



Day 1 – Monday 24 July 2017		
BELLEVUE BALLROOM 2, Level 3, Perth Convention and Exhibition Centre		
	Session 1: Opening and Keynote Presentations I Session Chair: Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair	
8.30 am – 8.35 am	Welcome from the Conference Chair: <i>Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair</i>	
8.35 am – 8.40 am	Welcome to Country: <i>Matthew McGuire of the Whudjuk People</i>	
8.40 am – 8.50 am	Welcome from the AusIMM: <i>Stephen Durkin MAusIMM, Chief Executive Officer, the AusIMM</i>	
8.50 am – 9.05 am	Official Conference Opening: <i>Rick Newnham, Chief Economist, Chamber of Commerce and Industry of Western Australia</i>	
9.05 am – 9.35 am	Keynote Presentation I: Global steel and raw materials market outlook — <i>Yu-Kyung Lee, Vice-President Iron Ore Group, Raw Materials Purchasing, POSCO</i>	
9.35 am – 10.05 am	Keynote Presentation II: 'Back to the Future' – resilience in historical context and implications for the future — <i>Allon Brent, Principal, Global Minerals Marketing</i>	
10.05 am – 10.35 am	Keynote Presentation III: The Importance of iron ore to Western Australia's economy — <i>Don Flint, Western Australian Department of Mines, Industry Regulation and Safety</i>	
10.35 am – 11.05 am	Morning Tea Break and Exhibition, BelleVue Ballroom 1	
STREAM A: BELLEVUE BALLROOM 2		STREAM B: MEETING ROOMS 1 & 2, LEVEL 2
	Session 2A: Exploration and Geology Session Chair: Fleur Muller, Rio Tinto	Session 2B: Beneficiation I Session Chair: Evert Lessing, WEIR Minerals <i>Sponsored by: </i>
11.05 am – 11.25 am	Using airborne electromagnetics to solve a structurally complex geological puzzle in the Hamersley Province, Western Australia — <i>R Murray, R Neroni, D Kepert and J Bresnahan</i>	The Importance of mineralogy and petrology on the beneficiation of iron oxide ores, primarily those containing goethite — <i>K Quast, J Addai-Mensah and W Skinner</i>
11.25 am – 11.45 am	Geological and metallurgical characteristics of banded iron formation – associated detrital iron mineralisation in central West Africa — <i>B De Waele, M Lacorde, K Bischoff, G Loveday and F Linares</i>	Influence of feed moisture in high pressure grinding rolls pellet feed grinding — <i>F Heinicke, H Günter and P Hunger</i>
11.45 am – 12.05 pm	High accuracy 2.5D airborne electromagnetic inversion method for banded iron formation and other geological settings — <i>R Paterson, J Silic, D FitzGerald and S Jakica</i>	Trommel panel development for iron ore applications — <i>R Wilson, B Freeburn and R Williams</i>
12.05 pm – 12.25 pm	The Iron Bridge magnetite deposits — <i>C Simpson</i>	Influence of shear rate on separation of iron ore fines using the REFLUX™ classifier — <i>D M Hunter, J Zhou, S M Iveson and K P Galvin</i>
12.25 pm – 1.25 pm	Lunch Break & Exhibition, BelleVue Ballroom 1	
	Session 3A: Mining Session Chair: Andrew Howie, thyssenkrupp Industrial Solutions <i>Sponsored by: </i>	Session 3B: Beneficiation II Session Chair: Richard Williams, McLanahan <i>Sponsored by: </i>
1.25 pm – 1.45 pm	Mining Innovation State of Play – iron ore insights — <i>G Stanway, P Mahoney and C Griebel</i>	Separation of ultrafine particles using the REFLUX™ Graviton — <i>J L Carpenter, S M Iveson and K P Galvin</i>
