

## OPTIMISE 2019 PROGRAM

	Day 1 Conference	Day 2 Conference	Day 3 Conference	Day 4 Workshops	Day 5 Workshops
	MONDAY 17 JUNE	TUESDAY 18 JUNE	WEDNESDAY 19 JUNE	THURSDAY 20 JUNE	FRIDAY 21 JUNE
0730 - 0800					
0800 - 0830	REGISTRATION (tea & coffee served)	Business Breakfast <i>sponsored by BHP</i>  Attracting and retaining the best STEM talent to the mining, oil and gas, agriculture and water sectors  Dr Gaurav Singh, BHP Dr Liz Dallimore, WA Data Science Innovation Centre Dr Kylie Hollins, Alcoa Jane Mitchell, Water Corporation Dr Julie Howell, Curtin University	REGISTRATION - TEA & COFFEE		
0830 - 0900			Control of complex intersection areas in transient gas networks Mark Turner, Zuse Institute Berlin	REGISTRATION - TEA & COFFEE	REGISTRATION - TEA & COFFEE
0900 - 0930	Opening Ceremony & Welcome to Country		Opportunities for Optimisation in Oil and Gas & Considerations for Uptake Dan Sutherland Biarri EMI	<b>Keynote:</b> Bilevel programming, Stackelberg games and pricing problems Professor Martine Labbé Universite Libre de Bruxelles	<b>Keynote:</b> Optimization of Forest Industry Operations Professor Rafael Epstein Universidad de Chile
0930 - 1000	The Groundwater Grand Challenge Professor Craig T. Simmons National Centre for Groundwater Research & Training	<b>Keynote:</b> Optimising Mine Planning and Operations Professor Rafael Epstein Universidad de Chile			
1000 - 1030			<b>Keynote:</b> A bilevel programming model for a problem of market regulation: application to the Mexican petrochemical industry Professor Martine Labbé, Université Libre de Bruxelles	Integrated Vessel and Helicopter Routing for Offshore Oil and Gas Facilities Dr Elham Mardaneh, Curtin University	Integrated Water Balance Optimisation at Roy Hill Dr Giovanni Firmani, Roy Hill Iron Ore
1030 - 1100	MORNING TEA	MORNING TEA	MORNING TEA	MORNING TEA	MORNING TEA
1100 - 1130	Optimising the use of pumping stations in a wastewater network Dr Christina Burt, Water Corporation	Solving Real World Problems through Math – Improving Mining Productivity with Operational Simulation Chet Fong RPM Global	Optimising the layout of a chemical process plant Professor Maria Garcia De La Banda Monash University	Bayesian atmospheric tomography for detection and estimation of methane emissions Laura Cartwright, University of Wollongong	Potential flow of fluid from an elevated, two dimensional source Shaymaa Shraida, Murdoch University
1130 - 1200	Intelligent Sensing for Urban Water Systems Associate Professor Rachel Cardell-Oliver The University of Western Australia		Optimisation opportunities to unlock further value from mine automation Dr Tarrant Elkington, Snowden		Real time optimisation of air quality predictions for Australia through Artificial Intelligence Ekta Sharma, University of Southern Queensland
1200 - 1230			The Wireless Industrial Sensor Environment (WISE) Program Brad Holding Innovation Central – Cisco Systems	Generating mixed integer programming test instances with challenging properties Simon Bowly, The University of Melbourne	A knowledge management system for emergency management, <b>Chunjuan Li</b> Energy saving optimal and numerical simulation of new car engine vane pump, <b>Chuanlai Yuan</b> Research progress on energy utilization of agricultural waste in China: bibliometric analysis based on citespace, <b>Jiapei Wei</b> Convergence analysis of parallel block alternating direction method of multipliers family of nonconvex problems, <b>Ya-zheng Dang</b>
1230 - 1300	LUNCH	LUNCH		<b>1230-1310</b> LUNCH (40 minutes)	
1300 - 1330				<b>1310-1410</b> <b>Keynote:</b> Solution Methods for Stochastic Mine Planning Professor Amina Lamghari University of Quebec, Canada	LUNCH
1330 - 1400	<b>Keynote:</b> Simultaneous stochastic optimization of mining complexes / mineral value chains Assistant Professor Amina Lamghari University of Quebec, Canada	Optimisation Challenges in Mineral and Energy Resource Applications Professor Peter Dowd University of Adelaide		Optimization of Dynamic Motorway Traffic with Distributionally Robust Joint Chance Constraints via Ramp Metering, <b>Chuanye Gu</b> Research on Synergistic Innovation Mechanism of Fintech and Regtech on Balancing Efficiency and Risk, <b>Xiumei Lyu</b>	An efficient NLP-based Specification Recognition Method for 2D Road CAD Drawing Compliance Checking System, <b>Chongyi Liu</b> Event-triggered mixed control for Markov jump systems with time delay and input nonlinearity, <b>Yanyan Yin</b>
1400 - 1430			Threshold Risk and Uncertainty Quantification in Environmental Modelling Professor Jerzy A. Filar Centre for Applications in Natural Resource Mathematics	<b>1410-1440</b> Newton-MR: Newton's Method Without Smoothness or Convexity Dr Fred Roosta, University of Queensland	
1430 - 1500	APR Intern: Open up your World Tracey McClurg, APR Intern	Synthesis of supply chain transport data using generative neural networks Herbert Taco Arana, Curtin University		<b>1440-1510</b> A flexible approach for finding the best approximation to the intersection of convex sets Dr Minh N. Dao, The University of Newcastle	
1500 - 1530	AFTERNOON TEA	AFTERNOON TEA	Australian Actuaries Climate Index Pulkit Jain, Finity Consulting	<b>1510-1530</b> AFTERNOON TEA	
1530 - 1600	Network Optimisation in the Access Design for Underground Mines Professor Emeritus Doreen Thomas The University of Melbourne	Port Product Delivery Optimisation Dr Stephen Beckwith Optika Solutions	AFTERNOON TEA	Lyapunov functions and convergence of Douglas-Rachford method for non-convex problems Dr Bjorn Ruffer, The University of Newcastle	
1600 - 1630				Probabilistic Robust Anti-disturbance Control of Uncertain Linear Systems, <b>Peng Cheng</b> The Relationships Among Commitment to Change, Coping with Change, and Job Satisfaction, <b>Xiaoli Cao</b> The tensor complementarity problem, <b>Xueli Bai</b> Mixed-integer min-max dynamic optimization and its application on identifying dynamic structure and parameters of glycerol continuous fermentation, <b>Juan Wang</b> Research on loss analysis of power distribution network and auxiliary decision-making technology of loss reduction and efficiency increase, <b>Jie Liu</b> An ensemble dynamic metabolic fluxes modelling of glycerol metabolism in Klebsiella pneumoniae, <b>Jianxiang Ye</b> Optimization of Impedance Matching Network in Wireless Power Transfer System, <b>Yuan Yuan Liu</b> Robust Real-Time Optimization for Blending Operation of Alumina Production, <b>Lingshuang Kong</b>	
1630 - 1700	Poster Session	Divide and Conquer: Taming blending constraints in mine planning models with stockpiles Adj. Prof. Jose Charango Munizaga-Rosas, University of Chile	Hands-on session: Optimising crop rotation schedules Dr Alysso M. Costa & Simon Bowly The University of Melbourne		
1700 - 1730	Welcome Reception				
1730 - 1800					
1800 - 1830				Optional activity: Informal offsite dinner	
1830 - 1900					

*Please note: the program may be subject to change*