

DRAFT March 09, 2017



## The 12th Hydrocarbon Summit

### Transport, Fate and Remediation of Hydrocarbons in the Subsurface

University of Waterloo, April 19 and 20, 2017

Wednesday April 19 – DAY 1  
DC 1302

**12:30 – 13:30 REGISTRATION & LUNCH, DC 1301**

- 13:30 – 13:40 Neil Thomson (UW) - Welcome and agenda
- 13:40 – 14:00 Roger Claff (API) - Updates from API
- 14:00 – 14:20 Michelle Cho (UW) – Field trials of chaotic advection for enhanced reagent delivery
- 14:20 – 14:40 Stuart Linley (UW) - Targeted delivery of nanomaterials to contaminated sites
- 14:40 – 15:00 Tim Leshuk (UW) - Passive solar degradation of naphthenic acids in oil sands process-affected water with floating photocatalysts

**15:00 – 15:20 BREAK**

- 15:20 – 15:40 Ahmed Chowdhury (UWO) – Activated persulfate and electrokinetics
- 15:40 – 16:00 Lorenzo Simonetti (UW) – Media interactions during electrokinetic delivery of persulfate and thermal activation
- 16:00 – 16:20 Anh L. Pham (Carleton) – Contaminant oxidation by heat-activated persulfate: Effect of temperature on contaminant transformation pathway and product distribution
- 16:20 – 16:40 Jorge Gabayet (UWO) - Pilot testing and design modelling of STARx hottpad system for ex situ treatment of petroleum hydrocarbon sludge
- 16:40 – 17:00 Gavin Grant (Savron Solutions) – Operation of full-scale STARx system
- 17:00 – 17:15 Discussion

**End of Day 1**

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Thursday April 20 – DAY 2  
DC 1302

### 07:30 – 08:30 CONTINENTAL BREAKFAST, DC 1302

- 08:30 – 08:50 Summer Jin (UW) - Dual oxidant system for in situ treatment of organic contaminants
- 08:50 – 09:10 Bruna Soldera (USP) – Sustainable water and residual hydrocarbons
- 09:10 – 09:30 Bruce Tunnicliffe (Vertex Environmental) - Using a novel adsorptive method for cVOC treatment: A case study
- 09:30 – 09:50 Andrea Marrocco (UW) - Carbon based injectates for the remediation of petroleum hydrocarbons in groundwater
- 09:50 – 10:10 Nicole Soucy (Queen's) - Mass flux from bubble-facilitated transport of VOCs: Laboratory experiments and potential effects on vapour intrusion

### 10:10 – 10:40 BREAK

- 10:40 – 11:00 James Cullen (Golder) - Semi-automated LNAPL recovery at several sites in Ontario
- 11:00 – 11:20 Janice Cooper (UW) - Addressing challenges with the detection of PFAS degradation products
- 11:20 – 11:40 Rachel Baldwin (UW) - Removal of PFOS in the presence of granular zerovalent iron
- 11:40 - 12:00 Saeid Shafieiyoun – Intra-NAPL diffusion, multi-component mass transfer, and chemical oxidation

### 12:00 – 13:00 LUNCH, DC 1302

- 13:00 – 13:20 Rick Devlin (KU) – Update on PVPs
- 13:20 - 13:40 Zahra Ardestani (UW) - Foam as a vehicle for reagent delivery
- 13:40 – 14:00 Behrad Gharedaghloo (UW) – Influence of pore surface heterogeneity on sorption of dissolved hydrocarbons in peat soils
- 14:00 – 14:20 **TBD**
- 14:40 – 15:00 Neil Thomson (UW) - Closing