1.45 pm – 2.05 pm	New Generation Western Australian iron ore 2006–2016: strategic insights far beyond the Pilbara? — <i>L Barrere, A Trench, J P Sykes and R S Davies</i>	A batch elutriation technique for the density-based fractionation of iron ore — <i>D M Hunter, S M Iveson and K P Galvin</i>
2.05 pm – 2.25 pm	The development and future of BHP, Western Australian Iron Ore's Geological Reconciliation System — <i>S J Loach</i>	Dry Processing of magnetic iron ores – addressing cost and environmental issues — <i>C G Kelsey, J R Kelly and W Skinner</i>
2.25 pm – 2.45 pm	Pilbara Creek diversions – resilience gained through increased ore recovery and an integrated approach to design — <i>S Atkinson, A Markham, M Rafty and M Heyting</i>	A novel sink-hole fluidisation method for dry separation of iron ore Fines — <i>D Kumar, S M Iveson and K P Galvin</i>
2.45 pm – 3.05 pm	Real-time shovel-mounted coal or ore sensing — <i>A T Job, M L Edgar and P R McAree</i>	Automation for efficient separation with the Outotec SLon VPHGMS — <i>R Jain, I Sherrell and P Jansson</i>
3.05 pm – 3.35 pm	Afternoon Tea Break & Exhibition, BelleVue Ballroom 1	
	Session 4A: Mining and Geostatistics Session Chair: Raja Ratnam, Schenck Process Australia Pty Limited <i>Sponsored by: </i>	Session 4B: Beneficiation III Session Chair: John Martinovich, FLSmidth <i>Sponsored by: </i>
3.35 pm – 3.55 pm	The relationship between mineralogy and shear strength of Pilbara Hamersley Group shales across the weathering spectrum — <i>A Maldonado, K G Mercer and A Robert</i>	Overview of ArcelorMittal Mining operations, and research and development — <i>M Gotelip-Barbosa, A Correa de Araujo and T Sylow</i>
3.55 pm – 4.15 pm	One perfect (production) day – a bulk solids handling perspective — <i>G Wellwood</i>	Addressing the challenges associated with the modelling of iron ore in vibrating screens — <i>T J Donohue, W Chen, A Katterfeld and S Reid</i>
4.15 pm – 4.35 pm	Three case studies on the implementation of new technology in the mining industry — <i>A T Job and P R McAree</i>	Simulation investigation of flow patterns and feeder loads at hopper/feeder interface — <i>J Guo, A W Roberts, K Williams, M Jones, B Chen and J Y Guo</i>
4.35 pm – 4.55 pm	Iron ore grade modelling using geostatistics and artificial neural networks — <i>B C Sarkar, R K Singh, D Ray, A Kumar, P K Sinha and V Sarkar</i>	Rapid and reliable flow property testing – a modified uniaxial approach — <i>W Chen, K Williams, A Roberts and J Miller</i>
4.55 pm – 5.15 pm	Iron ore takes benefit from neutron pulsed geochemical tools — <i>P Jeanneau, V Flahaut and R A M Maddever</i>	Relocatable modular beneficiation creates value from waste — <i>T Graham</i>
5.15 pm – 7.15 pm	Welcome Function, BelleVue Ballroom 1 and Foyer 2, Perth Convention and Exhibition Centre <i>Sponsored by: </i>	

Day 2 – Tuesday 25 July 2017		
BELLEVUE BALLROOM 2, Level 3, Perth Convention and Exhibition Centre		
Session 5: Opening and Keynote Presentations II Session Chair: Erick Ramanaidou, CSIRO Mineral Resources		
8.30 am – 8.40 am	Day 2 Welcome: <i>Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair</i>	
8.40 am – 9.10 am	Keynote Presentation IV: Iron ore developments in India – view from a growing mining and steel industry — <i>Ashok Kumar, Chief Technology Officer, Process, Tata Steel Limited</i>	
