


# PROGRAM - Workshops

Sunday, 25 August 2024

Time	Title	Location
08.30 – 08.55	<b>Workshop &amp; Pre-Conference Registration</b>	Mezzanine Foyer
09.00 – 12.00	<b>Modelling SIG Workshop</b>	Harbour View 1
09.00 – 12.00	<b>Climate Change SIG Workshop</b>	Harbour View 2
09.00 – 12.00	<p><b>Health SIG Workshop</b></p> <p>Proudly presented by:</p> 	Grand Ballroom 1
09.00 – 17.00	<b>Odour SIG Workshop</b>	Ballroom 2 & 3
10.30 – 10.40	<b>Morning Tea</b>	Mezzanine Foyer
12.30 – 13.30	<b>Lunch</b>	Mezzanine Foyer
13.30 – 16.30	<b>Biomass Burning SIG Workshop</b>	Grand Ballroom 1
13.30 – 16.30	<b>Measurement SIG Workshop</b>	Harbour View 1
15.00 – 15.20	<b>Afternoon Tea</b>	Mezzanine Foyer
17.30 – 19.00	<p><b>Welcome Reception</b> Dress Code: Smart Casual</p> <p><b>Welcome to Tasmania</b>   The Right Honourable Lord Mayor of Hobart, Councillor Anna Reynolds</p> <p><b>Sponsor Welcome</b>   Wes Ford, Director and Chief Executive Officer, Environment Protection Authority, Tasmania</p> 	Exhibition Hall

## PROGRAM – Day 1

Monday, 26 August 2024

08.15 – 08.50	<b>Conference Registration</b>			Mezzanine Foyer
08.50 – 09.00	<b>Welcome &amp; Housekeeping</b> MC: Gerda Kuschel   Jeff Bluett			Plenary Room
09.00 – 09.10	<b>Welcome to Country</b>			Plenary Room
09.10 – 09.20	<b>Official Conference Open</b>   Her Excellency, the Honourable Barbara Baker AC, Governor of Tasmania			Plenary Room
09.20 – 09.30	<b>Welcome</b>   Hon. Minister Nick Duigan, Minister for Energy and Renewables, Minister for the Environment			Plenary Room
09.30 – 09.35	<b>Welcome to the Clean Air Conference 2024</b>   Society President, Francine Manansala			Plenary Room
09.35 – 09.40	<b>Welcome to the 10<sup>th</sup> IWA Odours &amp; Air Emissions Conference 2024</b>   Michael Assal, Organising Committee Co-Chair and CASANZ Odour SIG Chair			Plenary Room
09.40 – 09.45	<b>Platinum Sponsor Welcome</b> - Lear Siegler			Plenary Room
09.45 – 10.15	<b>Keynote Speaker 1:</b> Dr Carolyn Orr   Neurologist   Environmental Campaigner, Speaker for Doctors for the Environment <b>The enormous benefits to human health of a greener, cleaner world where our energy is renewable and our forests are thriving.</b>			Plenary Room
10.15 – 10.45	<b>Keynote Speaker 2:</b> Matthew Riley   Director Climate and Atmospheric Science, NSW Government, Department of Climate Change, Energy, the Environment and Water <b>Integrated air quality services – blending observations, emissions, land use and modelling to deliver actionable information to the community.</b>			Plenary Room
