

## **COURSE AGENDA**

Monday, June 17, 2019	
7:00 am - 5:00 pm	Registration
8:00 am - 10:00 am	<ol> <li>Welcome &amp; Introduction (15min, SB)</li> <li>Overview of Emissions (20min, DW)</li> <li>Emission Fundamentals -         <ul> <li>A. Fluoride Emissions &amp; Dry Scrubbing Basics (60min, SL)</li> <li>B. Group Discussion - Fluoride Emissions</li> </ul> </li> </ol>
10:00 am - 10:15 am	Break
10:15 am - 12:00 pm	<ul> <li>3. Emission Fundamentals, cont'd</li> <li>C. Sulfur Emissions (45min, SB)</li> <li>=short break==</li> <li>4. Dry Scrubber Design -</li> <li>A. Basics of Pot Ventilation (30min, SB)</li> <li>B. Key Operating Areas (30min, DW)</li> </ul>
12:00 pm - 1:00 pm	Lunch
1:00 pm - 2:30 pm	<b>5. Pot Ventilation &amp; Scrubber Technologies -</b> A. Dry Scrubbers Technology & Designs (60min, SL) B. Gas Flows (30min, SL)
2:30 pm - 2:45 pm	Break
2:45 pm - 3:45 pm	5. Pot Ventilation & Scrubber Technologies, cont'd - C. Alumina Flows (30min, SL)
3:45 pm - 4:00 pm	Break
4:00 pm - 5:45 pm	6. Guest Lecture - A. Environmental Improvements at TRIMET (60min, Dr. Elmar Sturm) B. Group Discussions – Attendees to share their own major control challenges
6:30 pm - 8:00 pm	Welcome Reception & BBQ sponsored by TRIMET
	Tuesday, June 18, 2019
7:00 am - 5:00 pm	Registration
8:00 am - 10:00 am	7. Dry Scrubber Operation - A. Impact of Alumina Properties (60min SL) ==Short break== B. Operational Considerations & Challenges (60min, SL)
10:00 am - 10:15 am	Break
10:15 am - 11.45 am	<ul> <li>7. Dry Scrubber Operation, cont'd</li> <li>B. Operational Considerations &amp; Challenges, cont'd (30min, SL)</li> <li>=Short break at 11 AM==</li> <li>C. Emission Monitors (60min DW)</li> </ul>
12:00 pm - 1:00 pm	Lunch
1:00 pm - 3:00 pm	7. Dry Scrubber Operation, cont'd D. Performance Metrics (60min, SL) ==Short break== E. Alumina Properties and Particle Attrition (60min, SL)
3:00 pm - 3:15 pm	Break



3:15 pm - 4:45 pm	<ul> <li>8. SO2 Wet Scrubbers (75min, SB)</li> <li>A. Introduction &amp; Key Areas</li> <li>B. Operation &amp; Control - Designs, Types, Operational Aspects</li> <li>==short break==</li> </ul>	
4:45 pm - 5:15 pm	9. Management of Potroom Fugitive Emissions (30min, DW) - Fluorides, Particulates, PFCs, Impact of Operations, Emission Controls, Maintenance, Process Control, Audits	
5:15 pm - 6:00 pm	10. Group Discussions – Attendees to share their own major control challenges	
	Wednesday, June 19, 2019	
8:00 am	Registration / Bus departs at 8 am	
8:30 am - 12:00 pm	11. Plant Tour at TRIMET, Hamburg	
12:00 pm - 1:00 pm	Lunch	
1:00 pm - 2:00 pm	<b>12. Management of Potroom Fugitive Emissions, cont'd</b> (60min, DW) - Fluorides, Particulates, PFCs, Impact of Operations, Emission Controls, Maintenance, Process Control, Audits	
2:00 pm - 2:15 pm	Break	
2:15 pm - 3:15 pm	13. PFC Emissions (60min, DW)	
3:15 pm - 3:30 pm	Break	
3:30 pm - 5:00 pm	14. Process Calculations for Environmental Engineering (90min, SB)	
5:00 pm - 5:45 pm	15. Guest lecture - Environmental Practices for GTCs at Hydro Aluminium (45min, Dr. Are Dyrøy)	
Thursday, June 20, 2019		
7:00 am - 5:00 pm	Registration	
8:00 am - 10:00 am	16. Guidelines for Engineering, Procurement, & Construction of Scrubber Technologies (60min, SB) ==Short break== 17. Advancements & Davalanments in Scrubber Emission Controls (60min	
	<b>17. Advancements &amp; Developments in Scrubber Emission Controls</b> (60min, SB) Drivers, Pot Gas Cooling, Advanced Filter Bags, Compact GTCs, etc.	
10:00 am - 10:15 am		
10:00 am - 10:15 am 10:15 am - 12:00 pm	SB) Drivers, Pot Gas Cooling, Advanced Filter Bags, Compact GTCs, etc.	
	<ul> <li>SB) Drivers, Pot Gas Cooling, Advanced Filter Bags, Compact GTCs, etc.</li> <li>Break</li> <li>18. Advancements &amp; New Developments in Potroom Emission Controls (20min, DW) - Draft, Spent Anode Controls</li> <li>== Short break==</li> <li>19. Common Problems with Potroom Roof Emissions (70min, SL)</li> </ul>	
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10:15 am - 12:00 pm 12:00 pm - 1:00 pm	<ul> <li>SB) Drivers, Pot Gas Cooling, Advanced Filter Bags, Compact GTCs, etc.</li> <li>Break</li> <li>18. Advancements &amp; New Developments in Potroom Emission Controls (20min, DW) - Draft, Spent Anode Controls == Short break==</li> <li>19. Common Problems with Potroom Roof Emissions (70min, SL) Attendee preparation time</li> <li>Lunch</li> <li>20. Attendee Presentations to Group - Emission Management Plans for Key</li> </ul>	
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