SACLA

2023B, Performed Proposals

1Shift =12Hours

S/N	Proposal Number	Performed Proposal Title	Project Leader	Affiliation	Country	Type of Proposal	Beamline	Shift
1	2023B8002	Exploring damage-less structure determination with sub 3-fs XFEL pulses	Ichiro Inoue	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	7
2	2023B8003 2)	Capturing dynamic C-C bond formation and cleavage in a photosensitizer protein using XFEL	Jiangyun Wang	Chinese Academy of Sciences	China	SACLA General Proposal (Non-proprietary)	BL2	5.5
3	2023B8004	Time-resolved serial femtosecond crystallography using temperature-jump techniques	Takaaki Fujiwara	Tohoku University	Japan	SACLA General Proposal (Non-proprietary)	BL2	3
4	2023B8005	Time-resolved crystallography of light-driven reactions by photolyases and cryptochromes	Junpei Yamamoto	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
5	2023B8006	Soft X-ray FEL pulse shaping using transient absorption of rear gas	Shigeki Owada	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
6	2023B8008	Nonlinear absorption spectroscopy in K-shell core-hole state III	Kenji Tamasaku	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
7	2023B8009	Light-induced non-equilibrium state of Weyl semimetals studied by time-resolved soft x-ray second harmonic generation	Masafumi Horio	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL1	8
8	2023B8010	Measuring soft X-ray chemical edges with hard X-ray nonlinear spectroscopy	Jordan O Neal	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
9	2023B8011	Verification of photo-induced ultrahigh speed magnetization switching in ferromagnetic semiconductor quantum well structure by X-ray SHG spectroscopy	Masaki Kobayashi	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL1	6
10	2023B8012	X-ray optics using high-intensity-laser-produced plasma	Yuichi Inubushi	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL2	9
11	2023B8013 1)	Mix-and-inject serial crystallography of structural changes during the copper amine oxidase reaction	Takeshi Murakawa	Osaka Medical and Pharmaceutical University	Japan	SACLA General Proposal (Non-proprietary)	BL2	4
12	2023B8014	Resonant driving of elementary excitation by strong terahertz electric field and real-time detection of phase transition by sub-cycle spectroscopy	Noriaki Kida	Japan Synchrotron Radiation Research Institute	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
13	2023B8016	Determining the Structure of Iron Salts at the Vacuum-Water interface with Soft X-ray Second Harmonic Generation	Craig Schwartz	University of Nevada, Las Vegas	USA	SACLA General Proposal (Non-proprietary)	BL1	10
14	2023B8017	Time resolved laser activation and X-ray pump probe studies of co-factor bound and catalytic disulfide enzymes	Michael Hough	Diamond Light Source	UK	SACLA General Proposal (Non-proprietary)	BL2	5
15	2023B8018	Element-selective tracking of electron states predominated bandgap by soft X-ray sum frequency generation spectroscopy	Masato Kotsugi	Tokyo University of Science	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
16	2023B8019	Formation and Capture of Boron-Doped Nanodiamonds from Shock Compressed Plastic-Boron Slurry Targets.	Michael Stevenson	University of Rostock	Germany	SACLA General Proposal (Non-proprietary)	BL3	4
17	2023B8020 2)	Extended development of serial femtosecond crystallography complementing electron diffraction for structural analysis of micro crystalline sponge	Sota Sato	The University of Tokyo	Japan	SACLA General Proposal (Non-proprietary)	BL2	6.5
18	2023B8023 1)	In-situ XFEL diffraction measurement of lattice strain under femtosecond laser-driven shock compression of solids	Tomokazu Sano	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
19	2023B8024	Probing Electron Dynamics with Ultrafast X-ray Scattering	Ruaridh Forbes	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5
20	2023B8025	Development of time-resolved crystallography using reaction induction by temperature rise	Jungmin Kang	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
21	2023B8026	Rapid structure determination system for drug-target proteins using the X-ray free electron laser	So Iwata	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL2	6
22	2023B8027	Analysis of structural changes in the oxygen-evolving photosystem II by multiphoton absorption process using femtosecond lasers	Keisuke Kawakami	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
23	2023B8028	Measuring Norrish reaction dynamics using X-ray ionisation	Emily Warne	University of Oxford	UK	SACLA General Proposal (Non-proprietary)	BL1	7
24	2023B8029	Modelization of the mixing induced by shear instabilities using a nanosecond laser	Victorien Bouffetier	ALBA Synchrotron	Spain	SACLA General Proposal (Non-proprietary)	BL3	3
25	2023B8032	Tracking aqueous solvation dynamics with femtosecond X-ray spectroscopy and scattering	Christian Bressler	European XFEL GmbH	Germany	SACLA General Proposal (Non-proprietary)	BL3	5