10.45 – 11.15	<b>Morning Tea</b>			Exhibition Hall
11.15 – 13.10	<b>CONCURRENT SESSION 1</b>			
	<b>Grand Ballroom 1</b> <b>Monitoring &amp; GHG</b> Session Chair: David Cohen	<b>Grand Ballroom 2</b> <b>Modelling</b> Session Chair: Iain Cowan	<b>Grand Ballroom 3</b> <b>Policy</b> Session Chair: Dusan Ilic	
11.15 – 11.35	34 - Frequency dependent bias resulting from temporal subsampling schemes and its relevance for air quality monitoring data   Charles Turner	63 - A comparison of the performance of GRAL and CALPUFF in the modelling of fumigant emissions from shipping containers   Samuel Wong	24 - Challenges in air quality impact assessments of airport operations due to ambiguous legislative frameworks Dylan Turnbull	
11.35 – 11.55	56 - Using ambient monitoring data to estimate fugitive emissions Emily Mace	65 - Comparative Study of WRF and TAPM Meteorological Models in South-East and North-West Queensland   Hector Machado	75 – Considerations in the development of proposed incremental criteria for the NSW assessment pathway Louise Kristensen	
11.55 – 12.15	21 - OPENAIR - Low Cost Air Quality Sensing Best Practises and Open Data Platform Peter Runcie	69 - An Air Quality Forecast for Implementation of the Nes-lph in Canterbury   Alida van Vugt	85 - Sky-diving for science: a novel technique for rapid vertical transect methane sampling Damon Roddis	
12.15 – 12.35	129 - OPENAIR: Unlocking the potential of smart low-cost sensing through best practice and harmonised cross-jurisdictional data sharing   Andrew Tovey	74 - Simplified approach to interpretation of the likelihood of predicted short-term air quality impacts for non-steady state emission sources Dave Cloughton	14 - Making the Case for Net Zero: Global policies and their applicability within New South Wales   Dr Rebecca Wilson	
12.35 – 12.55	40 - Monitoring of GHG Fluxes for Blue Carbon   Cameron Brown	134 - Utilising BARRA as an alternative meteorology input to CTM simulations: a case study set in Tasmania during winter Stephen Vander Hoorn	135 - NSW EPA Climate Change Policy and Action Plan Ruby Kan	
12.55 – 13.10	59 - Real-time greenhouse gas (GHG) measurement and reporting from urban wastewater treatment processes   Elliot Lee	131 - The development of a national rapid update smoke forecasting framework for Australia Fabienne Reisen	102 - Modernising the NSW Local Government Air Quality Toolkit Russ Francis	
13.10 – 14.00	<b>Lunch</b>			Exhibition Hall

