# Breaking the Ice: Toxicology in Cold Climates

 $9^{\text{th}}$  Annual SETAC Prairie Northern Chapter Meeting and Conference June  $4-5^{\text{th}}$ , 2018

**University of Alberta** 



#### 9<sup>th</sup> Annual Chapter Meeting of SETAC Prairie-Northern

### "Breaking the Ice: Toxicology in Cold Climates"

#### Monday, June 4th, 2018

Short Course - "The Biotic Ligand Model: Theory, Mechanisms,

and Applications"

1:00 pm – 4:30 pm

Dr. Chris Glover (Athabasca University)

Location: CCIS 1-140, University of Alberta (See Map)

Tox on Tap: "Challenges for Polar Bears – Inside and Out"

Speaker: Dr. Andrew Derocher (University of Alberta)

**Location:** Faculty Club Lower Bar, University of Alberta (See Map)

\* Food and drink available for purchase \*



7:00 pm - 11:00 pm





















## 9<sup>th</sup> Annual Chapter Meeting of SETAC Prairie-Northern

# "Breaking the Ice: Toxicology in Cold Climates"

Tuesday, June 5 <sup>th</sup> , 2018 – TELUS Centre Atrium and Room TEL-150								
8:30 am – 8:50 am	Registration (Poster Set-Up)							
8:50 am – 9:00 am	Opening Remarks: Dr. Mark Hanson & Dr. Greg Goss							
9:00 am – 9:30 am	PLENARY: Dr. Jim McGeer, Wilfrid Laurier University  "Establishing thresholds for the effects of inorganic contaminants in northern Canadian ecosystems"							
9:30 am – 9:50 am	Bogart, S. (University of Lethbridge)  "Potential criteria for the protection of aquatic life for water hardness using the percent change in water hardness and Ca:Mg ratio from background"							
9:50 am – 10:10 am	Klemish, J. (University of Lethbridge)  "The interactive effect of sediment bound copper and an artificially created forest fire runoff on <i>Hyalella azteca</i> "							
10:10 am – 10:30 am	<b>Delompré, P. (University of Alberta)</b> "The osmotic effect of the hyper-saline hydraulic fracturing fluid on rainbow trout, <i>Oncorhynchus mykiss</i> "							
	COFFEE BREAK (10:30 am – 11:00 am)							
11:00 am – 11:20 am	Hanson, M. (University of Manitoba)  "An ecological risk assessment for thiamethoxam in Canadian surface waters: a weight-of-evidence approach"							
11:20 am – 11:40 am	Miller, C. (University of Lethbridge)  "Effects of early life-stage exposure to tebuconazole on the reproductive physiology of adult zebrafish ( <i>Danio rerio</i> )"							
11:40 am – Noon	Mary Reiley – Society of Environmental Toxicology and Chemistry SETAC North America and SETAC Global Initiatives							



#### LUNCH BREAK (Noon – 1:00 pm)

1:00 pm – 1:30 pm	PLENARY: Rainie Sharpe, Golder Associates "Environmental monitoring in Canada's north: thou shalt versus thou should"				
	Baldwin, N. (University of Saskatchewan)				
1:30 pm – 1:50 pm	"Sublethal effects of chronic exposure to chlorpyrifos on <i>Xenopus laevis</i> tadpoles"				
	Razmara, P. (University of Lethbridge)				
1:50 pm – 2:10 pm	"The effect of copper nanoparticles on olfaction in rainbow trout (Oncorhynchus mykiss)"				
	Gault, I. (University of Alberta)				
2:10 pm – 2:30 pm	"Oil sands process-affected water: toxicity attribution and evaluating ageing as a remediation strategy"				
	COEFEE BREAK (2:30 pm _ 2:50 pm)				

