

Australian Pavement Recycling and Stabilisation Conference

Pavement Recycling for Sustainable Roads

Novotel Brighton Beach, Sydney • 10th August 2022

2022 AustStab Pavement Recycling and Stabilisation Conference

Speaker Biographies

Session 1 – Keynote

Ainsley Simpson

Infrastructure Sustainability Council



Ainsley joined the Infrastructure Sustainability Council as Chief Executive Officer in May 2016. In her role at ISC, Ainsley works across the infrastructure industry to advance sustainable outcomes through the deployment and development of the IS rating scheme. Ainsley also oversees ISC's learning and development portfolio aimed at building marketing capability across industry. Ainsley is committed to making a real impact in organisations that anchor in their core values, develop their people and support the advancement of women with leadership aspirations.

Session 1 – Keynote

John Soars

Transport for New South Wales



John is the Director Maintenance & Delivery for Transport for NSW in the Network & Assets team within the Regional & Outer Metropolitan section of TfNSW.

John started work at Qantas Airlines as an Apprentice Avionics in 1986 coming out 35 years later looking for a change after COVID shutdown the industry. During the 35-year journey he lived 4 years in Los Angeles and spent time in Toulouse, France and Hamburg, Germany when Qantas bought the A380 aircraft from Airbus. John has obtained endless technical qualifications, including a Degree in Aviation Management, Diploma in Applied Finance and he also Graduated from the Royal Military College, Canberra as an Infantry Officer. His personal interests centre around family – having spent 10 years as a Sea Scout Leader attending three Jamborees – and he wishes he had more time to enjoy his 400-acre farm at Gloucester in NSW where he runs a


	<p>herd of around 100 Angus cattle and is collecting an endless array of toys.</p> <p>Today John leads the Maintenance & Delivery (M&D) business within the Network & Assets Branch of Rural & Outer Metro (ROM) within TfNSW. Their boundaries are the Hawksbury River to the North, Victoria Pass to the West and Waterfall to the South. The team of 2088 people maintain and build new roads, tunnels and bridges and also manage car ferries across regional NSW. The team has 69 major depot locations, a fleet of over 680 trucks and 650 light vehicles.</p> <p>This year the team is being tasked to complete over \$1.3B of works, from the largest projects including an \$80M dual carriageway at Raglan near Bathurst to the 170,000 potholes they filled last year and everything in between. The Network & Assets team are very motivated to be a much better partner to industry and are working hard to see their own programs of work and looking forward to sharing that with industry to help everyone prepare for the works programs ahead.</p>
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Session 1 – Implementation of foamed bitumen in Queensland – a 25-year journey


Damian Volker	Queensland Department of Transport and Main Roads
	<p>Damian is Principal Engineer, Pavements Rehabilitation, Engineering and Technology for TMR. He holds an Advanced Diploma of Civil Engineering and has recently completed a Bachelor of Civil Engineering (Honours) degree. His final research thesis investigated the effects of bitumen temperature on foamed bitumen performance.</p> <p>Damian joined TMR over 17 years ago as a Cadet Materials Technologist, spending the first half of his career in the TMR laboratories, also performing detailed pavement investigations and as an asphalt Roadworks Inspector. This foundation developed a valuable understanding and knowledge of material properties and failure mechanisms.</p> <p>With a mind for innovation and environmentally sustainable solutions, Damian has provided valuable technical input into all aspects of stabilisation projects, including detailed pavement investigations, design, testing, construction, training, performance monitoring, research and development of TMR specifications.</p> <p>He is TMR’s Project Manager for the National Asset Centre of Excellence project reviewing 'Queensland's foamed bitumen mix design and structural design procedure' and the Austroads</p>

	<p>Project Manager for the project to 'Develop design procedures for foamed bitumen stabilised pavements'.</p> <p>Damian was the inaugural 'Young Stabiliser of the Year' award winner in 2015 and is a member of the AustStab National Technical Working Group.</p>
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Session 2 – Sustainability assessment for innovative pavement materials, designs and processes