9.10 am – 9.40 am	Keynote Presentation V: Aligning innovation with business — <i>Barry Fitzgerald, Chief Executive Officer, Roy Hill Holdings</i>	
9.40 am – 10.10 am	Keynote Presentation VI: Iron ore market outlook — <i>Adrian Doyle, Senior Consultant Iron Ore Costs, CRU Group</i>	
10.10 am – 10.40 am Morning Tea Break and Exhibition, BelleVue Ballroom 1		
STREAM A: BELLEVUE BALLROOM 2		STREAM B: MEETING ROOMS 1 & 2, LEVEL 2
Session 6A: Ore Characterisation I Session Chair: Belinda Godel, CSIRO Mineral Resources		Session 6B: Beneficiation IV <small>Sponsored by: </small> Session Chair: Kevin Galvin, University of Newcastle
10.40 am – 11.00 am	A comparison of X-ray and electron-based analysis techniques for characterising the mineralogy and associated alumina deportment in iron ores — <i>M I Pownceby, C M MacRae and A Torpy</i>	Reverse cationic flotation of iron ores with complex silicate gangue minerals — <i>C H Veloso de Melo, A Correa de Araujo and L O Filippov</i>
11.00 am – 11.20 am	Summary of results of an international X-ray diffraction round robin for mineralogical analysis of iron ores — <i>M D Raven and S L Birch</i>	The practical characterisation of ferrosilicon for dense medium applications — <i>J Bosman and W Blair</i>
11.20 am – 11.40 am	Dirty Goethite – a geochemical characterisation of some western Robe River channel iron deposits — <i>E Beattie, C Placzek and K Blake</i>	The use of filter aids on iron ore fines — <i>T Haskell, S Dickie and Y Joe</i>
11.40 am – 12.00 pm	Discriminating hematite/magnetite via scanning electron microscope–mineral liberation analyser in the -200 mesh size fraction of iron ores — <i>D C Grant, D J Goudie, C Voisey, M Schaffer and P Sylvester</i>	Minimising the water loss associated with mine tailings disposal — <i>C P Vuillier and A Rushdieh</i>
12.00 pm – 12.20 pm	Goethite classification, distribution and properties with reference to Australian iron deposits — <i>J R Manuel and J M F Clout</i>	Enabling iron ore concentrate for the production of direct reduced iron with pre-existing beneficiation lines — <i>J Martens, L Petzold and B Hiehl</i>
12.20 pm – 1.20 pm Lunch Break & Exhibition, BelleVue Ballroom 1		
Session 7A: Ore Characterisation II Session Chair: Cam Schubert MAusIMM, CITIC Pacific Mining		Session 7B: Agglomeration I Session Chair: John Clout FAusIMM, John Clout & Associates
1.20 pm – 1.40 pm	Optical Image analysis of iron ore pellets and lumps using CSIRO software Mineral4/Recognition4 — <i>A Poljakov, E Donskoi, S Hapugoda and L Lu</i>	Characterising the mineralogy of iron ore sinters – state-of-the-art in Australia — <i>T Honeyands, J Manuel, L Matthews, D O’Dea, D Pinson, J Leedham, B Monaghan, H Li, J Chen, P C Hayes, E Donskoi and M I Pownceby</i>
1.40 pm – 2.00 pm	Infrared spectroscopy in BHP iron ore with a focus on in-mine infrared sensing — <i>M Haest, D Mittrup and L Edwards</i>	Highlighting key features of the pore structure of iron ore sinter using mercury intrusion porosimetry and X-ray computed tomography — <i>T Harvey, D O’Dea, G Evans, B Godel and T Honeyands</i>
2.00 pm – 2.20 pm	Determination of iron ore mineralogy using fourier transform infrared spectroscopy and machine learning — <i>J Carter, K Auyong and L Dixon</i>	Correlation between high temperature sintering characteristics and sintering behaviours of iron ore fines — <i>D Q Zhu, Y X Xue, J Pan and B J Shi</i>