1400 – 1600			
CONCURRENT SESSION 2			
	Grand Ballroom 1 <b>Transport</b> Session Chair: Jacinda Shen	Grand Ballroom 2 <b>Machine learning</b> Session Chair: Cathy Nieuwenhuijsen	Grand Ballroom 3 <b>Mixed, low cost sensors</b> Session Chair: Yvonne Lim
14.00 - 14.20	27 - The impact of different design options for the Australian New Vehicle Efficiency Standard (NVES)   Robin Smit	5 - Estimating daily concentrations of PM2.5 in Western Australia from satellite-derived aerosol optical depth, fire radiative power, and meteorological variables using a machine learning technique   Madeleine Behn	12 - Air Quality - where do ecosystems fit?   Rob Van de Munckhof
14.20 - 14.40	54 - Waka Kotahi - Vehicle emission mapping tool concentration calculator   Sam Oliver	92 - Evaluation of data splitting techniques in the accuracy of machine learning predictions   Puneet Verma	70 - Community feedback on cultural air quality impacts in a New Zealand context   Jason Pene
14.40 - 15.00	103 - Estimating emissions using backward Lagrangian transport modelling: The good, the bad and the ugly   Patricia Thorpe	36 - Applications of machine learning algorithms when developing hourly varying background air concentration data for use in air dispersion models   Sophie Matera and Amy Schmidt	53 - Assessment of Low-Cost Smoke Sensors in comparison to Optical Particle Instruments in Queensland's Air Quality Monitoring Network   Adam Mustafa
15.00 - 15.20	114 - Quantification of Motor Vehicle Emissions in NSW   Dr Xavier Barthelemy	77 - Forecasting dust pollution events in a Melbourne suburb using a Machine Learning Technique   Dr Steven Utembe	62 - Clean Air Hospital Framework: Sustainable approach towards air quality improvement within hospitals and their host communities   Babatunde Okeowo
15.20 - 15.35	29 - The impact of modal shift by road, rail, air and sea on greenhouse gas emissions from Australian road transport   Robin Smit	100 - Operational Forecasting of Dust Risk for Mining Operations Using Machine Learning Techniques   Danny Craggs	88 - Insights from long-term deployment of a low-cost air quality sensor network in Sydney   Upma Dutt
15.35 - 15.50	93 - Fact and Fiction about Electric Vehicle Embodied Carbon   Kevin Peddie	116 - Towards the deep learning technology for enhancing air quality forecasting in New South Wales – the formation of a modular framework   Xavier Barthelemy	Poster 3 – Monitoring post-cyclone dust emissions with Clarity sensors   Elizabeth Somervell
15.50 - 16.15	<b>Afternoon Tea</b>		Exhibition Hall
16.15 - 17.00	<b>Keynote Speaker 3:</b> Dr Audrey de Nazelle   Senior Lecturer and the Director of Research at the Centre for Environmental Policy at Imperial College London   <b>Optimizing transport, environment, and climate strategies for health</b>		Plenary Room
17.00 - 17.30	<b>Society Annual General Meeting</b>		Plenary Room

