

## Tailings Masterclass

### Course Schedule:

Session/Topic	Duration (8am–5pm)
<b>1. Introduction to Tailings Masterclass 2</b>	8.00am
<b>Session 1: Characterisation 2.0</b>	
2. Interlinked tools for site-wide characterisation: From satellite to UAV and geophysics <b>(Assoc Prof Steve Micklethwaite)</b>	8.30am
3. Sampling strategies for mine waste <b>(Dr Laura Jackson)</b>	8.50am
4. Field tools for waste characterisation <b>(Dr Nathan Fox)</b>	9.10am
5. Application of synchrotron technologies for mine waste characterisation <b>(Dr Anne Whitworth)</b>	9.30am
<b>Break</b>	9.45am (15mins)
<b>Session 2: Waste Engineering</b>	
6. High Voltage Pulse for future tailings <b>(Dr Christian Antonio)</b>	10.00am
7. The use of semi-inverted cyclones for water removal and size segregation of tailings material <b>(Dr Vladimir Jokovic)</b>	10.20am
8. Eco-flow sheet development and its effects on tailings <b>(Dr Marcin Ziemski)</b>	10.40am
<b>Break</b>	11.00am (30mins)
<b>Session 3: Novel Processing</b>	
9a. Innovations in fine particle flotation and its implications for Tailings Management <b>(Lizette Verster)</b>	11.30am
9b. Innovations in coarse particle flotation and its implications for Tailings Management <b>(Dr Liza Forbes)</b>	11.55am
10. Microwave surface passivation <b>(Dr Christian Antonio)</b>	12.20pm
11. Bioleaching applications for metal recovery from mine waste <b>(Prof Gordon Southam)</b>	12.40pm
<b>Break</b>	1.00pm (15mins)
<b>Session 4: Repurposing</b>	
12. In situ tailings transformation <b>(Prof Longbin Huang)</b>	1.15pm
13. New economy metal recovery from mine waste <b>(Dr Anita Parbhakar-Fox)</b>	1.35pm
14. Alternative sand from mineral ores <b>(Prof Daniel Franks/ Dr Artem Golev)</b>	1.55pm
<b>Break</b>	2.15pm (15mins)

<b>Session 5: Energy, Water and Climate</b>	
15. Tailings energy demand modelling and innovation energy solutions <b>(Dr Doug Aitken)</b>	2.30pm
16. The role of mine waste in mining decarbonisation <b>(Dr Mehdi Azadi)</b>	2.50pm
17. Tailings Management as Core Component of Environmental Reliability <b>(Assoc Prof Claire Cote)</b>	3.10pm
18. Environmental Excellence <b>(Assoc Prof Mansour Edraki)</b>	3.30pm
19. Embedding the SDGs in mine waste management <b>(Assoc Prof Glen Corder)</b>	4.00pm
<b>Participant Q and A session and workshop close (Facilitated by Dr Anita Parbhakar-Fox)</b>	4.30pm (30mins)