Brook Hall	ARRB Group
	<p>Brook is a Principal Transport Economist leading the Life Cycle and Economic Assessment Portfolio within the Sustainability and Materials Performance group at ARRB. He leads a team of economists, engineers and sustainability experts to deliver applied research, develop bespoke life cycle assessment tools and economic models and provide expert technical advice for governments and industry that drives sustainable transport infrastructure and long-term environmental, social and economic outcomes.</p> <p>Brook is accredited as an Infrastructure Sustainability Professional with the Infrastructure Sustainability Council (ISC), an advisor on the Environmental Sustainability Leading Practice in Transport Infrastructure initiative of Roads Australia, the Australasian Railway Association and ISC, and is Australia's representative member of the World Road Congress' (PIARC) Sustainability Technical Committee.</p> <p>Brook has led the development of life cycle assessment tools and research outcomes for Australian governments and is passionate about environmental sustainability and delivering sustainability and economic outcomes.</p>

Session 2 – Circular Economy: Construction of an (almost) completely recycled road in Central Coast Council NSW

Stuart Baverstock	Transport for NSW (formerly of Central Coast Council NSW)
	<p>Stuart is the Senior Manager Maintenance & Delivery North at Transport for NSW, looking after road construction and maintenance of the state road network between the Central Coast and the Queensland border and out to New England. Stuart has held this role for 12 months before which he was the Construction Manager of the Roads & Drainage section of Central Coast Council for 10 years. These roles in the road construction sector of Transport for NSW and Central Coast Council are the product of a life in civil engineering since graduating nearly 30 years ago, a life that includes roles at water authorities, a marine consultancy, subdivision companies, and just for something</p>

	<p>different, a spell owning a Bakers Delight franchise for a number of years! Being an advocate for sustainable engineering practices has become a recent passion for Stuart through working with staff, local suppliers, consultants and governing bodies to instil a culture of sustainability within the workplace.</p>
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Session 2 – Managing respirable crystalline silica risks for stabilisation works

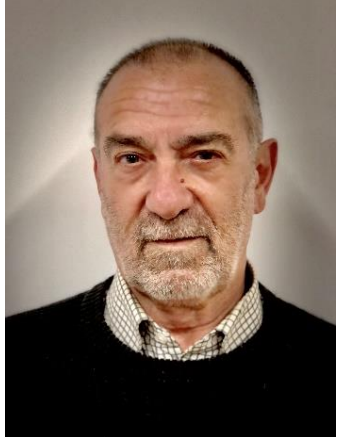
Rohan Davies	Queensland Department of Transport and Main Roads
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Rohan Davies is a project director at the Queensland Department of Transport and Main Roads, leading the development and implementation of strategic and operational health and safety initiatives. He has experience in project and contract management roles and safety leadership positions, and has worked on both the client and the delivery side to successfully achieve strong safety performance. Rohan is passionate about building the capability of executives, managers and frontline teams to improve how risk is managed.

Session 2 – Case study: Northbourne Avenue, Canberra

Alvaro Amorim	Transport Canberra City Services
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Alvaro is Senior Project Manager for Transport Canberra and City Services. He is a civil engineer and a senior project manager and has lived most of his life in South Africa before moving to Australia in October 2008 and becoming an Australian Citizen.

Alvaro is a passionate and dedicated professional who takes the time required to ensure all projects that he is managing or responsible for delivering are designed and constructed under the relevant standard and specifications.

Alvaro had the privilege of managing the biggest privately owned civil engineering construction company in South West Africa (Namibia), Bon Roads Construction, from 1979-1986. His projects were all delivered ahead of time, within budgets, with high quality standards, and receiving from client’s messages of “Thanks” for the great works delivered.

From 1986-1992, Alvaro was the Director of another South African construction company, Deca Civil. During his position as Director, Alvaro still maintained direct involvement with the projects being delivered. Working together with a progressive and a motivated team including operators, drivers, foremen and other workers, projects produced outcomes never achieved before and were consistently delivered well ahead of program. The company became so popular and renowned for their innovative ways that other construction companies initiated

contact through consultants and superintendents to visit the projects so they could learn and take away experience to improve their own delivery.

Alvaro continued his valuable contribution to organisations he was a part of when he joined BVI Consulting Engineers in 1992. Alvaro managed the "Project Management" department of the company, which consequently became the most successful section of the company. He was also seconded to the City Council of Pretoria, later Tshwane, as a Project Manager. Alvaro's role was to assist them with their project delivery side, get projects back on track, deal with issues as they arose and provide problem-solving recommendations.

In 2008 Alvaro moved to Perth, Australia, taking a position with Maunsell, where he managed designs and the delivery side of projects in Karratha as a Principal Engineer. In 2009 he moved to Cardno Young in Canberra and continued to deliver successful projects as Construction Manager.