2.20 pm – 2.40 pm	Digital rocks for iron ore sinters – towards a 3D quantification of sinter textures — <i>B Godel, B Ellis, D O’Dea, T Honeyands and T Harvey</i>	Iron sinter process control using X-ray diffraction – part 2: monitoring of low temperature degradation — <i>U Konig and N Norberg</i>
2.40 pm – 3.00 pm	Determination of the handleability index of adhesive bulk materials — <i>M Carr, J Plinke, K Williams, A Roberts and W Chen</i>	Variation in property parameters of iron ore granulated mix with moisture content — <i>C Li, R Moreno-Atanasio, D O’Dea and T Honeyands</i>
3.00 pm – 3.30 pm Afternoon Tea Break & Exhibition, BelleVue Ballroom 1		
Session 8A: Geometallurgy Session Chair: Tom Honeyands, University of Newcastle		Session 8B: Agglomeration II Session Chair: Paul Maney MAusIMM, BHP
3.30pm – 3.50 pm	A Geometallurgical perspective on a high-grade iron ore deposit at Kirunavaara, northern Sweden — <i>K Niiranen</i>	Development of an iron ore microparticle binder for increasing the concentrate content of sinter blends — <i>C Kamijo, Y Yamaguchi, M Matsumura, T Kawaguchi and S Nomura</i>
3.50 pm – 4.10 pm	Microhardness testing of hematite-goethite fe ores – implications for their textural characterisation and geometallurgy — <i>M J Peterson, J R Manuel and S Hapugoda</i>	Sintering technologies of sinter mixtures containing high proportions of magnetite concentrates — <i>H Han and L Lu</i>
4.10 pm – 4.30 pm	Predicting iron ore sinter strength through X-ray diffraction analysis — <i>N A S Webster, M I Pownceby, N Ware and R Pattel</i>	Improvement of sinter productivity by control of magnetite ore segregation in sintering bed — <i>Y Iwami, T Yamamoto, N Oyama, H Matsuno, N Saito and K Nakajima</i>
4.30 pm – 4.50 pm	The use of drill core blends to predict sintering performance — <i>M Gotelip-Barbosa, G Siboni, M J Venturini and A Correa de Araujo</i>	Tensile Strength and shear strength properties of the adhering layer of granules in iron ore sintering — <i>M X Zhou, H Zhou and T Honeyands</i>
4.50 pm – 5.10 pm	Evaluation of sintering behaviour based on ore characteristics — <i>T Higuchi and L Lu</i>	Enhancing magnetite concentrate granulation by blending with hematite ore — <i>M Adam, J Addai-Mensah, J Beggelhole, K Quast and W Skinner</i>
5.10 pm – 6.10 pm	Networking Drinks, BelleVue Ballroom 1 and Foyer 2, Perth Convention and Exhibition Centre	<small>Sponsored by: </small>
7.00 pm for 7.30 pm	Conference Dinner, BelleVue Ballroom 2, Perth Convention and Exhibition Centre	

Day 3 – Wednesday 26 July 2017	
BELLEVUE BALLROOM 2, Level 3, Perth Convention and Exhibition Centre	
Session 9: Opening and Keynote Presentations III Session Chair: Keith Vining, CSIRO Mineral Resources	
8.30 am – 8.40 am	Day 3 Welcome: <i>Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair</i>
8.40 am – 9.10 am	Keynote Presentation VII: Recent progress of ironmaking technologies in Japan — <i>Chikashi Kamijo, Senior Researcher, Ironmaking Research Lab, Nippon Steel and Sumitomo Metal Corporation</i>
9.10 am – 9.40 am	Keynote Presentation VIII: Innovative approach to project delivery — <i>Gerhard Veldsman, General Manager Iron Ore Projects, FMG</i>