## PROGRAM – Day 2

Tuesday, 27 August 2024

08.00 - 08.30	<b>Conference Registration</b>			Mezzanine Foyer			
08.30 - 08.40	Welcome & Housekeeping MC: Gerda Kuschel   Jeff Bluett			Plenary Room			
08.40 - 09.15	<b>Keynote Speaker 4:</b> Carlos Diaz   Director with <i>Ambiente et Odora</i> in Bilbao, Spain <b>Changes in European Legislation and the Consideration of Odour Impacts and Health</b>			Plenary Room			
09.15 - 09.50	<b>Keynote Speaker 5:</b> Dr Cameron McNaughton   Technical Fellow for Atmospheric Services   WSP <b>Practical solutions for the energy transition: State of the Planet and GHG Emissions</b>			Plenary Room			
09.50 - 10.30	<b>Panel Session   Using the circular economy to reduce atmospheric emissions</b>  <b>Panelists:</b> <table border="1" data-bbox="395 745 1193 931"> <tr> <td><b>Cameron McNaughton</b> Technical Fellow for Atmospheric Services   WSP</td> <td><b>Dr Ruth Fisher</b> University of New South Wales</td> <td><b>Matthew Riley</b> Director Climate and Atmospheric Science, NSW Government, Department of Climate Change, Energy, the Environment and Water</td> </tr> </table> <b>Moderator:</b> Gerda Kuschel			<b>Cameron McNaughton</b> Technical Fellow for Atmospheric Services   WSP	<b>Dr Ruth Fisher</b> University of New South Wales	<b>Matthew Riley</b> Director Climate and Atmospheric Science, NSW Government, Department of Climate Change, Energy, the Environment and Water	Plenary Room
<b>Cameron McNaughton</b> Technical Fellow for Atmospheric Services   WSP	<b>Dr Ruth Fisher</b> University of New South Wales	<b>Matthew Riley</b> Director Climate and Atmospheric Science, NSW Government, Department of Climate Change, Energy, the Environment and Water					
10.30 - 11.00	<b>Morning Tea</b>			Exhibition Hall			
11.00 - 12.40	<b>CONCURRENT SESSION 3</b>						
	<b>Grand Ballroom 1</b> <b>Modelling</b> Session Chair: Jane Barnett	<b>Grand Ballroom 2</b> <b>Health</b> Session Chair: Ruby Kan	<b>Grand Ballroom 3</b> <b>Monitoring</b> Session Chair: Robin Smit				
11.00 - 11.20	17 - Automated Near-Real Time Identification and Calculation of Area-Based Emissions Chaim Kolominskas	126 - A mathematical exploration of bushfire smoke infiltration into an air-conditioned building John Innis	38 - Workplace Exposure Measurements for H2S and Chlorine at South East Water Facilities – Outcomes and Lessons Learnt   Sabrina Woon				
11.20 - 11.40	23 - Utilising GRAL to undertake Pedestrian Wind Comfort Studies Kristen Clarke	130 - Health Impacts on Lead in Ambient Air   Varun Marwaha	44 - Bridgewater bridge project particulate monitoring; A comparison of reference BAM and particulate profiler performance Grant Kassell				
11.40 - 12.00	26 - Uncertainty in dispersion modelling from selection of meteorological data - A comparison of prognostic verses observational data Dr Iain Cowan	31 - Evaluation of Different Modelling Approaches for the Assessment of Intermittent Discharges over Longer Contaminant Averaging Periods Chris Hewlett	83 - Key updates to the guideline for assessing and minimising air pollution in Victoria Nyssa Hadgraft				
12.00 - 12.20	28 - The use of life cycle assessment (LCA) to estimate greenhouse gas emissions from the Australian road transport sector   Robin Smit	61 - Meta-analysis and review of Artificial Intelligence techniques for analysing meteorological variables affecting pollen levels and allergic reactions Dr Ekta Sharma	94 - Recent air monitoring experiences with sensors Jason Choi				
12.20 - 12.40	111 - Evaluation of WRF-CMAQ modelling system for air quality forecasting over NSW Khalia Monk	Poster 5 – Using a Smart Home Air Quality System to help occupants assess and improve indoor air quality   Ian Longley	136 - Air quality in the Pacific Island Countries, Territories and States (PICTS), focusing on Fiji and the Solomon Islands Jimmy Jaghoru Hilly				
12.40 - 13.00	<b>Technical Session: 1   The Future of Air Monitoring</b> Presented by: Ektimo			Grand Ballroom 1			
12.40 - 13.00	<b>Technical Session: 2   PlumeMapper: Unleashing the power of ambient odour assessment.</b> Presented by: Air Environment			Grand Ballroom 2			
13.00 - 13.45	<b>Lunch &amp; Poster Session: Authors Present</b>			Exhibition Hall			

