JULY 2026 Volume 69 Issue 06. Online: www.corrosion.com.au

Technical Symposium and Expo 2026 – preliminary notice connecting corrosion professionals across Australasia

The Australasian Corrosion Association is pleased to present the Technical Symposium & Expo 2026, a new multi-city technical event series designed to bring together corrosion and asset protection professionals across New Zealand and Australia.

The symposium format delivers a focused and accessible program of technical presentations, industry engagement, networking and exhibition opportunities while creating stronger connections with regional corrosion communities. The Technical Symposium & Expo will visit three cities across Australasia, providing delegates, sponsors, exhibitors and presenters with opportunities to engage with industry professionals and share technical knowledge.

Event Dates

Venues are currently being secured and the dates may change, so please do not make travel arrangements at this stage.

What to Expect

The Technical Symposium & Expo is being designed to deliver practical, relevant and high-quality technical content in a format that encourages participation from across the corrosion and asset protection community.

Each event will feature:

- Technical presentations (peer reviewed)
- Industry exhibition opportunities
- Networking events and industry engagement
- Asset owner, consultant, contractor and supplier participation
- Regional content tailored to local industry challenges and opportunities
- Access to corrosion professionals from a wide range of sectors

We suggest members go to the conference website:https://corrosion-prevention2026.eventsairsite.com/ where you can access the most up-to-date information as it becomes available.

Technical Program

The ACA technical paper process will continue as planned. All accepted abstracts will proceed through the ACA peer review process, ensuring the delivery of high-quality technical content and published proceedings. Technical papers will be reviewed and selected for each city based on program requirements, audience relevance and scheduling considerations.

Exhibition & Sponsorship Opportunities

The Technical Symposium & Expo provides a unique opportunity for organisations to connect directly with corrosion professionals, asset owners, engineers, consultants and decision-makers across multiple cities and markets. Exhibition and sponsorship packages will be available for individual events or across the full road show series.

Further details, including sponsorship opportunities, exhibition packages, venues and registration information, will be released shortly.

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Avoiding corrosion on solar panel structurals

Over a 30-year asset life, corrosion can evolve into structural, electrical, and fire safety issues on solar panels. Corrosion drives up operation and maintenance costs, reduces resilience to extreme events, and in some cases, can force premature decommissioning or complete structural replacement.

Solar panel racking steel is not rendered dysfunctional the moment rust appears. Designers build in a margin of material thickness above the minimum required to resist expected loads. But when corrosion affects electrical connections, it can shift from a reliability concern to a safety issue.

Corrosion concentrates at interfaces like bolted connections, weld seams, and cut edges, where moisture, debris, and movement can erode protective coatings.

Fasteners are a case in point. Corrosion can seize bolts, turning routine maintenance into labour-intensive replacement. It can also degrade the joint itself when small changes in tolerances and friction between contact surfaces create movement under loading, accelerating wear.

In practice, corrosion may appear in the form of compromised grounding continuity, by interrupting the metal-to-metal pathway that carries fault current from module frames through the racking system and into grounding conductors. That loss of continuity complicates fault detection and raises safety concerns.

At terminals, lugs, and connectors, corrosion can raise resistance, generate heat, and physically separate conductive surfaces. In the worst case, this combination can contribute to disconnection, arc faults, and elevated fire risk.

Most corrosion issues come from three underlying causes: (1) protection that is poorly designed for the environment in the first place; (2) protection that gets damaged in the field; and (3) component choices that accelerate corrosion at interfaces.

Racking structures most often rely on hot-dip galvanising for protection. Zinc acts as a sacrificial

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layer through galvanic corrosion, whereby the zinc preferentially corrodes first, protecting the steel underneath until the zinc layer depletes. That makes galvanising thickness a central variable in the measure of a component's corrosion resistance.

The zinc thickness required depends on the environment and the design life. If the zinc coating starts thinner than specified, or if the specification does not reflect true site exposure, the zinc layer can be consumed faster than planned, and corrosion of the underlying steel can begin far earlier than expected.

Even when galvanising is applied correctly, straps, forks, lifting points, handling and stacking can scrape the zinc coating. The process of bolting on connections can remove protective material on threads.

Those exposed areas will often require maintenance touch-ups. When materials sit for extended periods in

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wet staging conditions, or when a touch-up is missed, corrosion can start at exposed points.

Without close ¬inspection, it is difficult to determine where the protective layer is intact and where it has been removed.

A system specification that may be perfectly suitable for an inland site may be completely inadequate for a coastal site, or one with highly corrosive soil properties. There is no one-size-fits-all specification for corrosion protection.

Finally, component selection and compatibility can accelerate corrosion at critical interfaces. Connector components from different manufacturers that were never intended to mate, can introduce dissimilar metals that promotes galvanic corrosion.

Best practices

Corrosion control works best when designers treat it as a lifecycle program rather than a warranty clause. This requires clear specifications up front, verification at the right points in the supply chain, and a monitoring plan once the site is operating.

Prevention starts with corrosion specifications tied to the actual site; matching materials and coating thickness to the environment, including coastal exposure, soil conditions, drainage patterns, and expected wet-dry cycling.

Packaging and handling should minimise scraping and impact damage. Consistent touch-up is essential, using cold galvanising materials anywhere installation crews find exposed bare steel, including connector threads and cut edges.

When corrosion is detected, a clear inspection and diagnosis workflow helps crews to respond with measurements rather than assumptions.

