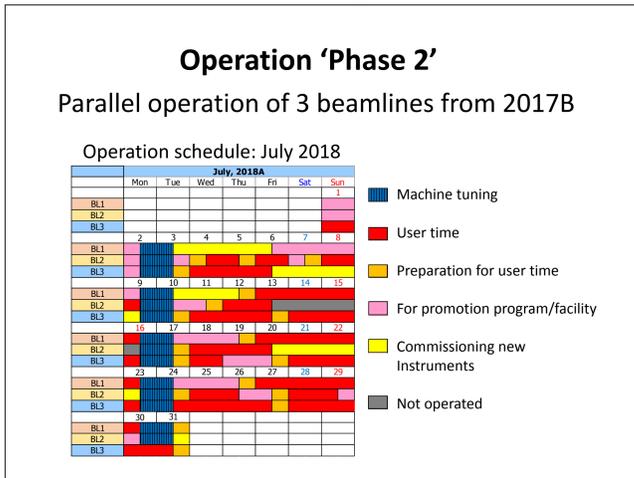


Overview of hard x-ray beamlines (BL2/3) at SACLA

XFEL R&D Division (RIKEN) & XFEL Utilization Division (JASRI)

Multi-beamline operation



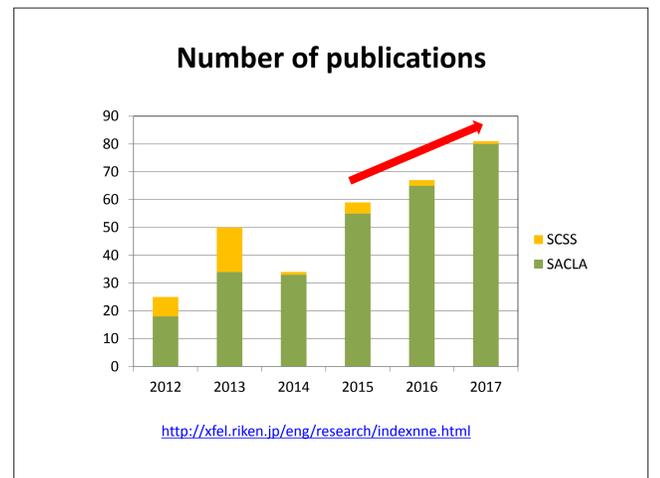
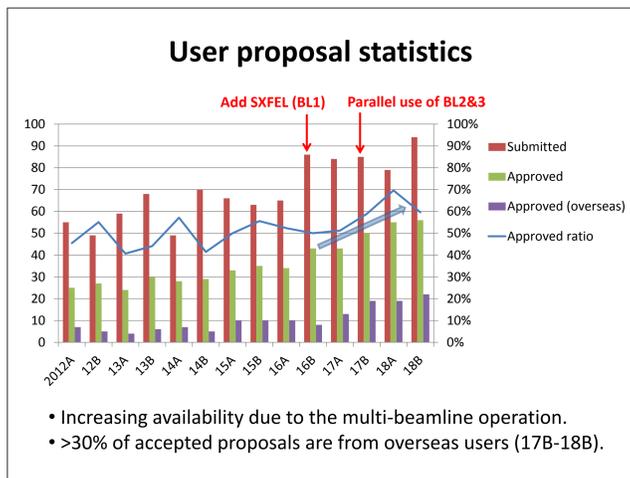
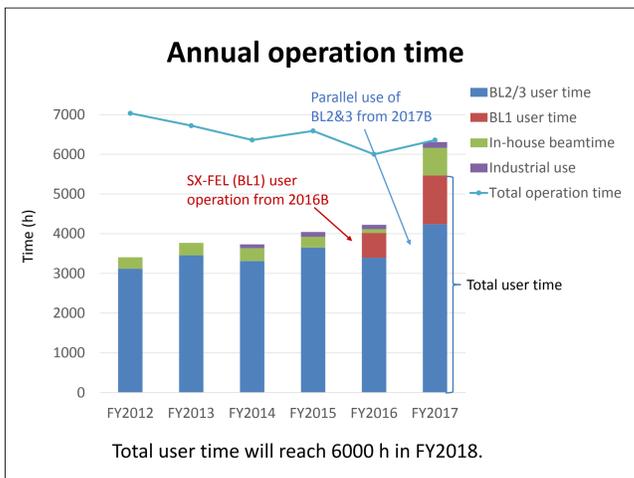
- ### Operation 'Phase 2'
- More user beamtime
 - ⇒ Over 6,000 h in a year.
 - ⇒ Feasibility-check beamtime @BL2 (from 2017B)
 - ⇒ Trial for beamtime allocation on a single-shift (12 h)-a-day basis @BL2 (from 2018B)
 - Opportunities for promotion programs
 - ⇒ SACLA Basic Development Program
 - ⇒ SACLA Research Support Program for Graduate Students
 - ⇒ Promotion Program for Industrial Use of SACLA
 - New photon source: 500-TW optical lasers
 - ⇒ Open to users from 2018A