13.15 - 13.45	<b>Technical Session 3:</b>   LSA/Thermo 5014iQ BAM and 5030iQ SHARP presentation Presented by: Peter Chronas, Lear Siegler			Grand Ballroom 1
13.45 - 15.40	<b>CONCURRENT SESSION 4</b>			
	<b>Grand Ballroom 1</b> <b>Focus on mining (industry)</b> Session Chair: Damon Roddis	<b>Grand Ballroom 2</b> <b>Focus on monitoring (industry)</b> Session Chair: James Forrest	<b>Grand Ballroom 3</b> <b>Focus on monitoring, difficult environments (industry)</b> Session Chair: Grant Kassel	
13.45 - 14.05	30 - Analysis of air quality stakeholders in the Upper Hunter Dusan Ilic	9 - Staying Ahead of the Dust Risk on the City Rail Link Project Dr Doug Boddy	58 - Idle Off Pilot Study: A school-based intervention to promote environmental awareness and action among primary school children   Aria Huang	
14.05 - 14.25	32 - Investigating Correlations Between Air Quality Monitoring Instruments in Coal Mining Regions: Methodology and Data Analysis in the Hunter Valley Liam Sutton	76 - Chemical Dosing for Sulfide Control and pH Dynamics in Sewer Networks   Hasan Shahariar	68 - Development of Machine Learning Methods to Condition Optical Counter Based Particulate Measurements Without a Heated Inlet   Michael Manraj Darroch	
14.25 - 14.45	71 - Use of source apportionment of PM10 and PM2.5 to better understand the contribution of emissions from a coal stockyard to measured concentrations in a residential area   Richard Chilton	10 - Have fine particle ammonium sulfate levels changed in NSW over the past three decades as coal-fired power stations close down? David Cohen	42 - Characterising the fine particle pollution within the airshed surrounding a mine in Australia Madhura Manohar	
14.45 - 15.05	137 - Changing expectations; A mining town or a town with a Mine in it? (MMG)   Danielle Zanetto, Adam Pandelis	43 - Cutting-edge optical device for measurements of PM10, PM2.5 and aerosol size distribution   Dr Markus Pesch	87 - Effective density, morphology, and volatile content of particles sampled during peat combustion   Dr Amy Louise Wilson	
15.05 - 15.25	125 - Comparing PM10 measurements from co-located High Volume Air Samplers and Optical-scatter particle instruments in residential areas peripheral to a mine: Common features, subtleties, and potentially fundamental limits to agreement John Innis	67 - Advancements in Atmospheric Particulate Matter Measurement Using Fast-Scanning LiDAR: Application in Dust Plume Visualization and Mitigation Effectiveness Assessment Liam Sutton	138 - Operation of an Air Quality Monitoring Network in remote harsh environments (BHP) Stuart Inglis	
15.25 - 15.45		139 - Predictive Emission Monitoring Systems (PEMS) versus analyser Continuous Emission Monitoring Systems (CEMS) (Emission Assessments) Giacomo Collica	90 - Trials & Tribulations of managing PM10 emissions from an Industrial Precinct in Melbourne Paul Torre	
15.45 - 16.15	<b>Afternoon Tea</b>			Exhibition Hall
16.15 - 16.45	<b>Keynote Speaker 5:</b> Dr Kris De Meyer   Neuroscientist; and Director of the Climate Action Unit, University College London <b>The Land of Climate and Environmental Action</b>			Plenary Room
16.45 - 17.00	<b>CASANZ Mentoring Program – Current Status</b>			Plenary Room
18.30 - 23.30	<p><b>GALA DINNER &amp; AWARDS EVENING</b></p> <p><b>Venue: Wrest Point Casino</b> Tasman Room 410 Sandy Bay, Sandy Bay</p> <p><b>Transport to the venue via Ferry</b> First boarding time: 18.30 pm Second boarding time: 18.45pm Brook Street Pier, 550m from the Hobart Grand Chancellor Hotel Directions: Refer to the map in the Conference App, located under Documents</p> <p><b>Return transport to the Hobart Grand Chancellor via Bus</b> Buses departing from 10.00pm and then at 20-minute intervals Meeting point: Wellington Entrance of the Casino</p> <p><b>Dress code: Dress to Impress</b></p>			

