

List of Abbreviations and Definitions

AHFMR	Alberta Heritage Foundation for Medical Research	DBA	Double Bend Achromat (magnetic cell at CLS)
ALS	Advanced Light Source (Berkeley, CA)	DDR	Detailed Design Report (CLS)
ANKA	ANgstrom source KARlsruhe synchrotron (Karlsruhe, Germany)	DESY	Deutsches Elektronen Synchrotron (Hamburg, Germany)
APS	Advanced Photon Source (Argonne, IL)	DCM	Double Crystal Monochromator (CLS; Canadian beamline at CSRF)
ARPES	Angle-Resolved Photoelectron Spectroscopy	Diamond	New synchrotron in UK (operational in 2006)
ASI	Alberta Synchrotron Institute (Edmonton and Calgary, AB)	ECS	Energy Compression System (CLS)
ASRA	Alberta Science and Research Authority	ELETTRA	ELETTRA synchrotron (Trieste, Italy)
ATR	Attenuated Total Reflectance (IR)	EPU	Elliptically Polarized Undulator
BCSI	British Columbia Synchrotron Institute	ESG	Experimental Systems Group (ALS)
BESSY I & II	Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung mbH (synchrotron facilities in Berlin, Germany)	ESRF	European Synchrotron Radiation Facility (Grenoble, France)
BIMR	Brockhouse Institute of Materials Research (McMaster U., Hamilton, ON)	ESS	Energy Spectrometer System (CLS)
BM	Bending Magnet	eV	Electron volt(s)
BNL	Brookhaven National Laboratory (Upton, NY)	EXAFS	Extended X-ray Absorption Fine Structure
BPAC	Beamline Planning Advisory Committee (CLS)	FAC	Facilities Advisory Committee (CLS)
BRI (NRC)	Biotechnology Research Institute, NRC (Montreal)	FIR	Far Infrared Radiation
BT	Beamline Team (CLS)	FOE	First Optics Enclosure
BTS	Booster ring To Storage ring transfer line (CLS)	Front end	SR beam pathway connecting the vacuum system of the ring to the start of the beamline (usually includes masks, shutters, and a vacuum system)
CANMET	Canada Centre for Mineral and Energy Technology (NRCan, several locations)	FTIR	Fourier Transform Infrared (spectrometer or spectroscopy)
CAT	Collaborative Access Team (APS)	FTS	Fourier Transform Spectrometer (IR)
CCD	Charge-Coupled Device detector (PX)	FWHM	Full Width at Half Maximum (Gaussian curve)
CDR	Conceptual Design Report (CLS)	FY	Fluorescence Yield (XAS)
CESR	Cornell Electron Storage Ring (Cornell University, Ithaca, NY)	HOM	Higher Order Mode
CFI	Canada Foundation for Innovation	HOPG	Highly Oriented Pyrolytic Graphite
CHES	Cornell High Energy Synchrotron Source (NY)	IQS	Institut Québécois du Synchrotron
CHUL	Centre Hospitalier de l'Université Laval	IBD (NRC)	Institute for Biodiagnostics, NRC (Winnipeg, MB)
CISR	Canadian Institute for Synchrotron Radiation	ICPET (NRC)	Institute for Chemical Processes and Environmental Technologies, NRC (Ottawa, ON)
CLS	Canadian Light Source (Saskatoon, SK)	ID	Insertion Device (in a synchrotron storage ring)
CLSI	Canadian Light Source Inc. (Saskatoon, SK)	IMI (NRC)	Industrial Materials Institute, NRC (Boucherville, QC)
CMCF	Canadian Macromolecular Crystallography Facility (CLS)	IMS (NRC)	Institute for Microstructural Sciences, NRC (Ottawa)
CNSC	Canadian Nuclear Safety Commission	INMS (NRC)	Institute for National Measurement Standards, NRC (Ottawa, ON)
COM-CAT	Commercial Beamline Collaborative Access Team (APS)	INRS	Institut national de la recherche scientifique (QC)
C ² SIRS	Canadian Consortium for Synchrotron Infrared Spectroscopy (CLS)	IR	Infrared (spectroscopy or spectrometer)
CSRF	Canadian Synchrotron Radiation Facility (SRC, U. of Wisconsin-Madison, Madison, WI)	IR-0	Canadian PRT on IR beamline U10B at NSLS
CXRO	Center for X-Ray Optics (LBNL)	IR-1	Far IR spectroscopy beamline (CLS)
DAFS	Diffraction Anomalous Fine Structure (XAS/XRD)	IR-2	Approved and funded mid-IR spectromicroscopy beamline (CLS)
Danfysik A/S	CLS booster ring supplier (Jyllinge, Denmark)	IR-2/3	Alternate name for IR-2 at the CLS (acknowledging the pooling of user communities with IR-3)
Daresbury	SRS (Synchrotron Radiation Source, Daresbury, UK)	IR-3	Approved but unfunded mid-IR beamline (CLS)
DARTS	Daresbury Analytical Research and Technology Service (SRS)	ISIS	A pulsed neutron and muon source at the Rutherford Appleton Laboratory (Oxford, UK)

