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ACA
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Motorcycle from WW2 pulled from the Danube in Budapest

Due to the recent record low water levels on the Danube River, exposing a number of WW2 German shipwrecks, passers-by spotted the handlebars of a military motorcycle protruding from the rocks along the embankment near Budapest, Hungary. Experts from the Hungarian Museum of Military History arrived at the scene and established that it was a German DKW 350-1 from WW2. Remarkably, the military motorcycle was found to be in unusually good condition and it was almost complete.

The motorcycle was not the only wartime relic found in the riverbed. During the subsequent excavation, German infantry ammunition, remnants of hand grenades, artillery shells, as well as mines, were also discovered. Because of the dangerous finds, the area was secured and bomb disposal experts began clearance work.

The thick river mud had stopped oxygen penetration causing any serious corrosion which preserved the motorcycle components. Several associated items including a German soldier Y-strap and a bayonet frog were found close by the motorcycle. The DKW motorcycle, weighed down by mud and trapped water, tipped the scales at more than 200 kilograms. In the end, the motorcycle was taken across to the Pest side of the Danube with the help of a research vessel. It was then transported to a hangar at the Hungary Military History Museum, where the valuable WW2 find will be cleaned and conserved in the coming year(s).

There is also a darker side to the story: human remains were found beneath the motorcycle. Investigations showed them to be the remains of two German soldiers, whose further excavation and recovery are being carried out by the German War Graves organisation.

On the basis of market comparisons, this is an especially valuable WW2 German DKW motorcycle example, all the more so because it surfaced in near-complete condition, meaning there is a very good chance it can be restored and displayed. Collectors buy WW2 DKW military motorcycles of this type in unrestored condition for a few thousand Euros; but good condition restored WW2 DKW motorcycles can fetch up to €18,000.



The complete WW2 German DKW 350-1 motorcycle discovered after 82 years in the Danube River, Hungary.



A restored German WW2 DKW motorcycle at the Australian Armour & Artillery Museum in Cairns

Source: Daily News Hungary, August 2026

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: What is the cause of the increasing formation of sinkholes around the world?

& A:

The increase in the formation of sinkholes in the roading of cities around the world can often be traced back to corrosion occurring on ageing underground infrastructure such as sewer pipes. It all starts underground when corrosion, pipe deflection and soil erosion quietly undermine buried infrastructure. If left unchecked, these issues can escalate into serious ground instability - sometimes with dramatic consequences including the formation of dangerous sinkholes.

Hydrogen sulphide gas (H_2S), commonly found in sewage pipes, poses a serious threat to underground sewage pipe systems. When this gas comes into contact with moisture on the inside of pipe walls it forms sulphuric acid (H_2SO_4) which is highly corrosive and gradually eats away at the pipe material. Over time the corrosion on internal pipe walls can lead to cracks, leaks and even structural failure of a pipe.

Once a pipe is compromised, escaping water begins to erode the surrounding soil. As the soil is washed away underground voids begin to form, destabilising the ground above. This can result in gradual subsidence of the ground or in extreme cases the sudden formation of sinkholes. Early detection and repair of pipe deflection are therefore critical to preventing costly and dangerous ground movement that can result in a sinkhole forming. Regular inspection and timely rehabilitation of ageing sewer pipes can prevent sinkhole issues before they escalate.

The United States Geological Survey estimates that sinkhole damage costs at least \$US300 million each year in the USA. In 2025 in Japan, a large sinkhole (40 metres wide) suddenly ruptured in a main road just north of Tokyo. A mini-truck and its driver fell into the massive sinkhole seconds later (see image). The truck and driver were washed away underground and the driver tragically died. So, sinkhole formation in roads can be very dangerous.



Above: The 2025 sinkhole in Tokyo

Below: The 2023 sinkhole in Parnell, Auckland



Source: BBC World News, February 2025

Introducing the new ACA Board Chair: Trish Shaw



At the June 2026 ACA Board meeting, former ACANZ President Dr Patricia (Trish) Shaw was elected to be the 2026/27 Chair, taking over the role from Kingsley Brown. Trish had been re-elected to the Board in 2024 to fill a vacancy created by former Chair, Dean Fergusson's retirement.

She is well qualified to serve as our Board member and its Chair as, besides her PhD in Chemistry awarded by the University of Auckland in 1994 and a PGDip Business they also awarded her in 2004, Victoria University of Wellington awarded her a PGDip Strategic Studies in 2018.

Her previous governance experience includes three years as a member of the University of Auckland Council.

From 1994 to 2011, Trish was with the Defence

Technology Agency in Auckland where she managed the NZDF corrosion programmes that included protective coatings for the RNZAF and RNZN. For four years she chaired the Coatings, Polymers and Adhesives panel of The Technical Cooperation Programme (TTCP) representing NZDF at international meetings and conferences.

After an 18-month executive position with the NZ Army at Waiouru, Trish joined BRANZ for four years as a Materials Scientist. There she led a multidisciplinary (fire, structures and materials) team of 10 carrying out applied research, including corrosion of building materials, in support of New Zealand's building and construction industry.

Until recently, Trish was a Principal Scientist and Team Leader in the Advanced Materials Group at Callaghan Innovation in Lower Hutt, where her team conducted applied research and provided consulting services across a range of industries in NZ. She is now semi-retired and does a variety of contract work.