26	2023B8034	Dynamical decoding of the nature of multiple charge density waves in nickel-based superconductor	Nuh Gedik	Massachusetts Institute of Technology	USA	SACLA General Proposal (Non-proprietary)	BL3	5
27	2023B8035	Serial femtosecond pump-probe photocrystallography of small unit cell systems	Bo Iversen	University of Aarhus	Denmark	SACLA General Proposal (Non-proprietary)	BL3	5
28	2023B8036 1)	Molecular-level imaging using 100-nm Focused XFEL	Yoshinori Nishino	Hokkaido University	Japan	SACLA General Proposal (Non-proprietary)	BL2	11
29	2023B8038 1)	Towards the electron transfer induced misfolding of prion proteins studied by ultrafast X-ray absorption and Xray scattering	Maria Eugenia Corrales	Universidad Autonoma de Madrid	Spain	SACLA General Proposal (Non-proprietary)	BL3	5
30	2023B8039	Generation of Phase-Stable Femtosecond X-ray Pulse Pairs	Uwe Bergmann	University of Wisconsin-Madison	USA	SACLA General Proposal (Non-proprietary)	BL3	5
31	2023B8043	Time-resolved serial femtosecond crystallography on the recently discovered CarH photoreceptor protein	Martin Weik	Commissariat a l Energie Atomique	France	SACLA General Proposal (Non-proprietary)	BL3	5
32	2023B8048	Investigating Junctions in Photovoltaic Devices via Soft X-ray Second Harmonic Generation Spectroscopy	Walter Drisdell	Lawrence Berkeley National Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL1	10
33	2023B8050	Observation of multiple ionization under ultraintense sub-10 nm focused XFEL radiation	Jumpei Yamada	Osaka University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
34	2023B8051	Dynamics of plasmonic hot electron injection into TiO2 for NH3 synthesis	Feng Wang	University College London	UK	SACLA General Proposal (Non-proprietary)	BL3	5
35	2023B8052 1)2)	High-speed time-resolved structural analysis of light-energy transfer mechanism in antenna protein	Yasufumi Umena	Nagoya University	Japan	SACLA General Proposal (Non-proprietary)	BL3	5.5
36	2023B8053	Enhanced Sensitivity of Seeded Two-Color Stimulated XES on Mn solutions	Thomas Kroll	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5
37	2023B8055	Study of electronic state in catalytic intermediates of metal protein by time-resolved simultaneous measurements of X-ray spectroscopy and SFX	Atsuhiro Shimada	Gifu University	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
38	2023B8056	Super-resolution in-line holography using sub-10 nm focused XFEL	Gota Yamaguchi	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
39	2023B8057	Optical manipulation of the dimensionality of competing charge density waves in doped kagome metals.	Stephen Wilson	University of California, Santa Barbara	USA	SACLA General Proposal (Non-proprietary)	BL3	5
40	2023B8058	Elucidation of the molecular mechanism of the catalytic reaction of membrane-bound nitric oxide reductase	Takehiko Tosha	University of Hyogo	Japan	SACLA General Proposal (Non-proprietary)	BL2	5
41	2023B8059 1)	Ligand Modification on Argentophilic Networks in MOChas: an smSFX study	Elyse Schriber	SLAC National Accelerator Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	4
42	2023B8060	Verification of lattice distortions at the photo-induced insulator-to-metal transition in an exitonic insulator	Yuya Kubota	RIKEN	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
43	2023B8062	RNaseA-Mn(CO)3 adduct for observing side-chain dynamics in a light reaction of CO release	Takafumi Ueno	Tokyo Institute of Technology	Japan	SACLA General Proposal (Non-proprietary)	BL2	4
44	2023B8064	Time-resolved multielectron-ion coincidence spectroscopy of UV-photoinduced ring-opening reactions	Mizuho Fushitani	Nagoya University	Japan	SACLA General Proposal (Non-proprietary)	BL1	7
45	2023B8065	Low-temperature powder x-ray diffraction at above 100 T generated using PINK-02: Uncovering magnetic field induced phase transition of correlated transition metal oxides	Akihiko Ikeda	The University of Electro-Communications	Japan	SACLA General Proposal (Non-proprietary)	BL3	5
46	2023B8067 2)	Shooting molecular movies of 2-oxoglutarate-dependent dioxygenase and other non-light-driven enzymes	Shingo Nagano	Tottori University	Japan	SACLA General Proposal (Non-proprietary)	BL2	4.5
47	2023B8068	X-ray crystallography and X-ray absorption spectroscopy of Photosystem II	Junko Yano	Lawrence Berkeley National Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5
48	2023B8069	Understanding the ultrafast and efficient electron transfer of photosynthetic reaction center: How is the charge separation and stabilization achieved?	Jan Kern	Lawrence Berkeley National Laboratory	USA	SACLA General Proposal (Non-proprietary)	BL3	5

[1] SACLA Research Proposals for Complementary Use with SPring-8, J-PARC/MLF or HPCI including the K computer / the supercomputer Fugaku.

[2] Including the feasibility check beamtime (FCBT) of 0.5 shifts in performed shift.