

# 11th Triennial Conference 2022

## Conference Program



Sunday 1st May 2022	
18:00 - 20:00	Pre-Conference Reception
Monday 2nd May 2022	
8:00 - 8:30	Registration (Tea and coffee available)
8:30 - 8:45	Welcome and Introduction: Richard Walsh
8:45 - 9:25	Keynote Address - Ken Mills <i>Subsidence Engineering – From Art to Science</i> <span style="float: right;">p. 1</span>
9:25 - 10:15	<b>Technical Session 1</b> Chairperson: Peter Corbett
9:25 - 9:45	<i>An Introduction to the Standardised Subsidence Information Management System –</i> G Li, P Pâquet, R Steuart, R Ramage, J Perceval <span style="float: right;">p. 39</span>
9:45 - 10:05	<i>Demonstration of valley closure through Punch Longwall Mining at Broadmeadow Mine -</i> D Payne, B Coutts, M Martin <span style="float: right;">p. 57</span>
10:05 - 10:15	Questions
10:15 - 10:45	Morning Tea
10:45 - 12:30	<b>Technical Session 2</b> Chairperson: Bruce Hebblewhite
10:45 - 11:05	<i>Observations of Multi-Seam Subsidence at Ashton Underground Mine -</i> K Mills and S Wilson <span style="float: right;">p. 73</span>
11:05 - 11:25	<i>Improved understanding of Residual Subsidence Movements after Longwall Mining -</i> D Kay, P DeBono, M Montgomery <span style="float: right;">p. 91</span>
11:25 - 11:45	<i>Determination of the Subsidence Mechanism for Subcritical Miniwall Panels, Airly Coal Mine -</i> Y Heritage, A Boyling, P Corbett <span style="float: right;">p. 111</span>
11:45 - 12:05	<i>Geological and Hydrogeological characteristics of the Elouera Fault and the impacts of mining -</i> R Walsh, S Brown, K Mills, R Heritage <span style="float: right;">p. 121</span>
12:05 - 12:30	Questions
12:30 - 13:30	Lunch
13.30 - 14.45	<b>Technical Session 3</b> Chairperson: Zina Ainsworth
13:30 - 13:50	<i>The Height of Connected Fracturing above a Longwall Coal Mine: A Field and Isotopic Investigation -</i> S Brown and R Walsh <span style="float: right;">p. 135</span>
13:50 - 14:10	<i>Definition of Measured Hydraulic Conductivity Zones above a Longwall Panel, United Colliery -</i> Y Heritage, B Blacka, D James <span style="float: right;">p. 141</span>
14:10 - 14:30	<i>Groundwater System Response to Longwall Mining at Springvale Mine -</i> P Corbett <span style="float: right;">p. 153</span>
14:30 - 14:45	Questions
14:45 - 15:15	Afternoon Tea
15:15 - 16:30	<b>Technical Session 4</b> Chairperson: Michael Nicholson
15:15 - 15:35	<i>An Analysis of Unplanned Coal Mine Pillar System Failures -</i> K Black, I Canbulat, C Twomey, M Semmler, J Johnston <span style="float: right;">p. 171</span>
15:35 - 15:55	<i>The Morphology of collapsed workings inferred from Surface Investigations –</i> S Fityus and J Johnston <span style="float: right;">p. 185</span>
15:55 - 16:15	<i>Subsidence Prediction from Seam Convergence Data in Bord &amp; Pillar Mine Workings below the Newcastle CBD -</i> S Baker and S Ditton <span style="float: right;">p. 201</span>
16:15 - 16:30	Questions
16:45 - 17:45	AGM for MSTs Members
19:00 - 23:00	Conference Dinner

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## Conference Program



Tuesday 3rd May 2022	
8:45 - 9:00	Tea and coffee available
9:00 - 9:05	Introduction: Richard Walsh
<b>Technical Session 5</b>	
Chairperson: Dan Payne	
9:05 - 9:25	<i>GNSS Based Real-time 3D Position Monitoring - Informing the Art of Subsidence Engineering</i> - M Nicholson, P Symons, J Ryder, C Kelly <span style="float: right;">p. 213</span>
9:25 - 9:45	<i>The use of RPAS Based Aerial Photogrammetry and Aerial Lidar in Wide Area Subsidence Monitoring and its place In the Monitoring Regime for Mining Projects –</i> P Sergeant and M Ewing <span style="float: right;">p. 227</span>
9:45 - 10:05	<i>Back-calculation of Pillar Stability in NSWs abandoned Coal Mines – An automated GIS based approach –</i> C Twomey, J Johnston, K Black, M Montgomery <span style="float: right;">p. 239</span>
10:05 - 10:20	Questions
10:20 - 10:50	Morning Tea
<b>Technical Session 6</b>	
Chairperson: Matthew Richardson	
10:50 - 11:10	<i>Management of Subsidence for the Mt. Owen Railway</i> - J Barbato, S Holmes, J Kowalczyk, L Wicks, S Moreno, E Smit, C Martin, M Hill, A Pidgeon, C Banks, A Nunes, T Furney <span style="float: right;">p. 251</span>
11:10 - 11:30	<i>Responses of free-standing railway embankments to Mine Subsidence in the Southern Coalfield</i> - A Leventhal, T Hull, R Walsh, R Barber <span style="float: right;">p. 261</span>
11:30 - 11:50	<i>Experiences From Longwall Mining Beneath the M31 Hume Motorway</i> - D J Kay, HG Buys, G Swarbrick, D Lee Shoy, C Gunaratne, M Chadwick, R Walsh, M Brunton, C Dove, A Rayner <span style="float: right;">p. 281</span>
11:50 - 12:10	<i>Structural Evaluation of Polyethylene Pipeline subject to Mine Subsidence</i> - D Ho, E Lo, G Dominish <span style="float: right;">p. 297</span>
12:10 - 12:30	Questions
12:30 - 13:30	Lunch
<b>Technical Session 7</b>	
Chairperson: Yvette Heritage	
13:30 - 13:50	<i>Managing Subsidence at Harris Creek Cliff Line</i> - R Walsh, J Barbato, A Leventhal, G Swarbrick <span style="float: right;">p. 309</span>
13:50 - 14:10	<i>Permeation Grouting of a Subsidence impacted watercourse in the Southern Coalfields</i> - G Price, B Blacka, N Le Baut <span style="float: right;">p. 327</span>
14:10 - 14:30	<i>Mine Grouting Remediation Projects in the Hunter Region</i> - M Semmler, J Johnston, C Twomey, T Cairnes, S Fityus <span style="float: right;">p. 339</span>
14:30 - 14:45	Questions
14:45 - 15:15	Afternoon Tea
<b>Technical Session 8</b>	
Chairperson: Richard Walsh	
15:15 - 15:35	<i>Subsidence Features – What is safe?</i> - S Mackenzie <span style="float: right;">p. 353</span>
15:35 - 15:55	<i>Newcastle CBD Mine Subsidence Model – Paper 1 – Background and Mining</i> - D Knott, S Ditton, H Streater, K Black, R Kingsland <span style="float: right;">p. 363</span>
15:55 - 16:15	<i>Newcastle CBD Mine Subsidence Model – Paper 2 – Pillar Stability and Subsidence Assessment</i> - D Knott, S Ditton, H Streater, K Black, R Kingsland <span style="float: right;">p. 375</span>
16:15 - 16:30	Questions
16:30 - 16:45	Closing Address: Richard Walsh
17:00 - 18:00	Post Conference Social Hour