







## December 6th, 2019

## **Ecohydrology Research Symposium**

Morning and Afternoon Sessions		
Everyone welcome – Please register		
8:30 - 9:00	Registration opens (DC 1301)	
	Opening and Welcoming Remarks (DC 1302)	
Session Chair: Nancy Goucher		
9:00 - 9:10	Dave Rudolph (Chair, Dep. of Earth and Env. Sciences)	
	Roy Brouwer (Executive Director, Water Institute)	
9:10 - 9:20	Fereidoun Rezanezhad, Chris Parsons	
	Overview of the Ecohydrology Research Group (2011-2019)	
Session 1: Molecular Processes (DC 1302)		
Session Chair: Ekaterina Markelova		
9:20 - 9:40	Laurent Charlet, University of Grenoble-Alpes, France	
	Silver nanowires recycling and toxicity	
9:40 - 10:00	Christina Smeaton, Memorial University of Newfoundland,	
	Canada	
9:40 - 10:00	Microbial bioenergetics: Bridging the gap between theory and	
	application to biogeochemistry	
10:00 - 10:20	Steeve Bonneville, Université Libre de Bruxelles, Belgium	
	Some old fungi stories	
	Gernot Nehrke, Alfred Wegener Institute, Germany	
10:20 - 10:40	Solution stoichiometry and calcite growth: Past and present	
	results	
10:40 - 11:00	Coffee break (DC 1301)	
Session 2: Environmental (Geo)chemistry (DC 1302)		
Session Chair: Ana Lima		
11:00 - 11:20	<b>Céline Pallud</b> , University of California at Berkeley, USA	
	Temperature effects on iron reduction and dissolved organic	
	carbon export in subalpine wetland soils	
	Jean-François Gaillard, Northwestern University, USA	
11:20 - 11:40	Probing the edge for understanding the link between sulfur	
	metabolism and Hg biouptake	
11:40 - 12:00	<b>Thilo Behrends</b> , University of Utrecht, The Netherlands	
	Redox reactivity of iron <del>oxyhydroxides</del> in clays	
12:00 – 12:10	<b>Lightning Talks,</b> Ecohydrology Research Group	
	Presenters: Ekaterina Markelova, Kunfu Pi, Linden Fairbairn	
12:10 - 13:00	Lunch served (DC 1301)	

Session 3: The Power of Modelling (DC 1302)  Session Chair: Babak Shafei		
	Christof Meile, University of Georgia, USA	
13:00 - 13:20	Tiny multitudes: The challenge of scale in microbial reactive transport models	
13:20 - 13:40	Raoul Couture, Laval University, Canada	
	Chasing a moving target: Modelling Arctic lake dynamics under rapid change	
13:40 - 14:00	Nandita Basu, University of Waterloo, Canada	
	Nutrient legacies and water quality modelling	
14:00 - 14:20	Mayumi Seto, Nara Women's University, Japan	
	Application of bioenergetics in astrobiology and ecology	
14:20 - 14:30	Lightning Talks, Ecohydrology Research Group	
14:30 - 15:00	Presenters: Mahyar Shafii, Mehdi Gharasoo, Steph Slowinski Coffee break (DC 1301)	
14.30 - 13.00	Session 4: Biogeochemical Cycles (DC 1302)	
Session 4: Biogeochemical Cycles (DC 1302)  Session Chair: Helen Powley		
	Ivan L'Heureux, University of Ottawa, Canada	
15:00 – 15:20	Stochastic coupling between biogeochemical cycles and orbital	
	forcing during the late Quaternary	
15:20 - 15:40	Homa Kheyrollah Pour, Wilfrid Laurier University, Canada	
	Remote sensing in ecohydrology	
15:40 - 16:00	Anniet Laverman, University of Rennes, France	
	Nitrate reduction rates related to organic matter quality and	
	quantity in riparian wetland sediments	
16:00 - 16:20	Taylor Maavara, Yale University, USA	
	Buckets and hoses: Using simple mechanistic box models to	
	answer big biogeochemical questions	
16:20 - 16:30	<b>Lightning Talks,</b> Ecohydrology Research Group	
	Presenters: Rute Pinto, Tamara Van Staden, Nady Kao	
16:30 - 17:15	Ecohydrology Research Group Lab Tour Limited spaces available – please sign-up at registration desk	

Evening Keynote Lecture University of Waterloo Faculty Club		
By invitation only		
17:30 - 18:30	Reception	
18:30 - 18:40	Welcoming Remarks: Carla Korestky, Western Michigan	
	University, USA	
18:40 - 19:10	Keynote Lecture: Carl Steefel, Lawrence Berkeley National	
	Laboratory, USA	
	Reactive transport modeling at the crossroads	
19:10 - 19:20	Final Remarks: Philippe Van Cappellen	
19:20 - 21:30	Dinner	