# COFFEE BREAK (2:30 pm – 2:50 pm)

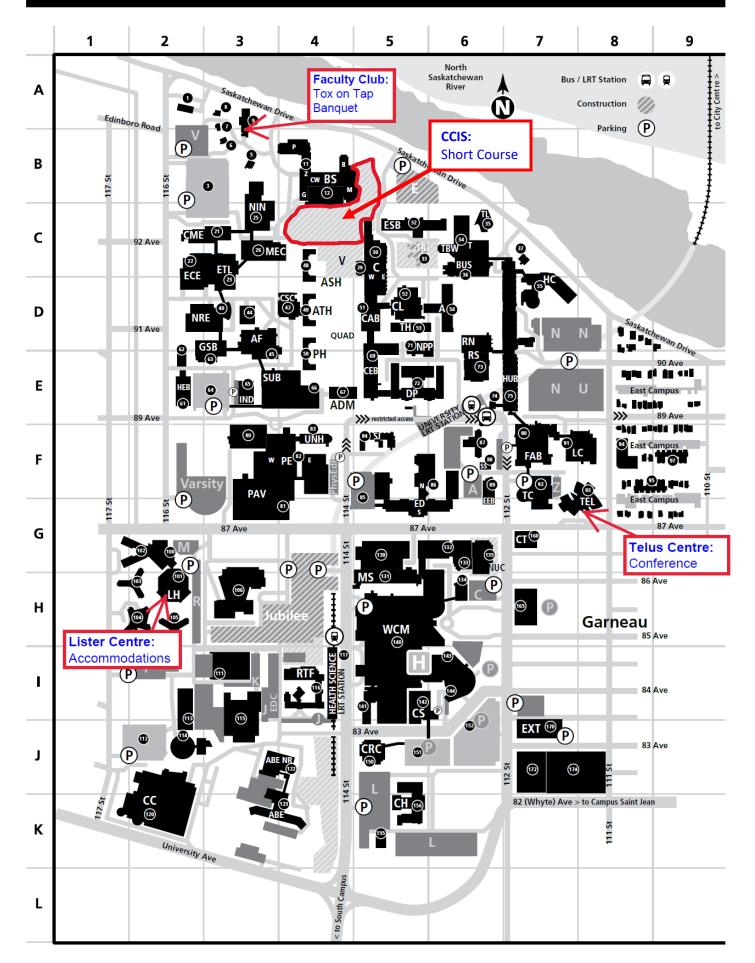
	1
2:50 pm – 3:10 pm	Everitt, S. (University of Lethbridge)  "Acute lethality of sediment-bound diluted bitumen to freshwater amphipods ( <i>Hyalella Azteca</i> )"
3:10 pm – 3:30 pm	Phillips, N. (University of Alberta) "Impacts of <i>in vitro</i> exposure to oil sands process-affected water and its fractions on mammalian immune cells"
3:30 pm – 3:50 pm	Bujaczek, T. (Grant MacEwan University)  "Microplastic pollution in the urbanized North Saskatchewan River"
3:50 pm – 4:10 pm	He, H. (University of Alberta)  "Salts and Oil: assessing the environmental toxicity of hydraulic fracturing flowback and produced water"

#### SETAC PNC Annual General Meeting (4:10 pm – 4:30 pm)

#### Poster Social (4:45 pm - 6:00 pm)

Banquet Reception, Dinner and Awards (6:30 pm) – Faculty Club, University of Alberta





# **Building List**

and Health Research (KGR)

Kelsey Hall Law Centre

Lister Centre

MacKenzie Hall

LRT (University Station)

