

## CONFERENCE PROGRAM

### RESOURCE OPERATORS CONFERENCE 2025

#### 6-7 February 2025

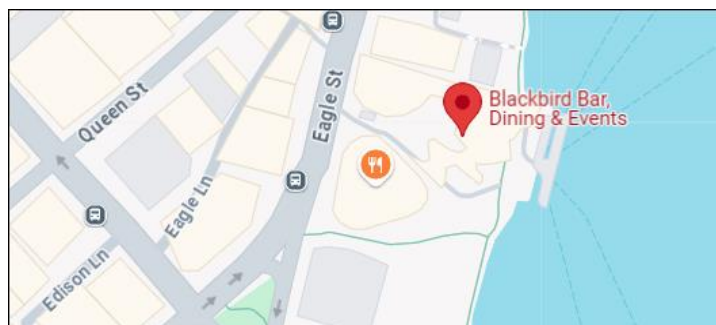
#### Thursday 6<sup>th</sup> February 2025

07:30 – 08:00 am	<i>Registration and Coffee</i>
08:00 – 08:30 am	<i>Welcome and Plenary session - Chair: Naj Aziz</i>
Welcome to the <b>University of Southern Queensland</b> – Springfield Campus by <b>Professor Prasad Yarlagadda OAM</b> , Prasad Yarlagadda OAM, Head of School, and Dean (Engineering) at the Springfield Campus.	
08:30 – 10:40 am	<i>Technical Session I (Special session) - Chairs: Ali Mirzaghobanali &amp; Naj Aziz</i>
<ol style="list-style-type: none"> <li>1. <b>Keynote Speaker, Dr Ross seedsmen:</b> Factoring-in deformations when specifying roof support (40 Minuets)</li> <li>2. <b>Ian Gray, Ratheesh Keloth:</b> Stresses within the roof of a longwall in massive strata</li> <li>3. <b>Mahdi Saadat, Mattin Khishvand, Andrew Seccombe, Richard Campbell:</b> A comprehensive python tool for predicting mining-induced subsidence</li> <li>4. <b>Adel Mottahedi, Naj Aziz, Alex Remennikov, Matthew Holden, Robert Galluzzi, Peter Craig:</b> Shear testing of rock bolts for hard rock mining</li> </ol>	
10:40 – 11:00 am	<i>Morning Tea</i>
11:00 – 12:30 pm	<i>Technical Session II - Chairs: Pabasara Kumari &amp; Peter Craig</i>
<ol style="list-style-type: none"> <li>5. <b>Ken Mills:</b> Influence of bedding plane shears associated with topography on overburden behaviour around underground coal mines</li> <li>6. <b>Xiaohan Yang, Mehdi Serati, Paul Buddery:</b> Stress and strain measurement for large physical model based on 3D-DIC</li> <li>7. <b>James Anderson, Jarred Stanes:</b> Rib support design and the coal mass rating relationship</li> </ol>	
12:30 – 01:30 pm	<i>Lunch</i>
01:30 – 03:00 pm	<i>Technical Session III - Chair: Jason Emery &amp; Katheelin Lee</i>
<ol style="list-style-type: none"> <li>8. <b>Richard Campbell:</b> Polymeric ground consolidation chemical testing and quantification of in-situ performance</li> <li>9. <b>David Evans, Grzegorz Smolnik, Robert Penczek, Jaroslaw Drozd, Jan Franek, Dawid Bucholc:</b> Styrene-free polyester resin cartridges - a breakthrough technology for health and safety, with increased mechanical properties</li> <li>10. <b>Hadi Nourizadeh, Alireza Entezam, Ali Mirzaghobanali, Kevin McDougall, Burry Polly and Naj Aziz:</b> Development of environmentally friendly grout products for cable bolt encapsulation.</li> </ol>	
03:40 – 04:00 am	<i>Afternoon Tea</i>
04:00 – 06:00 am	<i>Technical Session IV - Chairs: Adam Raine &amp; Gaetano Venticinqu</i>
<ol style="list-style-type: none"> <li>11. <b>Matthew Follows:</b> ACARP grants 2025 (invited guest)</li> <li>12. <b>Xuanyu Zhu, Mehdi Serati, Harry Asche, Niki Jackson, Alister Gayler:</b> Chloride penetration of shotcrete with crushed waste glass as fine aggregate</li> <li>13. <b>Chenhao Wang, Amre Eizad, Mark Kleinhans, Eleonora Widzyk-Capehart, Gareth Kennedy:</b> A digital twin simulation platform for 4D millimeter-wave radar-based navigation in underground mining environment</li> <li>14. <b>Masoud Samaei, Roohollah Shirani Faradonbeh, Erkan Topal:</b> Path optimisation for drill rigs: a step toward full automation in mining</li> </ol>	

