

SC123: Orebody Knowledge – Leveraging Cross-disciplinary Datasets
November 6-10, 2023

Monday, November 6, 2023

Time Start	Time end	Speaker	Topic
800	850	-----	Check-in opens and coffee -----
850	900	Shaun Barker (MDRU)	Welcome
900	930	John Steen (BRIMM)	Why does the mining industry need to do better on orebody knowledge?
930	1030	Cassady Harraden (MDRU)	Orebody knowledge, drill core, key terms, and the importance of rock and mineral observations
1030	1100	-----	Morning tea -----
1100	1130	Hannah Lang (MineSense)	Ongoing ore body knowledge and monitoring – MineSense Technologies
1130	1230	Shaun Barker & Cassady Harraden (MDRU)	Mineralogy, rock properties, orebody models, and analytical methods
1230	1330	-----	Lunch -----
1330	1400	Regina Baumgartner (Teck)	How Reproducible are Mineralogical Data? A round-robin case study
1400	1430	Shaun Barker (MDRU)	Sensing technologies and rock scanners
1430	1530	John Thompson (PetraScience)	Barriers to orebody knowledge and ongoing characterization + Group discussion
1530	1600	-----	Afternoon tea -----
1600	1700	Jim Lang (NorthWest Copper)	The critical role of the geologist in de-risking projects as they advance
1700	1730	Exercise 1 (groups): Introduction	Orebody challenge – linking orebody characteristics to geology, mining, engineering, metallurgical, environmental and economic considerations

Tuesday, November 7, 2023

Time Start	Time end	Speaker	Topic
830	900	-----	Check-in opens, coffee, and time to work on Exercise 1 -----
900	1000	Erik Eberhardt (UBC)	Basics of ground support, pit design/pushback, underground development and design
1000	1030	Erik Eberhardt (UBC)	Rock mass classification schemes and indices
1030	1100	-----	Morning tea -----
1100	1200	Erik Eberhardt (UBC)	Common data collected from drill core VS underground observations, benchtop tests
1200	1300	-----	Lunch -----
1300	1330	Ryan Campbell (Freeport)	Importance of OBK, lessons learned about geology, and links to caving at Grasberg
1330	1400	Erik Eberhardt (UBC)	Rockburst and other hazards, caving and fragmentation
1400	1430	Kevin Byrne (Teck)	Linking OBK to operational value drivers
1430	1530	Exercise 2	Calculated mineralogy
1530	1600	-----	Afternoon tea -----
1600	1730	Exercise 3	Linking geotechnical/processing parameters to mineralogy and domaining

Wednesday, November 8, 2023

Time Start	Time end	Speaker	Topic
830	900	-----	Check-in opens, coffee, and time to work on Exercise 1 -----
900	945	Bern Klein (UBC)	Principles of comminution, methods, equipment
945	1030	Bern Klein (UBC)	Processing circuit basics: flotation, gravity, magnetic, cyanide leach
1030	1100	-----	Morning tea -----
1100	1130	Bern Klein (UBC)	Liberation and recovery - factors and orebody knowledge required
1130	1230	Bern Klein (UBC)	Minerals processing testwork, bench-scale tests, reading and designing flowsheets
1230	1330	-----	Lunch -----
1330	1345		Walk to Mining Engineering Building
1345	1400		Lab safety induction and PPE check
1400	1730		Lab demonstrations <i>Rotate groups of ~5 around set up lab demos, including: Drop Weight, Bond Ball Mill, Flotation, Magnetic/gravity separation, HPGR & fine-grinding</i>

Thursday, November 9, 2023

Time Start	Time end	Speaker	Topic
830	900	-----	Check-in opens, coffee, and time to work on Exercise 1 -----
900	1030	Roger Beckie (UBC, TBC)	ABA, static testing, metal mobility, tailings assessment, environmental impact
1030	1100	-----	Morning tea -----
1100	1230	McLean Trott (ALS GoldSpot)	The 3 P's: Preparation and Parameters to Predictions
1230	1330	-----	Lunch -----
1330	1500	Pim van Geffen (ERM)	From greenfields to green fields: the value of exploration data throughout the mining lifecycle
1500	1530	-----	Afternoon tea -----
1530	1615	Dave Lawie (IMDEX)	Building improved orebody knowledge to drive value outcomes
1615	1700	Ayesha Ahmed & Regina Baumgartner (Teck)	Acid-base-accounting: Breathing new life into old data

Friday, November 10, 2023

Time Start	Time end	Speaker	Topic
830	900	-----	Check-in opens, coffee, and time to work on Exercise 1 -----
900	930	Michael Doggett (Beach Meadows)	Mineral economics, project evaluation, royalties, and industry trends
930	1030	Albert Chong (Wheaton Precious Metals)	Orebody knowledge and investment decisions
1030	1100	-----	Morning tea -----
1100	1230	Exercise 1	Group presentations and discussion
1230	1330	-----	Lunch -----
1330	1430	Gabriela Brando & Kevin Byrne (Teck)	High resolution GeoMet
1430	1500	Geoff Owen (Teck)	Application of computer vision for structural data extraction
1500	1530	-----	Afternoon tea -----
1530	1630	Group Exercise	Drilling down on orebody knowledge: follow your gut!
1630	1645	Shaun Barker (MDRU)	Concluding remarks, social