Beamlines

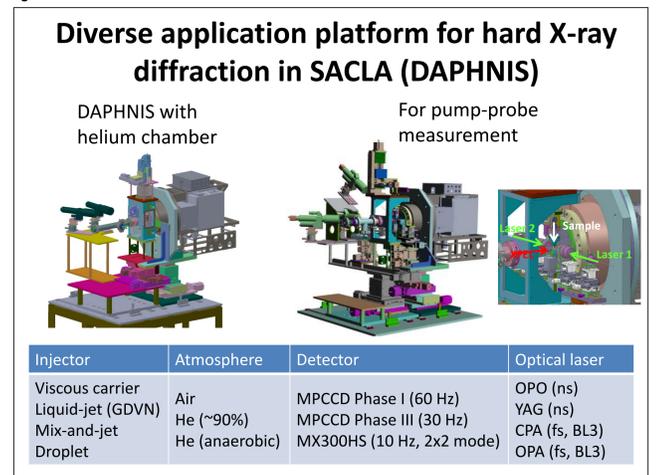
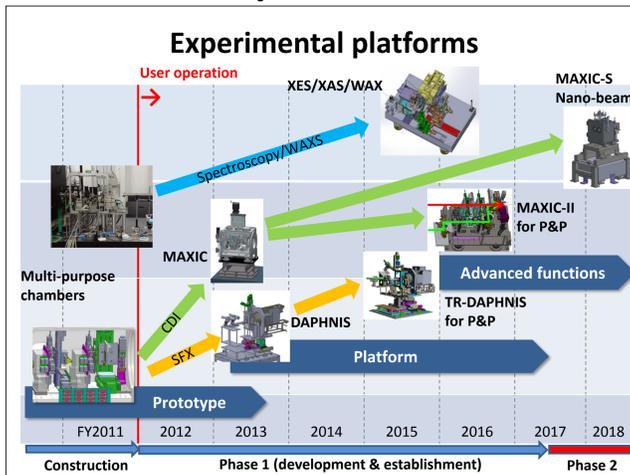
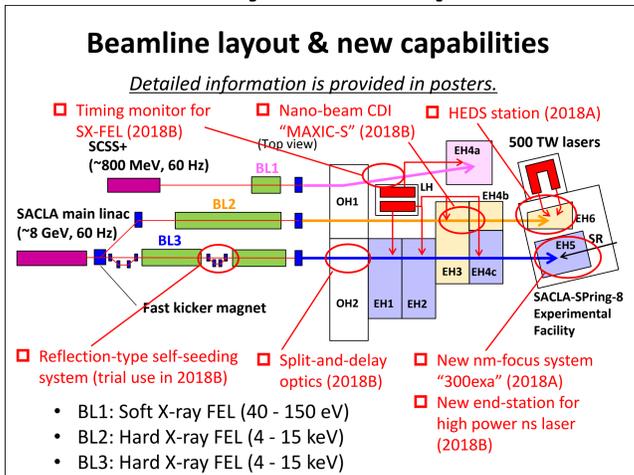
	Type of experiment	Major instruments	Remarks
BL1 (40-150 eV)	Ion/electron spectroscopy SX spectroscopy Ellipsometry Imaging	fs laser KB (~5 μm) Timing tool	Users are encouraged to use their own end-stations
BL2 (4-15 keV)	Fixed-target PX SFX CDI/SAXS P&P with high power laser	KB (~1 μm) DAPHNIS (SFX) MAXIC-S/II (CDI) 500 TW laser	Feasibility-check beamtime
BL3 (4-15 keV)	P&P XRD, WAXS, Spectroscopy XPCS X-ray pump X-ray probe	fs laser Timing tool CRL, KB (~1 μm) 300 exa (~0.1 μm) SDO Platform for utilizing high-power ns laser	Double-pulse XFEL (~300 fs delay @ 10 keV) Self-seeding (trial use) X-ray polarization control