In June 2012 Alvaro joined the ACT Government/Roads ACT as a Senior Project Manager, where he is currently part of the Infrastructure Delivery Team. Alvaro is responsible for delivering all major projects for the Territory and has done so within time and budget limits. Under TCCS/Roads ACT, projects with issues or difficulties are all passed to Alvaro for delivery.

Alvaro is an innovative person who seeks suitable sustainability methodologies for all projects. As an officer of the ACT government, he frequently engages with residents and the public, providing answers to their concerns and actively assisting with issue resolution.


Session 2 – ARRB research outcomes and current programs

Dr James Grenfell	ARRB Group
	<p>Dr Grenfell is a Principal Professional at ARRB (Australian Road Research Board). He has been working within the Sustainability team since the beginning of 2020. This has allowed him to bring his pavement engineering expertise to Sustainability and Resilience, whilst also increasing the research carried out in the recycled materials space. He has led Austroads APT6311 Use of Crushed Glass in Road Infrastructure and is undertaking joint NACoE/WARRIP work to investigate the use of recycled and reclaimed plastic in safe, sustainable future road infrastructure. Previously, he was working within pavement structures as part of Future Transport Infrastructure, having joined ARRB in February 2017. His work focused on Austroads projects looking at the improving knowledge of foamed bitumen stabilised pavements</p>

	<p>and the use of lightly cemented materials in pavement construction. He has also looked at the addition of nanosilica to asphalt to improve properties and the addition of recycled crushed glass to asphalt to help reduce waste stockpiles.</p> <p>Dr Grenfell has published more than 100 journal papers and peer reviewed conference papers. He is a Director-at-large of the International Society of Asphalt Pavements, on the Editorial board for the Proceedings of the Association of Asphalt Paving Technologists and a member of the TRB Asphalt Pavement Design and Rehabilitation (AKP30) committee. He is involved in several RILEM Technical Committees looking at bituminous and asphaltic materials. He is member of the Standards Australia Committee CE-012 Aggregates and Rock for Engineering Purposes.</p>
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<p>Session 3 – A practical approach to rehabilitate thin existing pavements using base-grade stabilisation</p>	
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<p>Scott Young</p>	<p>Stabilised Pavements of Australia</p>
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	<p>Scott Young is both the Technical Manager for Stabilised Pavements of Australia and Managing Director for the group’s Malaysian operations and is a registered professional civil engineer with Honours from the University of Newcastle, a Master of Pavement Technology from the Centre for Pavement Engineering Education, is a member of Professionals Australia, REAM, BPEQ and REAAA, and has over 19 years’ involvement in the pavement stabilisation industry, including time spent as Vice President, President and as a Director of AustStab – Scott is currently Convenor of the AustStab National Technical Working Group and a specialist technical presenter of the Stabilisation Fundamentals course conducted by CPEE.</p> <p>Scott’s experience covers civil and geotechnical engineering across asset management, structural design, maintenance contracts, asphalt and sprayed sealing, and pavement rejuvenation and recycling. Scott’s prowess as a presenter was recently recognised with the award by IPWEA of the E.J. (Ted) Hooper Medal for best paper at the recent Institute of Public Works Engineering Australasia International Public Works Conference in Adelaide.</p>
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Session 3 – Design of foamed bitumen stabilised pavements for local government engineers

George Vorobieff

Head to Head International



George is a professional engineer with extensive experience in civil and structural engineering and has worked in private and public sector organisations. George has also had a progressive career path from structural engineering, specialising in bridges and buildings, to a broader civil engineering career in the design, construction, testing, product quality audits, maintenance, asset management and forensic engineering of pavements and geotechnical structures.

George was the first CEO of AustStab, got the association up, and passed on the reins after 2008.

Session 3 – Rehabilitation of 300 projects in the Campbelltown NSW LGA by pavement recycling and stabilisation to optimize service levels

Mahbub Hossain

Campbelltown City Council



Mahbub Hossain has 25 years of local government experience, gained at Campbelltown City Council, and for last 22 years as Coordinator, Strategic Assets section. Mahbub holds a Degree in Civil Engineering with a Masters in Infrastructure Management. Particular areas of interest are asset management, pavement management and forward planning of infrastructure maintenance and improvement. Mahbub is a key member of Council's Asset Management Team, in the introduction and promotion of Asset Management Systems and Strategies. Mahbub Hossain is also directly involved in introducing innovative renewal treatment solutions for Campbelltown City Council's road pavement assets.