Trish was the PF Thompson Memorial lecturer at our 2016 Corrosion & Prevention conference in Auckland, where she also won the AC Kennett Award for the best paper on non-metallic corrosion. This was one of her 23 published papers with many having been presented to ACA and other international conferences. Trish remains involved with the ACANZ Branch as our representative on the International Corrosion Council. She also was a Director on the ACA Board from 2021 to 2023.

Compiled by Willie Mandeno

Aurora Energy Otago Science & Technology Fair

To Willie Mandeno
Australasian Corrosion Association (NZ Branch)

Thank you and Australasian Corrosion Association (NZ Branch) for your sponsorship of the Aurora Energy Otago Science & Technology Fair.

This year we attracted 255 entries from 14 schools totally almost 315 students from around the Otago region to include Central Otago. We continue to be the largest science and technology fair in the country.

Judges were impressed by the quality and diversity of questions investigated by Otago's young scientists. While we did not attract as many entries as expected, it is notable that due to all the changes in curriculum

and impact that this has had on schools, we still attracted entries from a range of schools.

Hudson Ferguson:	Guard your grin
Joshua McCulloch:	What is the best paper towel brand?
Shubhrolima Das:	Gutted! How different drinks affect your medicine
Oscar Reiber:	Exploring Bio-alternatives to Commercial Plastics
Briar Henwood & Elsie Hyink:	Watching Paint Dry - Te ako ngā peita ngā tae me ngā kohuke

On behalf of the Fair Committee, I thank you for your support and look forward to working with you again next year.

Respectfully yours, Steven Sexton, Fair Convenor

Cathodic Protection Forum at ACA's Christchurch Symposium

The annual ACA CP Forum, normally held at ACA Conferences, will be held this year at the ACA Symposium in Christchurch on either the 8th or 9th of October 2026.

This year's CP Forum will be the 99th meeting of the Australian Electrolysis Committee (AEC) and it will be a combined effort by the AEC and NZ Electrolysis Committee (NSEC). There will be forum speakers

from both Australia and New Zealand.

The CP Forum is relatively informal, and speakers at the forum do not present a paper, just an interesting subject. It is also expected that the Forum will be streamed on-line this year, so even if you can't make it to Christchurch, keep an eye out for the opportunity to watch it on-line.

Mark Sigley, NSEC Secretary

ACANZ at Government House

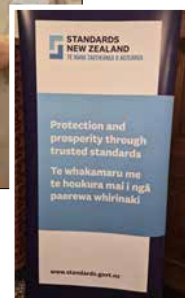
On 30 July 2026, over 180 volunteers who contribute to writing and updating our national standards were invited by the Governor General to a Volunteer Recognition Reception at Government House that was organised by MBIE and NZ Standards. Speakers included the Rt Hon Dame Cindy Kiro, Cameron Brewer MP and Malcolm MacMillan, National Manager of SNZ.

Dame Cindy noted that NZ's first home-grown standard was for galvanised steel fencing wire (NZSS 143) and how "standards have become part of the often-unseen infrastructure of daily life".

Other speakers highlighted the importance of the experts "who voluntarily contribute their knowledge and experience to the standards development process, helping ensure standards remain relevant, practical, and responsive to the needs of New Zealand's communities, industries, and future challenges".

Also, how standards "help reduce technical barriers to trade, support quality and safety, enable innovation and provide confidence for businesses, regulators, consumers and international markets."

Attendees included several ACANZ Members who contributed to the new NZS 3404.3, Steel structures, Durability requirements, including Zhengwei Li, Raed El Sarraf and Willie Mandeno (pictured), Kaveh Andisheh and Michail Karpenko from HERA and our Branch President, René Hill.



AMPP Coating Inspector Programme - NZ, Level 1

The AMPP Coating Inspector Program (CIP) Level 1 is returning to New Zealand in 2026

Christchurch

28 September – 3 October 2026

<https://lnkd.in/gwm-8GG2>

The course is an intensive presentation of the fundamental technology of coating application and inspection. It provides both the technical and practical fundamentals for coating inspection work on structural steel projects. This is the world's most recognised and specified coating inspection certification program.

Auckland

19 – 24 October 2026

<https://lnkd.in/gAgiqVYi>

Although specifically designed for Coating Inspector Trainees, this program benefits anyone interested in gaining a better understanding of coatings and inspection including Project Managers, Engineers, Maintenance and Quality Assurance/Control Personnel, Contractors and Specification Writers, and Coating Applicators.

For more information, go to:

<https://www.corrosion.com.au/training/training-programs/coating-inspector-program-level-1-ampp/>

Innovation needs more than good ideas

Advertorial

Most organisations have no shortage of ideas.

A new coating system. A different fabrication detail. A more efficient or alternative way of working.

The challenge is rarely the idea itself.

The challenge is proving that it works.

At Ferric Consulting Ltd, we help clients bridge the gap between innovation and implementation by combining technical expertise in durability, protective coatings, passive fire protection and compliance with a practical understanding of experimental design, performance verification and risk management.

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Too often, trials fail because they are poorly designed, critical variables are overlooked, or the results cannot withstand technical scrutiny.

We work alongside asset owners, engineers, contractors and manufacturers to develop meaningful outcomes and support informed decision-making.

Sometimes the result confirms the original concept.

Sometimes it challenges it.

Either way, decisions are made on evidence rather than opinion.

Alongside this capability, Ferric Consulting provides specialist services in:

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- Protective coatings
- Passive fire protection systems
- Technical auditing and compliance reviews
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- Expert witness and dispute resolution support

In an environment where performance expectations continue to increase and budgets continue to tighten, there has never been greater value in understanding what works, why it works and how to demonstrate it.

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