo Institute of Technology, Japan

LSC3-1 (Invited) Development of an Ultrafast Pump-probe Facility with Multiple Radiations generated by an RF Photogun-based Accelerator and a Femtosecond Laser
Young U. Jeong
WCI Center for Quantum-Beam-based Radiation Research, KAERI, Korea LSC4-4 14:15 (Invited) Role of Ultrafast Structural Dynamics in Photo-Functional Materials Based on Cooperative Effect
Shin-ya Koshihara CREST, JST and Department of Materials Science, Tokyo Institute of Technology, Japan

LSC4-3 Chair:
13:45

LSC3-2 (Invited) Generation of Coherent Synchrotron Radiation by using Laser and Synchrotron Masahiro Katoh Institute for Molecular Science, Japan LSC4-5 15:30 (Invited) Synchrotron Radiation and Laser Photoemission Studies of Epitaxial Graphene on SiC Kazutoshi Takahashi Synchrotron Light Application Center, Saga University, Japan

LSC3-3 (Invited) Nonlinear ionization of atoms in intense EUV laser fields studied by single-shot photoelectron spectroscopy Mizuho Fushitani Department of Chemistry, Graduate School of Science, Nagoya University, Japan LSC4-6 16:00 (Invited) Highly Efficient Deep UV Generation from a Newly Developed Wavelength-conversion β-BaB2O4 Device Ichiro Shoji Chuo University, Japan

LSC3-4 (Invited) Capturing structural dynamics of materials by picosecond X-ray pulses Shin-ichi Adachi Photon Factory, KEK, Japan LSC4-7 16:45 (Invited) Time-resolved vibrational spectroscopy for photo-functional organic materials Ken Onda Tokyo Institute of Technology, PRESTO-JST, Japan

LSC3-5 (Invited) Ultrafast X-ray science at synchrotron and XFEL facilities using laser pump X-ray probe experiments Shunsuke Nozawa High Energy Accelerator Research Organization, Japan LSC4-8 17:15 (Invited) Nondestructive 3D Imaging of Fatigue Cracks inside Engineering Materials by Synchrotron Radiation Yuji Sano Toshiba Corporation, Japan Development of measurement system for magneto-optical effect with a vacuum ultraviolet High Harmonic Generation laser Shingo Yamamoto Institute for Solid State Physics, the University of Tokyo, Japan

LSC3-6 (Invited) Single-shot time-resolved X-ray scattering measurement of structural change of amorphous material under laser-driven compression Kouhei Ichiyanagi Graduate School of Frontier Sciences, The University of Tokyo, Japan LSC4-9 17:45 Observing carrier dynamics in an n-type epitaxial graphene using time-resolved photoemission spectroscopy Takashi Someya Institute for Solid State Physics, the University of Tokyo, Japan

LSC4-10 18:00

LSC4-1 (Invited) Ultrabright femtosecond electron diffraction German Scaini Department of Chemistry, University of Waterloo, Canada LSC4-11

LSC4-2 (Invited) Femtosecond Electron Diffraction Studies Masaki Hada Tokyo Institute of Technology, JST-PRESTO / Max Planck Institute for the Structure and Dynamics of Matter

18:15-18:30 Closing

Closing Remarks
K. Nakamura, Steering Committee Co-Chair of LSC’14
Tokyo Institute of Technology, and CREST-JST, Japan