Session 3 – Industry partnerships in national recognised stabilisation operator training

Marcia Kelly

THE Mining and IS Australia




Marcia has a diverse work history in both Australia and abroad with high-level experience in leadership and management roles, including management of multimillion-dollar projects, people and human resources, HSEQ, and workforce development and training across multiple industry sectors, including mining, civil and building construction, oil and gas, and Government.

Marcia brings particular expertise in safety audits, investigations and compliance, Government liaison, stakeholder management and tender development and has comprehensive knowledge of

	<p>finance, management, business, organisational development, and staff management.</p> <p>Marcia thrives in challenging environments and through her experience as both a CEO and Project Director in an international environment, brings high level communication, consultation and negotiation skills and engagement experience in liaison with Government, national and international companies and clients, along with an enjoyment in building team and company capability.</p>
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Session 4 – Foamed bitumen stabilisation and the Airport Pavement Research Program

Dr Greg White	The University of the Sunshine Coast
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	<p>Dr Greg White is the Director of the Airport Pavement Research Program at the University of the Sunshine Coast. Following a career as an Airfield Engineering Officer in the Royal Australian Air Force, Greg worked for a number of leading Australian design consultants as a Principal Airport Pavement Engineer and then as the Technical Manager Airports for one of Australia’s leading airport construction and surfacing companies. Greg holds a number of Masters level degrees, as well as a PhD, all earned in the area of pavement materials and engineering.</p>
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Session 4 – Canberra Airport – Taxiway Bravo extension

Tim Jackson	Downer EDI Works
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	<p>Tim is Specialist Products and Services Manager for Downer. After commencing his early studies and career as a laboratory technician in Queensland, Tim seized the opportunity to move to the UK in 2002. This enabled him to further develop his skills in the planning and delivery of civil infrastructure and construction projects.</p> <p>Tim has more than 15 years’ experience working with Tier 1 contractors in the UK and Middle East on a range of major civil infrastructure and construction projects, including significant asphalt road and specialised pavement projects in both regions. Tim has also played a key role in projects which required client and stakeholder engagement and subcontractor management, including the management of diverse workforces in the UK and Middle East.</p> <p>Since returning to Australia to work with Downer, Tim has been focused on the delivery of specialised airport pavement projects and has been a principal member of the project team delivering</p>
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	<p>works to Sydney Airport on the main runway, parallel runway and major taxiway intersection upgrades.</p> <p>Tim’s focus today is to develop strong relationships and trust with his clients and assist Airport & Road asset managers with specialist pavement preservation & maintenance solutions.</p>
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Session 4 – Effects of ‘hot storage and duration’ on Class 170 binder properties and foamed bitumen stabilisation performance

Damian Volker	Queensland Department of Transport and Main Roads
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Damian is Principal Engineer, Pavements Rehabilitation, Engineering and Technology for TMR. He holds an Advanced Diploma of Civil Engineering and has recently completed a Bachelor of Civil Engineering (Honours) degree. His final research thesis investigated the effects of bitumen temperature on foamed bitumen performance.

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Damian was the inaugural 'Young Stabiliser of the Year' award winner in 2015 and is a member of the AustStab National Technical Working Group.

Session 4 – Emulsion treated road base – Bracalba Quarry case study

Kanjana Yindee



Sami Bitumen Technologies

Kanjana is the National Laboratory and R&D Manager for Sami Bitumen Technologies. She graduated with a Bachelor Degree in Chemistry Science and a Master in Environmental Science from Naresuan University and University of San Francisco respectively.

Kanjana joined TIPCO asphalt company (Colas Asia) after graduation. During her time in TIPCO, she has covered bituminous materials production, quality control and R&D of bituminous and asphalt materials and technologies.

At the end of 2011, Kanjana joined Colas Mauritius (Colas Group) as a laboratory manager for a Parallel Taxiway construction Project at SSR international Airport, Mauritius and was involved in all quality control processes and testing on soil, aggregate, cement and asphalt. In 2013, after completing the airport project in Mauritius, Kanjana joined Sami Bitumen Technologies (Colas Australia) as the Laboratory Manager, Queensland and in June 2015 was transferred to Sydney as the National Laboratory and R&D Manager.

With more than 25 years' experience working in bituminous products and road construction field, Kanjana specialises in R&D and production of bituminous and asphalt products. Her interests are rheology of bituminous materials, recycled materials for road construction, and green pavement materials.