## PROGRAM – Day 3

Wednesday, 28 August 2024

8.30 - 8.50	<b>Conference Registration</b>	Mezzanine Foyer
8.50 - 9.00	<b>Welcome &amp; Housekeeping</b> MC: Gerda Kuschel   Jeff Bluett	Plenary Room



9.00 - 9.15	<b>Session Moderator:</b> Ruby Kan   Unit Head Climate Change Policy   Climate and Environmental Protection Branch, NSW Environment Protection Authority <b>Overview and learnings of her recent expedition to Antarctica</b>	Plenary Room
9.15 - 10.05	Marc Mallet   Atmospheric Scientist   Institute for Marine and Antarctic Studies (IMAS) <b>Biological controls on aerosols and clouds over the Southern Ocean</b>	Plenary Room
10.05 - 10.25	Elizabeth Shadwick   Principal Research Scientist   CSIRO <b>A Great Climate Service: the Southern Ocean uptake of anthropogenic heat and carbon</b>	Plenary Room
10.25 - 10.45	Petra Heil   Senior Research Scientist   Australian Antarctic Division <b>Climate change in Antarctica and cascading impacts</b>	Plenary Room
10.45 - 11.00	Q&A	Plenary Rooms

11.00 - 11.30	<b>Morning Tea</b>	Exhibition Hall
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11.30 - 12.50	<b>CONCURRENT SESSION 5</b>		
	<b>Grand Ballroom 1</b> <b>Bushfires</b> Session Chair: John Innis	<b>Grand Ballroom 2</b> <b>Mixed</b> Session Chair: Geordie Galvin	<b>Grand Ballroom 3</b> <b>Mixed</b> Session Chair: Gary Graham
11.30 - 11.50	133 - Introducing an Australian Ensemble Wildfire Air Pollution Forecast: a case study based on events during the 2019-2020 summer   Stephen Vander Hoorn	55 - Advances in spectroscopic methods for air particulate matter speciation   Dr Cherie Tollemache	109 - Projected Changes in Non-Exhaust Particulate Matter Emissions with Vehicle Technology Advancements: a NSW Case Study   Xavier Barthelemy
11.50 - 12.10	16 - Enhancing air quality information delivery in the aftermath of the 2019/2020 bushfires in Queensland   Ryan Stuart	106 - Characterising sources and composition of PM2.5 in inner west Melbourne   Rosemary Fedele	122 - Low-Cost Indicative Sensors for the Monitoring of Wood Smoke in Mount Barker   Mohammad Iqbal
12.10 - 12.30	115 - Spatial and Temporal Variations of Black Carbon in NSW, Australia   Handan Sariyonca	81 - Developing a Tool for Managing Dust Impacts   James Forrest	128 - Woodsmoke mortality estimates for Australia   Fay Johnston
12.30 - 12.50	132 - Real Time Smoke Impact Analysis for Decision Makers- Exploring Optimal Communication Pathways   Fabienne Reisen	33 - Small particles – Big Problem: A brief history of Quarry Dust in Canterbury   Jeff Bluett	25 - Mitigation of solid and liquid fuel boiler emissions in Ho Chi Min City   Thomas Buckland
	<b>Mixed</b>		
12.50 - 13.10	86 - Modelling of particulate matter deposition in the lungs of cyclists from Perth, Western Australia   Dr Anu Shrestha	118 - Potential Climate and environmental impacts of increasing hydrogen emissions from anthropogenic sources   Matthew Riley	120 - Tailings Storage Facility Particulate Matter Wind Erosion Emission Factor Analysis   Rebecca Chalmer/Michael Crawford
13.10 - 13.30	41 - The impact of particulate matter exceptional events on Australian outdoor air quality policy   Mitchell Aafjes	64 - Spatial Regression Modelling for Exposure Assessment of Hazardous Mineral Fibres   Dacey Zelman-Fahm	Poster 8 – Go South 2 – Finding the missing Southern Ocean Clouds   Guy Coulson

13.30 - 14.30	<b>Lunch</b>	Exhibition Hall
14.30 - 15.00	<b>Conference Closing Presentation</b>	Plenary Room

	Distinguished Professor Lidia Morawska   Queensland University of Technology   Thrive (an ARC Training Centre for Advanced Building Systems Against Airborne Infection Transmission) <b>Title: Influencing change through scientific consensus</b>	
15.00 – 15.15	<b>Conference Closing Remarks</b> Society President – Francine Manansala	Plenary Room

## POSTERS

Poster Session: Tuesday, 27 August 2024 | from 1.00pm

	Title	Author
1	A review of current evidence supports CO2 as an indicator for Indoor Air Quality	Sonali Deshmukh
2	Colocation Guide & Equivalency Testing for PM Instruments in New Zealand	Hamesh Patel
3	Monitoring post-cyclone dust emissions with Clarity sensors	Guy Coulson
4	A New Higher-Sensitivity Lower-Maintenance Beta Gauge	Grant Kassell
5	Using a Smart Home Air Quality System to help occupants assess and improve indoor air quality	Guy Coulson
6	Drugs in Auckland's Air	Olivia Johnson <i>Hamesh Patel presenting</i>
7	Screening for airborne erionite in Auckland, New Zealand	Hamesh Patel
8	Go South 2 – Finding the missing Southern Ocean Clouds	Guy Coulson
9	Novel Strategies for Sustainable Amelioration of Ozone Pollution in China: Towards Innovative Air Quality Enhancement	Dr Khalid Mehmood
10	Rural Particulate Matter Background Concentrations	Dr Bethany Warren
11	Wood burning in a residential area in Sweden using the Odin sensor: levels, wood use and neighbour complaints survey	Guy Coulson

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