

The 5th Workshop on FEL Science: "Creation of New Science"

Place: Gyeongju Hilton, Gyeongju, Korea
Date: 2012, October 28- November 1

October 28 (Sunday)

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|--|-------|-------------|------------------------------------|
| 15:30 | 16:30 | | Check-in and registration |
| Opening keynote lecture (Chair: D. Y. Noh) | | | |
| 16:30 | 17:00 | T. Ishikawa | Workshop opening keynote |
| Opening session - facility overview (Chair: M. H. Cho) | | | |
| 17:00 | 17:30 | M. Yabashi | Overview of SACLA beamlines |
| 17:30 | 18:00 | I. S. Ko | Current Status of PAL XFEL Project |
| 18:00 | 20:00 | | Welcome reception |

October 29 (Monday)

Session I: Overview of imaging with x-rays (Chair: J. Je)

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| 9:00 | 9:20 | D. Y. Noh | Application of Fresnel coherent diffraction imaging for composition analysis of bimetallic alloys |
| 9:20 | 9:40 | M. Nakasako | Possibility of CXDI of bio-molecular assemblies using X-ray free-electron laser |
| 9:40 | 10:00 | K. S. Liang | Structure of Human eNOS Protein |
| 10:00 | 10:20 | J. Miao | Coherent Diffraction Imaging of Materials by Using an X-ray Free Electron Laser |

10:20 10:40 Coffee break

Session II: Coherent x-ray imaging-1 (Chair: J. Miao)

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| 10:40 | 11:00 | Y. Nishino | Coherent Imaging with XFEL |
| 11:00 | 11:20 | J. H. Je | X-ray imaging in bubble systems |
| 11:20 | 11:40 | Y. Hwu | Nanofabrication for X-ray imaging |
| 11:40 | 12:00 | Y. Takahashi | High-Resolution Ptychography Using Focused Hard X-ray Beam |
| 12:00 | 12:20 | H. Kim | Strain Imaging of Nanocrystals |

12:20 13:30 Lunch & discussion

Session III: Coherent x-ray imaging - II (Chair: Y. Nishino & Y. Takahashi)

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| 13:30 | 13:50 | C. Song | Activities on Multiple Application X-ray Imaging Chamber |
| 13:50 | 14:10 | Y. Joti | Towards Synergistic Use of SACLA and K Computer for Bio-molecular Imaging |
| 14:10 | 14:30 | C.-C. Chen | Novel 3D reconstruction techniques from limited views: Equally Sloped Tomography and Ankylography |

14:30 14:40 Short break

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| 14:40 | 15:00 | H. J. Shin | A compact transmission soft-x-ray microscope at Pohang Light Source |
| 15:00 | 15:20 | T.-K. Lee | Resolution enhancement for coherent diffraction imaging of non-crystalline samples |
| 15:20 | 15:40 | J. H. Park | Aerodynamic focusing liquid jet injector development for single particle imaging at SACLA |

15:40 16:00 Coffee break

Poster & discussion

16:00 18:00 Refer to index for Poster Presentation

19:00 21:00 Dinner

October 30 (Tuesday)

Excursion

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| 9:00 | 18:00 | Excursion & PAL facility visit |
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| 19:00 | 21:00 | Dinner |
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October 31 (Wednesday)

Session V: Current status and future perspectives-I (Chair: C. Song)

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| 9:00 | 9:20 | H. C. Kang | Scanning X-ray Microscope with Multilayer Laue Lenses |
| 9:20 | 9:40 | H. Tomizawa | The operation status of SACLA accelerator and the future plans with FEL-seeding scheme |
| 9:40 | 10:00 | K. Sawada | Berry-phase theory of optical pulse propagation |

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| 10:00 | 10:20 | Coffee break |
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Session VI: Current status and future perspectives-II (Chair: M. Yabashi)

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| 10:20 | 10:40 | T. Katayama | Dispersive X-ray Absorption Spectroscopy with XFEL |
| 10:40 | 11:00 | J. W. Chung | Electronic properties of graphene modified by Fe-intercalation |
| 11:00 | 11:20 | C.-J. Yu | Beamlines in PAL-XFEL |
| 11:20 | 11:40 | T. Kameshima | Overview of Multi-port CCD detector system |

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| 11:40 | 15:00 | Lunch & discussion |
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Session VII: Ultrafast x-ray pump-probe (Chair: K. B. Lee)

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| 15:00 | 15:20 | H. Ihee | Molecular Structural Dynamics Probed by Ultrafast X-ray Scattering and Absorption Spectroscopy |
| 15:20 | 15:50 | R. Dilanian | Electronic phase transition in fullerene crystals induced by the nano focused femtosecond x-ray laser pulses |
| 15:50 | 16:10 | Jey-Jau Lee | The planning beamlines for ultrafast Time-Resolved X-ray diffraction in TPS of Taiwan |
| 16:10 | 16:30 | M.C. Newton | Time-Resolved Imaging with Coherent X-ray Diffraction (TRICXD): Applications to Ultra-fast Strain Dynamics at the Nanoscale |
| 16:30 | 16:50 | G. Van Riessen | Progress and challenges in coherent diffractive imaging with soft X-rays for biological microscopy |

Workshop closing

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| 16:50 | 17:00 | H. Kitamura | Workshop closing |
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Visit to Museum

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| 17:00 | 18:00 | Visit to Museum |
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| 18:00 | 20:00 | Farewell dinner |
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November 1 (Thursday)

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| ~ | 11:00 | Check-out |
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