Expanding Horizons: Educational Outreach at CLS

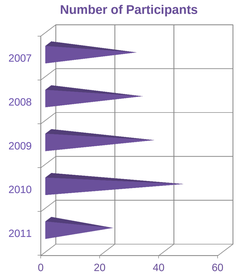
Canadian Light Source / Centre canadien de rayonnement synchrotron

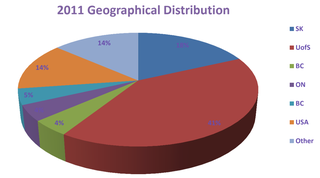
We were impressed by the amount of resources spent by CLS staff for outreach to the younger audiences. It is a fact that generating an interest in science for the younger audience is increasingly difficult. The Committee lauded this initiative by the CLS and noted that such enterprises are a key aspect of the facility access and make the CLS a good corporate citizen in its community. Once more, the committee wanted to commend the CLS for its active role in training the next generation of scientists.
– From one of many recent review committees

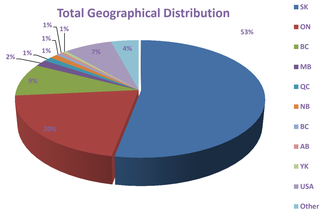
Summer Schools

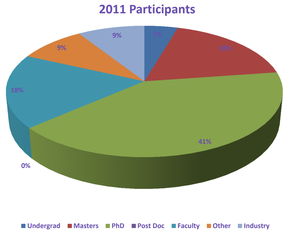
The 2007 Saskatoon Synchrotron Summer School (S^4) started the CLS staff's tradition of commitment to supporting new and beginning users. The first two summer schools were general, with the intention of helping all types of users become more familiar with the techniques offered at the facility. In 2009, we focused on environmental sciences, and in 2010 spotlighted life sciences. The 2010 school was associated with the Synchrotron Environmental Sciences conference, and was renamed CS^3, the Canadian Synchrotron Summer School.

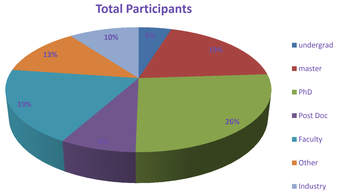
This year our theme is materials studies. A key feature of the school is practical hands-on experience at the beamlines, in sample prep, and in data analysis.





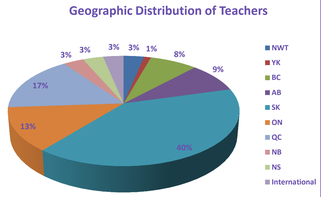


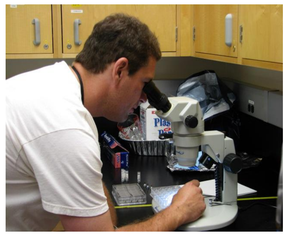


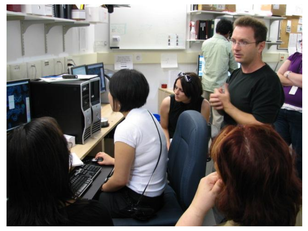


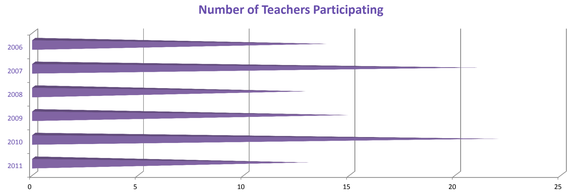
Workshops for Teachers

Every teacher that we share our enthusiasm for science with touches the lives of a thousand students. We believe that working with innovative and interested teachers will support science education for generations.







