

**Table B Future capabilities of beamlines corresponding to the existing CSRF capability to be developed at CLS
(2.9 GeV, 3rd generation ,i.e low emittance, ~ 10% of that of Aladdin, 500 mA when fully operational)**

Beamline	Source	Optics	Energy Range (eV)	Energy Resolution	Flux(photon/s /0.1% bw)	End-station Capabilities
SGM	ID linear undulator	Three spherical gratings	227 –1921	up to 12,600 at 10 μ m x 10 μ m slit settings	$\sim 10^{12} - 10^{14}$ high and medium resolution	Branched lines: high resolution photoemission of solids; photoabsorption, of solids; photoabsorption and photoionization of gases, fluorescence, XMLD
Variable line space PGM	ID linear undulator	Two interchangeable variable line space plane gratings	5 - 240	10,000 at 10 μ m x 10 μ m slit settings	$\sim 10^{12} - 10^{13}$	Branched lines: photoemission of solids; photabsorption and photoionization
DCM	BM bending magnet	Double crystal InSb, pre-collimating mirror and post-focusing mirror	1800 - 5500	3,000 at Si K-edge (~1840 eV)	$\sim 10^{12}$	Photoabsorption and photoabsorption of gases and solids, soft x-ray scattering, XMCD

All three beamlines are now at a preliminary design stage. This is the time to voice your needs to the BT so that they will be addressed. Please contact personnel listed below by e-mail.

BT project coordinator and scientific advisor: T.K Sham (UWO): sham@uwo.ca

BT manager: Emil Hallin (CLS), emil@cls.usask.ca

SGM beamline coordinator: Ian Coulthard (CLS), coulthar@cls.usask.ca; CSRF contact, Yongfeng Hu:hu@julian.uwo.ca

PGM beamline coordinator: Kim Tan (CSRF), ktan2@facstaff.wisc.edu; CLS contact, Jeff Cutler:jcutler@cls.usask.ca

DCM beamline coordinator: Emil Hallin (CLS), emil@cls.usask.ca

Optics specialist: Brian Yates (CLS), byates@cls.usask.ca

Endstation and industrial application specialists: Yongfeng Hu(CSRF), yhu@julian.uwo.ca; Jeff Cutler (CLS), jcutler@cls.usask.ca

Crystal and x-ray optics consultant: De-tong Jiang (CLS): Jiang@cls.usask.ca