From 2018

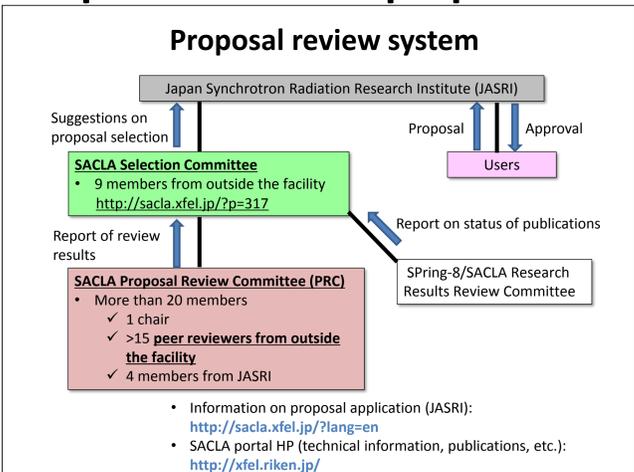
To BL2/BL3 users, the facility assigns BL2 or BL3 according to the type of experiment.



Beamline layout & experimental instruments (see also Posters 3-11)



Proposal review & preparation for experiment



- ### General information
- Two calls in a year.
 - May (Deadline in June) for Term B (Sept.-Feb.)
 - Oct. (Deadline in Nov.) for Term A (March-July)
 - Two categories
 - General proposal (non-proprietary proposal)
 - The project leaders are required to publish their research results.
 - Proprietary proposal
 - Beamtime fee: 1,098,000 JPY/2 hours (1,647,000 JPY/2 hours for Time-Designated Proposal)
- Contact:
About application procedures: sacra_jasri@spring8.or.jp (SACLA Users Office)
Technical queries: sacra-bl.jasri@spring8.or.jp (SACLA beamline staff)

- ### Review process
- Peer review by external PRC members
 - Each proposal is rated by 5 reviewers.
 - Scientific/technological importance is evaluated.
 - The reviewers rate each proposal independently and submit comments for the discussion of PRC.
 - Each proposal is ranked based on the average score of the reviewers.
 - Technical feasibility and safety are evaluated by JASRI members of PRC.
 - SACLA PRC members discuss the priority of proposals based on the reviewers' results.
 - Acceptable proposals are selected according to the available beam time of each beamline.

- ### After obtaining approval of your proposal
- Contact beamline scientists: sacra-bl.jasri@spring8.or.jp
 - Provide information as early as possible:
 - Practical (not only conceptual) information for setting up your experiment.
 - Final plan should be provided at least 6 weeks prior to your beamtime.
 - Make enough preparation:
 - Especially for experiments that need exotic setup/bring-in apparatus.
 - If necessary, apply for feasibility-check beamtime.
 - Do experiment:
 - Users are encouraged to operate instruments by themselves.
 - User-friendly platforms and program interface (ExpControlAPI) are available (see Posters)