A practical approach starts with visual walkdowns to map any corrosion clusters. Coating thickness measurements follow at representative locations, particularly at interfaces and other high-risk points.

Owners can reduce long term risk through periodic checks rather than reactive repairs. Spot-check galvanising thickness on steel racking every five years. Interpret results against the original corrosion protection specification.

Projects that stay ahead of corrosion treat it as a measurable and controllable performance variable. This requires clear acceptance criteria, documented remediation practices, and periodic verification.

Source: PV Magazine Global, April 2026

Report on AEC's 98th meeting

from Mark Sigley, NZ Electrolysis Committee

The Australian Electrolysis Committee (AEC) / CP Technical Group held its 98th meeting on Friday 19 June. The AEC holds two meetings every year, a one-day seminar in May – June and a shorter forum at the annual conference. This year's seminar was well attended in person, in Melbourne, and online from around Australasia. In fact, there were so many registered to attend in person that the venue was shifted from the new ACA premises to a nearby venue that could accommodate 60 people.

The morning session (Australian eastern time) was made up of a series of talks on subjects relevant to CP. **Bruce Ackland** welcomed the attendees to the meeting with a brief history of the AEC, which was formed as a way of sharing CP and stray current interference knowledge by the Australian state electrolysis committees.

Jim Hickey, from Ausgrid, NSW talked about a variety of options for improving how interference on buried pipes by stray current from dc rail power is assessed. Jim included recommended improvements to the Australian pipeline CP standard (AS 2832.1) which is currently under review. He included comparisons with international standards, the Victoria ESV Code of Practice, and the New South Wales NSWEC Guide.

Following on with the theme of interference, **Jason Styles**, from Powerearth, NSW, gave a presentation on AC rail traction systems, including a summary of the various types, all working with a voltage of 25kV transmitted and boosted in different ways, before talking about the hazards that may exist, and how ac can be transmitted onto pipelines and how this interference can be found, measured, and mitigated.

Ramon Salazar, of SA Water and current ACA President, summarised records that he was able to save from being discarded, from the early days of electrolysis mitigation in South Australia, including the works of **Sir William Goodman** (1872 – 1961), who supervised the installation of New Zealand's first electric tramway and went on to oversee the foundation and growth of the Municipal Tramways Trust in Adelaide, SA. Amongst his achievements were gaining cross-agency collaboration in mitigation stray current corrosion, particularly with adoption of cooperative testing and mitigation by bonding.

After the morning break, **Mike Tan and Bob Varela** (both from Deakin University) presented on the CP control system their team have developed with funding from the APGA's Future Fuels CRC and Australia's Economic Accelerator programme (see images below). The system includes an electronic controller which adjusts CP power supply output to suit corrosion and CP current measured using coupon probes that the team also developed, which are used to simulate a variety of coating defects, including shielded defects.

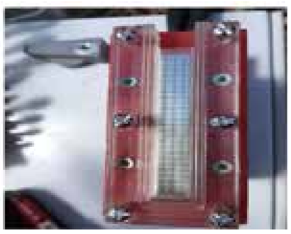
Wayne Burns and Madelaine Laurenson summarised the new ACA qualification scheme, which will be a single qualification of Corrosion Specialist, replacing the current two-tier Corrosion Technician and Technologist certificates. Qualification will be through courses and experience, and there will be a requirement to demonstrate continuing work and education in order to maintain certification.

The last presentation was by **Mark Sigley**, from ACANZ and Firstgas, who presented on weaknesses in our general understanding of how CP works, and how its performance can be assessed, referencing international research and experience monitoring CP systems over many years using CP Coupons.

After the break **Richart Brodribb** (of the ACA Victoria Branch, and M Brodribb Pty, Ltd) led a Q&A session, which despite having to use two separate microphones (one for the room, the other for the Zoom attendees) went smoothly with several interesting discussions.

The meeting concluded with the AEC's AGM, at which Bruce Ackland was re-elected as chair of the group with Alireza Kouklan continuing as secretary. The attendees also discussed whether a CP Forum could be held this year with the conference being replaced with three smaller symposiums. It was decided that a CP forum will be held in Christchurch, if it can be accommodated in that symposium's schedule. Next year's 100th meeting was also discussed, which the team are hoping to make a big event, and which will include a retrospective look at the history of the AEC.



Q & A CORNER

Older ACA NZ members have probably seen a number of situations that may never have made it to a textbook.

If you have a question you'd like clarification on, email it to the Editor at lesboultonrust@gmail.com. We'll pose it to our panel of experts who will answer it in another Bulletin, so everyone can improve their knowledge.

Q: Does the shift to renewable energy infrastructure change the nature of corrosion?

& A:

The global conversation around corrosion engineering has shifted quite rapidly. The energy transition to a renewable energy-based economy, such as wind, solar, geothermal, and hydrogen storage, moves critical assets to more complex and often remote environments (including offshore installations).

Corrosion issues in hydropower stations have long been attended to. Traditional engineering has done an excellent job, preventing short-term structural failures of plant and equipment using standardised materials selection.

However, localised forms of corrosion, like pitting corrosion, MIC, and stress corrosion cracking remain a tenacious threat to long-term asset integrity for more recent renewable energy sources infrastructure.

Because some remote energy systems can face harsh dynamic conditions, predicting corrosion via traditional scheduled time-based inspections is no longer sufficient.

The current industry focus is on developing real-time corrosion monitoring sensors and predictive modelling (including AI) to manage unpredictable local micro-environments.

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Advertorial

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