Mapping of methods to current beamlines and keywords(1/2)

Broad category	Subcategory		Beamlines: Public, RIKEN & (Contract BL)	Keywords
Spectroscopy	A1	Production XAFS	01B1, 14B2, 32B2	Versatile XAFS, Automated XAFS, Local structure, Chemical state, Operando
	A2	XES / HERFD-XAFS/X-ray Raman	39XU, 36XU (12XU)	High-sensitivity chemical state analysis, Trace element analysis, X-ray Raman scattering, RIXS
	A3	XAFS-CT	36XU, 37XU, 39XU, 29XU	Operando, Chemical state, Projection type, Imaging type, Fast scanning type
	A4	X-ray fluorescence, XMCD imaging	37XU, 29XU, 39XU	Chemical state, Fine structure, Element distribution
	A5	Fast XAFS	36XU	qXAFS, Complex measurement, Chemical state, Operando
HAXPES	B1	Production HAXPES	09XU, 46XU	Electronic state, Chemical state, Resonant HAXPES, Three dimentional space-resolved measurement
	B2	Atmospheric HAXPES	09XU, 46XU	Electronic state, Operando, Atmospheric pressure
High-resolution spectroscopy	C1	Magnetic/High-resolution Compton scattering	08W	Electron Momentum Density, Fermi Surface, Electron Spin Density
	C2	Nuclear resonant scattering	35XU, 19LXU	Hyperfine Spectroscopy, Nuclear Resonance Vibrational Spectroscopy, Enzyme active center, Slow dynamics
	C3	Inelastic X-ray scattering (IXS)	35XU, 43LXU	Phonon Dispersion and Linewidth, Thermal conductivity, Complex materials, Diordered Materials, Deep earth investigation, Elasticity
	C4	X-ray fluorescence holography		Three dimensional atomic image
	C5	Compton scattering imaging	08W、05XU	Operando observation, Digital twin

Mapping of methods to current beamlines and keywords(2/2)

Broad category	Subcategory		Beamlines: Public, RIKEN & (Contract BL)	Keywords
Diffraction, Scattering	D1	Multi-purpose (Multi-axis diffractometer)	13XU,19B2	Multi-axis diffractometer, in-situ observation, Operando measurement, Mapping measurement, Customized measurement
	D2	Powder Diffraction	13XU, 02B2, 19B2, 44B2	Automated measurement, Operando, Crystal structure analysis
	D3	PDF	13XU, 04B2, 08W, 44B2	High throughput PDF, in-situ PDF, Local structure, Fast measurement
	D4	Crystal structure XRD	02B1, 40XU	Precise structure analysis, High throughput
	D5	Nanobeam XRD/X-ray topography	13XU, 32B2, 29XU	Lattice destortion analysis, Mapping measurement, X-ray topography
	D6	Diffraction imaging & 3DXRD	47XU, 05XU	Grain, Orientation mapping, Operando
	D7	High pressure, Super extreme conditions XRD	10XU, 04B1, 05XU	High throughput DAC-XRD, High pressure, Micro XRD, Large volume press, Earth planetary dynamics, Extreme condition measurement
Small angle scattering	E1	Production SAXS	19B2, 40XU, 40B2, 05XU	SAXS, USAXS, GI-SAXS, Automated measurement, Operando measurement
	E2	Imaging SAXS	40XU, 40B2	Simultaneous image measurement, Local structure analysis, Scattering CT,
	E3	Fast SAXS, XPCS	40XU, 29XU	Non-uniformity evaluation, Dynamics analysis, in-situ, in-vivo, slow dynamics
Soft X-rays	F1	Soft X-ray XAFS	27SU, 17SU	Soft X-ray MCD, Atmospheric pressure measurement
	F2	Soft X-ray photoemission spectroscopy, ARPES	25SU	Microbeam, Position-resolved measurement
	F3	Soft X-ray imaging (PEEM/STXM)	17SU, 25SU	Spectroscopic imaging, PEEM, SPELEEM, Nanobeam
Imaging	G1	Production CT	20B2, 28B2, 05XU	Automated CT, Full CT, Operando CT, Micro-CT
	G2	Nano CT/Ptychography	20XU, 47XU、29XU	Multiscale CT, Operando
	G3	Fast imaginc, CT	47XU, 20XU, 20B2, 05XU	Operando CT、High-speed movie
Protein structural analysis	H1	Crystal structure analysis (Single crystal diffractometer)	45XU, 32XU, 41XU, 26B1	Automated
	H2	Correlation structure analysis	45XU, 32XU, 41XU, 26B1, Cryo-EM	Single particle analysis, Character evaluation, Sample preparation, Cryo-TEM
	H3	BioSAXS	40B2, 38B2	SEC-SAXS, Dynamical analysis
	H4	Dynamical crystal structure analysis, Room temperature measurement	41XU, 32XU, 45XU, 26B1	Time-resolved, Structural polymorphism, Serial crystal structure analysis