9.40 am – 10.10 am	Keynote Presentation IX: Innovation in the Australian mining spaces — <i>Ric Gros, Chief Executive Officer, METS Ignited Australia</i>
10.10 am – 10.40 am Morning Tea Break and Exhibition, BelleVue Ballroom 1	
STREAM A: BELLEVUE BALLROOM 2	STREAM B: MEETING ROOMS 1 & 2, LEVEL 2
Session 10A: Ore Characterisation III Session Chair: Warren Bruckard, CSIRO Mineral Resources	Session 10B: Agglomeration and Logistics Session Chair: William Skinner, University of South Australia
10.40 am – 11.00 am	Study of microwave-assisted magnetising roasting and mineral transformation of low-grade goethite iron ores — <i>V Nunna, S Hapugoda and M I Pownceby</i>
11.00 am – 11.20 am	The softening and melting behaviour of single and mixed iron ore burdens — <i>L X Wang, S L Wu, Y N Lu and B B Du</i>
11.20 am – 11.40 pm	The dynamic adhesion of wet and sticky iron ores onto impact plates — <i>M Carr, K Williams, W Chen, B Hayter, A Roberts and C Wheeler</i>
11.40 pm – 12.00 pm	Analysis of 98 individual -200 mesh iron ore samples in a single scanning electron microscope-automated mineralogy session — <i>D C Grant, D J Goudie and E Baird</i>
12.00 pm – 12.20 pm	VisuMet – analyses of lumpy iron carriers with image processing — <i>B Kain-Bueckner and H Mali</i>
12.20 pm – 1.20 pm Lunch Break & Exhibition, BelleVue Ballroom 1	
Session 11A: New Equipment Session Chair: John Visser MAusIMM, Johen Consulting	Session 11B: Project Optimisation <i>Sponsored by: FLUOR</i> Session Chair: Matthew Cobbett, FLUOR
1.20 pm – 1.40 pm	Development of a slimhole downhole nuclear magnetic resonance tool for iron ore – some applications and limitations — <i>K K Trofimczyk, T A J Hopper and B J Birt</i>
1.40 pm – 2.00 pm	Online elemental and mineral measurement of slurries in iron ore beneficiation — <i>L Koresaar, N Khajehzadeh, O Haavisto and J Timperi</i>
2.00 pm – 2.20 pm	Recent development and application of SLoN VPHGMS magnetic separators in iron ore and ilmenite processing industry — <i>X Dahe</i>
2.20 pm – 2.40 pm	Real-time slurry elemental analyser for iron ore beneficiation plant control — <i>G Noble, A Stabile, E Portes and J Roberto</i>
2.40 pm – 3.00 pm	Aeration induced moisture reduction of iron ore — <i>S Caldwell, K Williams, J Guo and W Chen</i>
3.00 pm – 3.30 pm Afternoon Tea Break & Exhibition, BelleVue Ballroom 1	
BELLEVUE BALLROOM 2	
Session 12: New Projects and Health, Safety and Environment Session Chair: Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair	
3.30 pm – 3.50 pm	The Central Eyre Iron project – developing a new iron ore mine in a challenging climate — <i>K L McPhee, A G Hunt and L J Ingle</i>
3.50 pm – 4.10 pm	Design to closure – construction of detailed rehabilitation designed iron ore waste rock dumps based on upfront site specific assessment — <i>A Kemp, I Taylor and S C Lamoureaux</i>
4.10 pm – 4.30 pm	Functional safety impacts on study stages of major projects — <i>M C Goode</i>
4.30 pm – 4.50 pm	Managing excess water temperature and high risk levels of Legionella bacteria in eyewash safety showers — <i>H A Challenor</i>
4.50 pm – 5.10 pm	Research into improving the efficiency of water spraying airborne dust control techniques in the iron ore industry — <i>J M Roberts and P W Wypych</i>
5.10 pm – 5.20 pm	Conference Close: <i>Ralph Holmes FAusIMM(CP), CSIRO Mineral Resources and Conference Chair</i>