Extraction and Upgrading of Oilsands Bitumen Short Course

Taught by Drs. Jacob Masliyah and Murray Gray, the objective of this intensive short course is to introduce the key technical and scientific concepts of the extraction and upgrading of bitumen from the oilsands to both new graduates and experienced professionals who are entering the oilsands industry. The rapid expansion of oilsands production is bringing many professionals into the industry.

Enrolment is limited to 35 participants to ensure that the course presentation is responsive to the interests and background of the participants, and to allow strong group interaction.

Audience: Open to the general public

Location: Calgary, Alberta as well as Fort McMurray and Edmonton depending on demand.

Contact Information:

Murray Gray, University of Alberta Dept of Chemical and Materials Engineering 7th Floor ECERF, 9107 - 116th Street Edmonton, AB Canada T6G 2V4

murray.gray@ualberta.ca

Tel: 780-492-7965

Dr. Jacob Masliyah Webpage

Detailed Schedule:

	Day One
0830-0900	Introductions
0900-0945	Introduction to Oilsands
	i) Properties of Oilsands
	(Masliyah)
0945-1000	Coffee Break
1000-1030	ii) Oilsands Interfacial Properties
	(Masliyah)
1030-1100	Bitumen Physical Properties
	(Gray)
1100-1115	Break
1115-1200	Bitumen Origins and Chemistry (Gray)
1200-1230	Lunch
1230-1330	iii) Recovery steps
	Commercial Extraction Plants
	(Masliyah)
1330-1345	Break
1345-1430	Ore Processability
	Hydrotransport
	(Masliyah)
1430-1500	North American crude oil markets
	(Gray)
1500-1515	Break
1515-1600	Commercial upgrading plants (Gray)

	, m
	Day Two
0830-0930	Primary Separation Cell
	Bitumen froth treatment
	(Masliyah)
0930-	Coffee Break
0945	
0945-1030	Tailings management
	Water management (Masliyah)
1030-1045	Break
1045-1130	Reclamation
	SAGD (Masliyah)
1130-1215	Benchmarking Upgrading Processes
	Separations
	(Gray)
1215-1300	Lunch
1300-1400	Primary Upgrading
	i) Coking
	ii) Hydroconversion
	(Gray)
1400-1415	Break
1415-1500	Hydrotreating
	Integration of extraction and upgrading
	(Gray)
1500-1515	Break
1515-1600	Discussion of challenges (All)
1600	Course Evaluation