Jefferson Lab	Thomas Jefferson National Accelerator Facility (Newport News, VA)	ROC	Review Oversight Committee (CLS)
K-B pair	Kirkpatrick-Baez mirror pair (X-ray beamlines)	SAL	Saskatchewan Accelerator Laboratory
KEK	Ko Energy Kyushu: location of the Photon Factory synchrotron (Tsukuba, Japan)	SAXS	Small Angle X-ray Scattering
LBNL	Lawrence Berkeley National Laboratory (Berkeley, CA)	SC	Superconducting
LENS	European Laboratory for Non-Linear Spectroscopy	SBC-CAT	Structural Biology Center Collaborative Access Team (PX facilities at APS)
LTB	Linac To Booster ring transfer line (CLS)	SER-CAT	Southeast Regional Collaborative Access Team (PX facilities at APS)
Linac	Linear accelerator	SGM	Spherical Grating Monochromator
LOI	Letter of Intent	SGU	Small Gap Undulator
LY	Light Yield (XAS)	SIMS (NRC)	Stacie Institute for Molecular Sciences, NRC (Ottawa, ON)
MAD	Multiple wavelength Anomalous Dispersion (protein crystallography)	SLS	Swiss Light Source or Synchrotron Lichtquelle Schweiz (Villigen, Switzerland)
MAX I, II or III	Synchrotrons at MAX-lab (Lund, Sweden)	SPring-8	Super Photon ring - 8 GeV (Sayo-gun, Hyogo, Japan)
McMaster	McMaster University (Hamilton, ON)	SR	Synchrotron Radiation
MCD	Magnetic Circular Dichroism (XAS)	SRC	Synchrotron Radiation Centre (U. of Wisconsin-Madison, Madison, WI)
MCT	Mercury-Cadmium-Telluride (IR detector)	SRS	Synchrotron Radiation Source (Daresbury, UK)
MEM	Maximum Entropy Method (XRD)	SSI	Saskatchewan Synchrotron Institute
MEMS	MicroElectroMechanical Systems	SSRL	Stanford Synchrotron Radiation Laboratory (Stanford, CA)
MLD	Magnetic Linear Dichroism (XAS)	STXM	Scanning Transmission X-ray Microscopy
MMO	Materials and Manufacturing Ontario (Toronto, ON)	TEY	Total Electron Yield (XAS)
Monochromatic	For SR, this denotes a selected energy range (plus harmonics) and relatively narrow bandwidth	U10B	IR beamline at NSLS (and Canadian PRT)
MOPD	Maximum Optical Path Difference (IR)	UC	University of California (several locations)
MOU	Memorandum of Understanding	U. of A.	University of Alberta (Edmonton, AB)
NCSU	North Carolina State University (Raleigh, NC)	U. of C.	University of Calgary (Calgary, AB)
NEXAFS	Near-Edge X-Ray Absorption Fine Structure	U. of S.	University of Saskatchewan (Saskatoon, SK)
NRC	National Research Council Canada (Ottawa)	UVSOR	UltraViolet Synchrotron Orbital Radiation facility (Okazaki, Japan)
NRCan	Natural Resources Canada (Ottawa)	UWO	University of Western Ontario (London, ON)
NSERC	Natural Sciences and Engineering Research Council of Canada (Ottawa, ON)	VCD	Vibrational Circular Dichroism (IR)
NSLS	National Synchrotron Light Source (BNL, Upton, NY)	VESPERS	Very Sensitive Elemental and Structural Probe Employing Radiation (CLS beamline)
OP2	Optical Point 2 (CLS): the point where the electron beam turns upwards from the linac vault.	VLS-PGM	Variable Line Spacing Plane Grating Monochromator beamline (CLS)
PBI	Plant Biotechnology Institute (NRC, Saskatoon, SK)	WD (or WED)	Western Economic Diversification Canada
PDR	Preliminary Design Report (for CLS beamlines)	White beam	SR beam that has not been modified, except possibly by filtering or reflection
PEEM	PhotoElectron Emission Microscopy	XANES	X-ray Absorption Near Edge Spectroscopy
PGM	Plane Grating Monochromator	XAFS	X-ray Absorption Fine Structure (a combination of XANES and EXAFS).
Photon Factory	Synchrotron at KEK (Tsukuba, Japan)	XAS	X-ray Absorption Spectroscopy
PI	Principal Investigator	XEOL	X-ray Excited Optical Luminescence
PLY	Photoluminescence Yield (XAS)	XNCD	X-ray Natural Circular Dichroism
PNC-CAT	Pacific Northwest Consortium—Collaborative Access Team (APS)	X-PEEM	X-ray PhotoElectron Emission Microscopy
PRT	Participating Research Team	XRD	X-ray Diffraction (usually X-ray powder diffraction)
PX	Protein Crystallography	XRF	X-ray Fluorescence
REXS	Resonant Elastic X-ray Scattering		
RF	Radio Frequency		
RIXS	Resonant Inelastic X-ray Scattering		