

International Workshop on Frontiers of XFEL Science

December 7th (Wednesday)

- Morning (09:50 ~ 12:00)

APCTP program opening

9:50 ~ 10:00 APCTP program opening remarks

Tutorial session in Korean (10:00 ~ 11:50):

10:00 ~ 10:50 *"X-ray scattering at synchrotrons and XFELs"*,
Do Young Noh (GIST)

11:00 ~ 11:50 *"XFELs & science applications"*
Changyong Song (POSTECH)

- Afternoon (13:30 ~ 18:00)

Opening (13:30 ~ 14:10)

- Chair: Do Young Noh (GIST)

13:30 ~ 13:40 Workshop opening - Ki Bong Lee (PAL director)

13:40 ~ 14:10 PAL-XFEL, In Soo Ko (PAL-XFEL project leader)

New states of matter (14:20 ~ 16:40)

- Chair: Do Young Noh (GIST)

14:20 ~ 15:10 *"Overview of the European XFEL Science Opportunities and Plans for Matter under Extreme Conditions Studies at the High Energy Density Science Instrument"*, Thomas Tschentscher (European XFEL)

15:10 ~ 15:25 Coffee break (15 min)

15:25 ~ 15:55 *"Relativistic charge dynamics and ultrafast plasma phenomena"*, Sargis Ter-Avetisyan (GIST)

15:55 ~ 16:40 *"Nano-focusing and nano-imaging optics for advanced synchrotron radiation sources"*, Kazuto Yamauchi (Osaka Univ.)

Facility tour (16:45 ~ 18:00)

PAL-XFEL facility tour

December 8th (Thursday)

- Morning session (9:00 ~ 12:15)

Beyond the crystallography (9:00 ~ 12:15)

- Chair: Changyong Song (POSTECH)

09:00 ~ 09:30	<i>"Kinetics of Strain Development during the Catalytic Process using X-ray Free Electron Laser"</i> , Hyunjung Kim (Sogang Univ.)
09:30 ~ 10:15	<i>"Single particle imaging at LCLS"</i> , Andy Aquila (LCLS)
10:15 ~ 10:45	Coffee break (30 min)
10:45 ~ 11:30	<i>"Progress towards single particle imaging with XFELs: Recent results and upcoming instrumentation at the European XFEL"</i> , Adrian Mancuso (European XFEL)
11:30 ~ 12:00	<i>"Femtosecond imaging & PAL-XFEL"</i> , Sang Soo Kim (PAL-XFEL)
12:00 ~ 14:00	Poster presentation

- Afternoon session (14:00 ~ 18:00)

Ultrafast dynamics at nanoscale (14:00 ~ 18:00)

- Chair: Hyun Jung Kim (Song Univ.)

14:00 ~ 14:45	<i>"Time-resolved Imaging of Excitations in Metal Nanoparticles"</i> , Ian Robinson (Univ. College London & BNL)
14:45 ~ 15:15	<i>"Ultrafast transmission electron imaging, diffraction, and spectroscopy"</i> , Oh-Hoon Kwon (UNIST)
15:15 ~ 15:45	<i>"Isolated Tera-watt attosecond hard X-ray laser pulse for ultrafast X-ray science"</i> , Dong Eon Kim (Max Planck Korea & POSTECH)
15:45 ~ 16:15	Coffee break (30 min)
16:15 ~ 16:45	<i>"Coherent lattice vibrations in correlated electron systems"</i> , Kyungwan Kim (CBNU)
16:45 ~ 17:30	<i>"Hard x-ray split-delay optics at SACLA – current status and future perspectives"</i> , Taito Osaka (SACLA)

- Workshop dinner (18:00 ~ 20:00)

December 9th (Friday)

In conjunction with the KOSUA annual workshop

- Morning session (9:00 ~ 10:55)

Proteins, small molecules

- Chair: Changyong Song (POSTECH)

09:00 ~ 09:30	<i>"Exploring structural dynamics of chemical and biological reactions in solution using femtosecond X-ray scattering at XFELs"</i> , Jeongho Kim (Inha Univ.)
9:30 ~ 10:20	KOSUA Plenary Talk <i>"A Three Dimensional Movie of Structural Changes in Bacteriorhodopsin"</i> , So Iwata (Kyoto Univ. & RIKEN)
10:20 ~ 10:40	<i>"Status of PAL-XFEL beamlines and user science program"</i> , Tae Young Koo (PAL-XFEL)

Workshop closing

10:40 ~ 10:55	Workshop closing : Do Young Noh (Chair, KOSUA) : Ki Bong Lee (Director, PAL)
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