#### Conference Dinner:

**Time:** 07:30 For 08:00 pm.

**Location:** Blackbird Bar, Riverside Centre, 123 Eagle St, Brisbane.



## Friday 7<sup>th</sup> February 2025

08:00 – 10:30 am	<i>Technical Session V - Chair: Andrew Seccombe &amp; Kevin Marston</i>
<p>14. <b>Ian Gray:</b> Large scale grouting in Mining</p> <p>15. <b>Sankalpa Fonseka, Pabasara Wanniarachchige:</b> Comparative analysis of machine learning and traditional methods for rock strength prediction</p> <p>16. <b>Mark Kleinhans, Eleonora Widzyk-Capehart, Gareth Kennedy and Iain Webster:</b> Methane gas detector accuracy and response times under varying gas flow and sensor occlusion conditions</p> <p>17. <b>Edwin Gan, Edward Gan, Alex Remennikov:</b> Experimental Analysis and Risk Assessment of Projectiles Expelled from Mine Openings Due to Underground Coal Mine Explosions</p> <p>18. <b>Scott Thomson:</b> Forensic Geology and Gas Reservoir Data from the Bit: New Learnings from Yabby Technology</p>	
10:30 – 11:00 am	<i>Morning Tea</i>
11:00 – 12:30 pm	<i>Technical Session VI - Chairs: Richard Campbell &amp; Mehdi Serati</i>
<p>19. <b>Yvette Heritage, Gaetano Venticinque, Mark Knackstedt, Yulai Zhang:</b> Determination of coal burst risk zones using CT scanning of coal microstructure</p> <p>20. <b>Amre Eizad, Chenhao Wang, Mark Kleinhans, Eleonora Widzyk-Capehart, Luke Ludlow, Clinton Battese, Jeremy Ward, Zachary Kiehl, Gareth Kennedy:</b> Wearable sensors for continuous, real-time health and safety monitoring and risk assessment</p> <p>21. <b>Libin Gong, Andrew Seccombe, Mattin Khishvand, Richard Campbell:</b> 2D/3D Numerical Modelling of an Underground Longwall Installation Road</p>	
12:30 – 01:30 pm	<i>Lunch</i>
01:30 – 3.30 pm	<i>Technical Session VI- Chairs: Xueqiu He &amp; Jan Nemcik</i>
<p>22. <b>Ashkan Rastegarmanesh, Ali Mirzaghobanali, Kevin McDougall, Naj Aziz, Sina Anzanpour, Hadi Nourizadeh, Mahdi Moosavi, Abbas Taheri:</b> Investigating the Rotation of cable bolts during pull out tests</p> <p>23. <b>Hadi Farhadian, Behshad Jodeiri Shokri, Hadi Nourizadeh, Ali Mirzaghobanali:</b> Determining the Optimal Pattern of a Geotechnical Model in Designing and Executing Open-Pit Mines</p> <p>24. <b>Borya Orkhontuul, Ulziibayar Oyunkhuu, Byambaakhuu Tsetseg, Erdenechuluun Uuganbayar, Javzan Gankhuleg:</b> The satisfaction survey of mining dump trucks in emc Mongolia</p> <p>25. <b>Raymond L Johnson Jr:</b> The Application of Emerging Technologies to Improve CMM Pre-Drainage And Reduce Emissions</p>	
03:00 pm	<i>Conference Closure</i>
<i>Additional Papers are included in the proceedings and also published online</i>	
<p>26. <b>Erdenechimeg Purevjav, Oyuntsetseg Dash, Ariunjargal Tsendenbat, Urjinkhand Sodnomdarjaa:</b> Study of processing for 1:200 000 scale topographic maps of Mongolia</p> <p>27. <b>Boldbaatar Chultemgombo, Ariunjargal Tsendenbat, Erdenechimeg Purevjav, Urjinkhand Sodnomdarjaa:</b> Geotechnical study on Salhit silver-gold open-pit mine</p> <p>28. <b>Baljinnyam Erdenetsoo, Lodoysamba sereeter, Otgonjargal Nominjargal, Zrigt-erdene Battuvshin:</b> Road dust suppression using lignosulfonate on unpaved road</p> <p>29. <b>Entezam Shima, Jodeiri Shokri Behshad, Mirzaghobanali Ali, Nourizadeh Hadi, McDougall Kevin, and Naj Aziz:</b> Load transfer mechanisms of composite rock bolts,</p> <p>30. <b>Dorna Emami, Mehdi Serati, Harry Asche, Michale Booy:</b> Particle projection of fire-induced shotcrete spalling</p> <p>31. <b>Alireza Entezam, Hadi Nourizadeh, Ali Mirzaghobanali, Polly Burey, Kevin McDougall, Behshad Jodeiri Shokri, Shima Entezam, Peter Craig, Naj Aziz:</b> Sustainability in underground mining and geotechnical practices</p> <p>32. <b>Shima Entezam, Gregor P, Behshad Jodeiri Shokri, Hadi Nourizadeh, Peter Gregor, Alireza Entezam, Ali Mirzaghobanali, Kevin McDougall, Waru</b></p>	