130

103

91

101

74

104

G5

H2

F8

H2

E6

H2

LC

LH

Duilding Name	Bldg #	Map #	Bldg Abbrev	Puilding Name	Bldg #	Map #	Bldg Abbrev
Building Name Aberhart Centre	# 123	# K3	Abbrev	Building Name Markin / CNRL Natural Resources	#	#	Abbrev
Aberhart Services	122	J3	ADL	Engineering Facility	40	D3	NRE
Administration	67	E4	ADM	Materials Management	111	13	
Agriculture / Forestry Centre	45	D3	AF	Mazankowski Heart Institute	144	16	
Alumni House	1	A2		Mechanical Engineering	26	C3	MEC
Arts and Convocation Hall	54	D6	Α	Medical Sciences	131	H5	MS
Assiniboia Hall	48	C4	ASH	NANUC (Nat'l High Field Nuclear			
Athabasca Hall	49	D4	ATH	Magnetic Resonance Centre)	133	G6	NANUC
Balmoral Centre		6820-1		National Institute for Nanotechnology	25	C3	NINT
Biological Sciences Centre	11	B4	BS	Newton Place	165 71	H7 E5	NPP
BS B—Botany Wing BS CW—Centre Wing				North Power Plant (Graduate Students' Centre) Old St Stephen's College (Alberta Community Dev		F6	NPP
BS G—Genetics Wing				Pembina Hall	50	E4	PB
BS M—Microbiology Wing				Phillips Services Building	113	12	
BS P—Psychology Wing				Physical Educ and Rec Centre, Van Vliet	82	F3	PE
BS Z—Zoology Wing				PE E—East Wing			
Business	36	C6	BUS	PE W—West Wing			
Butterdome (Universiade Pavillion)	81	G3	PAV	RCMS (Physical Plant Shop)	62	E2	
Cameron Library	52	D5	CL	Research Transition Facility	116	14	RTF
Campus Tower	160	G7	CT	Ring House 1	5	B3	
Canadian Blood Services	150	J5	CRC	Ring House 2	6	B3	
Centennial Centre for Interdisciplinary Science	12 51	B4 D5	CAD	Ring House 3	7 8	B3 A3	
Central Academic Building (CAB) CHA Parkade	152	J6	CAB	Ring House 4 Rutherford House	8 37	C7	
Chemical / Materials Engineering	21	C3	CME	Rutherford Library, North and South	73	E6	RN, RS
Chemistry Centre, Gunning / Lemieux	30	C5	C	Saint Joseph's College	84	F5	SJ
C E—East Wing				Saint Stephen's College	88	F6	SS
C W—West Wing				Schäffer Hall	102	G2	
Childcare Centre	155	K5		South Field Car Park	112	J2	
Civil / Electrical Engineering	69	E5	CEB	Triffo Hall (Killam Centre for Advanced Studies)	53	D5	TH
Clare Drake Arena	80	F3		Stadium Car Park	64	E3	
Clinical Sciences	142	15	CS	Structural Engineering Lab, Morrison	44	D3	
College Plaza	172	J7	ccc	Students' Union Building (SUB)	66	E4	SUB
Computing Science Centre Corbett Hall	42 156	D4 K5	CSC CH	TELUS Centre	93 114	F8 J2	TEL
Cross Cancer Institute (WW)	120	K2	CC	Thermal Energy Storage Timms Centre for the Arts	92	F7	TC
Dentistry / Pharmacy Centre	72	E5	DP	Timms/TELUS Car Park	92	F7	
Earth Sciences	32	C5	ESB	Tory Lecture Theatres	35	C6	TL
East Campus Villiage Blk 2	95	F8		Tory, Breeze Way	34	C6	TBW
East Campus Villiage Blk 4	97	F9		Tory, HM	34	C6	T
ECERF Car Park	22	D3		Universiade Pavilion (Butterdome)	81	G3	PAV
Education Car Park	85	G5		University Hall	83	F4	UNH
Education Centre, North and South	86	F6	ED	University Hospitals Outpatient Residence	141	15	
Electrical & Computer Engineering	22		5.05	University Hospitals Parkade	151	J5	E1/E
Research Facility	22	D2	ECE	University Terrace	170 82	J7 F3	EXT PE
Emergency Wing (WC Mackenzie Health Sciences Centre)	143	16		Van Vliet Physical Educ and Rec Centre V Wing	82 29	C5	PE
Engineering Teaching	143	10		Walter Mackenzie Health Sciences Centre	140	H5	WCM
Learning Complex	23	D3	ETL	Windsor Car Park	3	C2	WCIVI
Environmental Engineering	89	F6	EEB	Windsor Park Plaza	174	J7	
Faculty Club	9	A3		Zeidler Ledcor Centre	134	G5	
Fine Arts Centre	90	F7	FAB				
Foote Field		11601-	68 ave	Not shown on map:			
General Services	63	E3	GSB	Augustana Campus Camrose, AB			AU
Health Research Innovation Facility - East	135	G6		Campus Saint-Jean 8406, rue Marie Anne	Gaboury (91	st)	FSJ
Health Sciences Centre, WC Mackenzie	140	H5	WMC	Enterprise Square 10230 Jasper Ave			ESQ
Heating Plant	115	13					
Henday Hall	105	H2					-a 510
Heritage Medical Research Centre HUB International	132 75	G6 E7	HUB	South Campus			72 Ave
Human Ecology	61	E7 E2	HEB		Belgravia Ro	ad	11351
Humanities Centre	55	D7	HC	N.			
Industrial Design Studio	65	E3	IND		*-		
International House	94	F8	_	90 6			. 7
Jubilee Auditorium, Northern Alberta	106	Н3					13 St
Katz Group - Rexall Centre for Pharmacy				For			-

