

Institute for Water Innovation (IWI)

Workshop on Water Challenges in the Natural Resource Industries

Friday, June 17, 2016

Alumni Hall, Victoria College Building
91 Charles Street West, Toronto, ON

8:00 am to 8:30 am

Registration and Breakfast

8:30 am to 8:45 am

Welcome and Introduction:

Professor Vlad Papangelakis, Director, Institute for Water Innovation
Chemical Engineering & Applied Chemistry, U of T

Mandeep Singh Rayat, Manager, Institute for Water Innovation
Faculty of Applied Science and Engineering, U of T

8:45 am to 10:15 am

Keynote Panel

Moderator:

Dr. Sam Marcuson

Former Vice President, Vale Canada Ltd.

Emily Moore, Global Director, Water
HATCH

Michel Julien, Vice President Environment
Agnico Eagle Mines

Mike Sheedy, Vice President, Technology Development
Eco-Tec

John Brogly, Director, Water Environmental Priority Area
Canada's Oil Sands Innovation Alliance (COSIA)

10:15 am to 10:30 am

Break

10:30 am to 11:45 am

Theme I: Process Water Treatment and Recycling Panel

Moderator:

Dr. Sam Marcuson

Former Vice President, Vale Canada Ltd.

i. Current Challenges in the Reuse and Recycling
of Process Water

Kati Bell, Water Reuse Global Practice Leader
MWH Global

ii. New Advances in Solid and Oil Removal Technologies

Professor Edgar Acosta
Chemical Engineering & Applied Chemistry, U of T

iii. Process Water Treatment Technologies

Howie Honeyman, CEO
Forward Water Technologies

iv. Effectively Treating Water with High Total Dissolved
Solids (TDS) Using Nanofibre Membrane Distillation

Professor Ramin Farnood
Chemical Engineering & Applied Chemistry, U of T

v. Electrochemical Technologies for the Treatment of
Brackish Water

Professor Donald Kirk
Chemical Engineering & Applied Chemistry, U of T

11:45 am to 12:30 pm

Networking Lunch

N SERC Partnership Grants

Alejandra de Almeida, Research & Innovation Development Officer
Natural Sciences and Engineering Research Council of Canada

12:30 pm to 1:45 pm

Theme II: Effluent Water Treatment and Remediation Panel

Moderator:

Dr. Sam Marcuson

Former Vice President, Vale Canada Ltd.

i. Current Challenges in the Treatment of Mine Effluent Streams

Jes Alexant, Industrial and Mine Water Treatment Leader
Stantec Consulting

ii. Advances in Groundwater Remediation

Professor Brent Sleep
Civil Engineering, U of T

iii. Adsorption Technologies for the Treatment of Oil Sands Process Water

Professor Charles Jia
Chemical Engineering & Applied Chemistry, U of T

iv. Advances in Engineered Wetlands and Applications for the Natural Resource Industries

Professor Elodie Passeport
Civil Engineering and Chemical Engineering & Applied Chemistry, U of T

v. Using Genomics Based Technologies to Treat Resource Industry Effluents

Professor Elizabeth Edwards
Chemical Engineering & Applied Chemistry, U of T

1:45 pm to 2:00 pm

Break and Transition into Breakout Groups

2:00 pm to 2:45 pm

Industry Focus Session

Two breakout sessions based on Process Water Treatment & Recycling, and Effluent Water Treatment & Remediation

- i.** What are your company's greatest research needs?
- ii.** What is their importance in terms of short-term, medium-term, on-going/long-term horizons?
- iii.** What strategic University-Industry partnership opportunities exist?

2:45 pm to 3:15 pm

Reports from Breakout Sessions

Results will be used by IWI to develop a collaborative research action plan.

3:15 pm to 3:30 pm

Closing Remarks

Additional Support by:

Institute for Water Innovation (IWI)

Workshop on Water Challenges in the Natural Resource Industries
Alumni Hall, Victoria College Building
91 Charles Street West, Toronto, ON