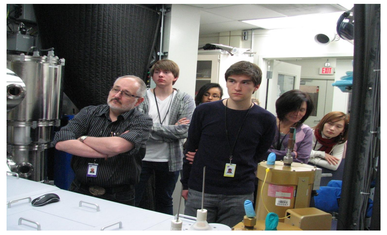


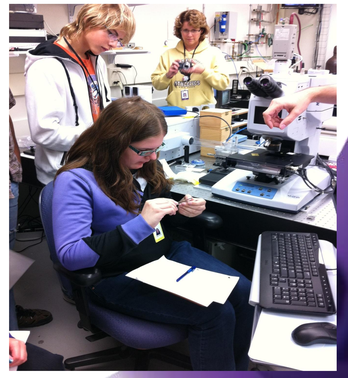
Students on the Beamlines

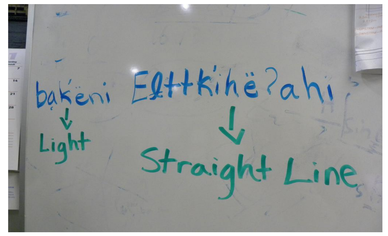
Tell me and I forget;
Show me and I remember;
Let me do and I understand.
(Chinese Proverb)

Introducing students to authentic scientific inquiry with synchrotron experience, Students on the Beamlines connects high school science with world-class research. The program enables students to become part of the research — to actively participate and learn directly from experimentation, not demonstration.

		Total	2011/12	2010/11	2009/10	2008/09	2007/08	2006/07	2005/06
Number of groups		27	3	6	5	7	4	1	1
Number of students		251	38	60	25	61	20	19	28
Provinces/Territories		6/1	SK, AB, QC	SK, ON, NWT	ON, AB, NB, NWT, SK	SK, ON, QC, AB	AB, SK, NS	SK	SK
Beamline Shifts Used	FarIR	7	3	3		1			
	MidIR	9	3	1	3	1	1		
	SGM	12	1	2	2	3	2	1	1
	PGM	2				1	1		
	SM	3		1	1	1			
	HXMA	2			1	1			
	SXRMB	2		1	1				
	BMIT	1		1					
	VESPERS	1		1					
Number of CLS Staff involved			7	8	7	8	5	3	3

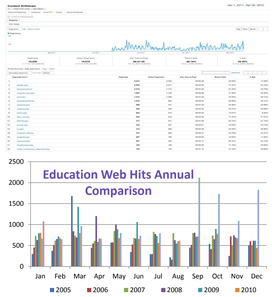


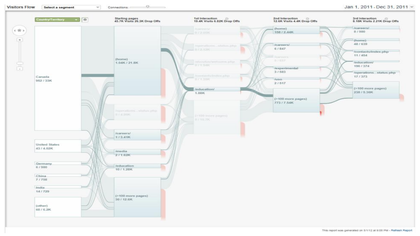


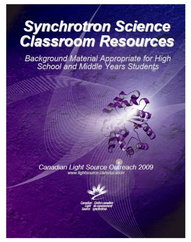


Education on the Web

The CLS website offers an array of educational content. Visitors can access plain language explanations of synchrotron science, ideas for classroom activities, and descriptions of high school student synchrotron experiments. The site also offers details for our annual summer school and workshop for teachers.

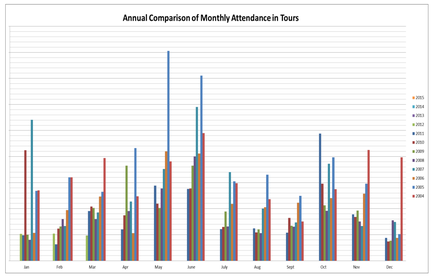


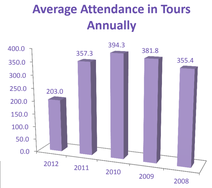


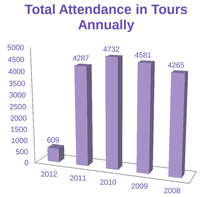


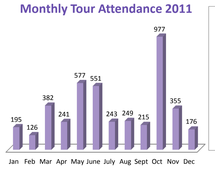
Tours

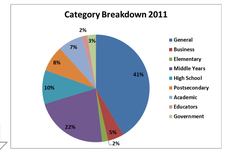
The CLS enjoys significant attention from several audiences, including academic colleagues, business and government groups, the general public, and educational audiences. Our tours of the facility have been met with great enthusiasm and we accommodate requests as often as resources allow. We are a cornerstone of Saskatoon's science community.











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