EFC
EUROPEAN FEDERATION OF CORROSION

November 2026

NEWSLETTER

Celebrating the people who make the Federation special

Welcome to the final EFC Newsletter of 2026. I hope you've had a good year and really made the most of your membership of the EFC.

I'm still reflecting on a successful and highly enjoyable EUROCORR 2026 conference in September. Aside from the technical quality of the conference, the standout moment for me was definitely when the troupe of Irish dancers burst into the Guinness Storehouse, accompanied dramatically and enthusiastically by the drummer.



From a personal perspective, it was wonderful to see so many people enjoying the experience and it made me so proud to be Irish. I don't think I'll ever forget how that felt. I'm glad so many of you had such a positive experience in Dublin and I'm already very much looking forward to attending next year's event in Prague.

We're truly fortunate to be part of such a closely-knit and supportive scientific community. As I mentioned during my address at the closing ceremony, the staff at the Convention Centre Dublin commented to me that we were one of the most open, friendly and welcoming groups that they had ever hosted. This is high praise indeed given the breadth of events that are regualrly held there and I think it's so important that we continue to cherish and nurture this spirit of inclusivity and community.

I approach the end of my term as EFC President with a deep sense of gratitude for the many stimulating and rewarding experiences that the role has brought me. It's been a very busy year, not only with those responsibilities, but also chairing the EUROCORR 2026 conference, not to mention my day job at NPL! But I wouldn't change a single thing. I end my term more convinced than ever of the value of the EFC in bringing people together with a shared sense of purpose. Our strength is truly in our diversity.

I'd also like to take this opportunity to thank all those in the EFC administrative team who have provided invaluable support during my Presidency, including Mariana Berthet, Ines Honndorf, Roman Bender, Julija Bugajeva, and Pascal Collet. Their professionalism, dedication, and commitment to the EFC are highly appreciated.

Moving into 2027, I'm delighted to be succeeded as President by Patrick Keil from GfKORR in Germany. Patrick and I have shared many experiences together over the past few years and I have so much respect for him, both as a scientist and as a person. He will be ably supported by incoming Vice President Marta Mohedano Sanchez. So the future of the EFC is in very good hands.

Wishing you all a productive end to the year, a relaxing and enjoyable break over the festive period, and very best wishes for 2027!

Gareth Hinds
EFC President

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The Gold Standard

EUROCORR 2026 welcomed the world's corrosion community to the Emerald Isle, including some of EFC's most notable corrosionists, who were honoured for their achievements in Dublin

Philippe Marcus (above) is presented with the Order of Merit by EFC President Gareth Hinds, who also presented the European Corrosion Medal to Damien Féron (right); Dawei Zhang (bottom) receives the Cavallaro Medal from Andrea Balbo (Corrosion and Metallurgy Study Centre "Aldo Daccò"). Photography by Stephen Wall Morris





EUROCORR 2026 in Dublin provided the perfect platform to recognise some of the outstanding contributions to corrosion science. From established leaders in their field to the next generation of researchers, the EFC's best and the brightest were honoured on stage.

Among the major honours, Professor Philippe Marcus received the Order of Merit, the Federation's highest distinction, Professor Damien Féron was awarded the European Corrosion Medal, Professor Dawei Zhang was honoured with the Cavallaro Medal, and Ines Honndorf was made an Honorary Fellow.

The EUROCORR Poster Prize and Oral Presentation Awards recognised the best prestations from the conference, Working Party 4 recognised their best talents, and the EUROCORR Travel Grant and Young Scientist Grant showed the calibre of the next generation in the fight against corrosion.





STAC Chair Stefan Ritter presents Ines Honndorf (above) with an Honorary Fellowship; the Young EFC Best Oral Presentation Awards recognised two outstanding early-career researchers: Ilana Bidon, (below, left) University of Nantes, for her presentation *Impact of welding on the microstructure and corrosion resistance of AA2219 Friction stir welds* and Cristhiana Albert, (below) ETH Zürich, who presented Decoupling the drivers of steel corrosion in carbonated concrete.











Bright Futures

Stefan Ritter presents the EUROCORR Travel Grant for Young Corrosionists to Ajaykumar Udayraj Yadav, Indian Institute of Technology Delhi, India (above, left) and Itziar Hidalgo González, Universidad Complutense de Madrid, Spain (above, right). Young EFC Chair Johanna Frenck presents the EFC Young Scientist Grants to Aleksandra Popovic, University of Belgrade, Serbia (left), Mohammed A. Shummo Yousif, Vrije Universiteit Brussel, Belgium (below, left) and Terezie Kosova Altnerova, University of Chemistry and Technology, Prague, Czech Republic (below).











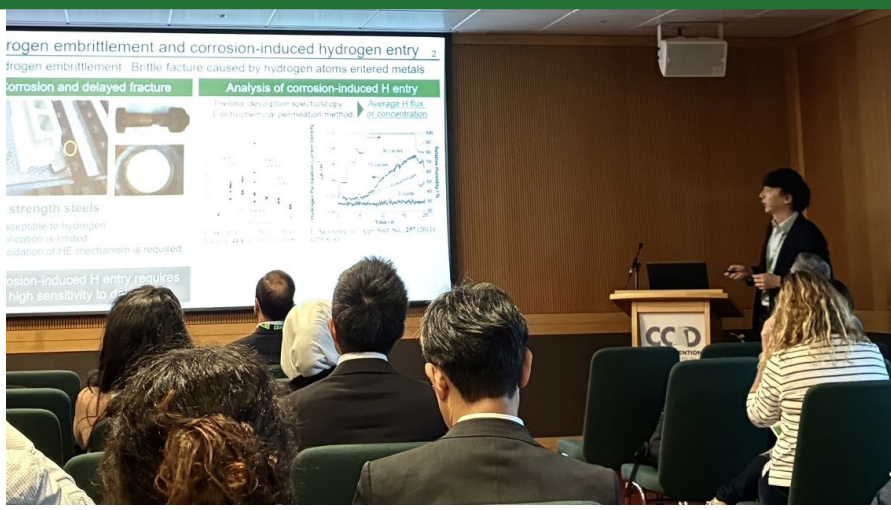
Toke Nørremølle Heegaardri, Technical University of Denmark (DTU), Denmark (above) is presented with the EUROCORR Poster Prize by Stefan Ritter, and the jury that presided over the honour (above, right). James Hall, University of Manchester, UK (right) is recognised as the EFC WP 4 – Best Early-Career Presenter of a nuclear corrosion-related talk; Catherine Guerre, CEA, France (below) receives the Henri Coriou Award; and Leyla Franz, Karlsruhe Institute of Technology (KIT), Germany (below, right) is honoured as the EFC WP 4 – Best Poster Prize winner of a nuclear corrosion-related poster.





If you submitted a paper for EUROCORR and would like to see it an special editon of CEST, then click here

EUROCORR hosts annual International Branch meet



The EFC International Branch continued to strengthen its international engagement in 2026 with its third annual meeting, bringing together members, developing regional partnerships and creating new opportunities for collaboration across the corrosion and materials engineering communities.

The International Branch's annual in-person meeting at EUROCORR 2026 in Dublin attracted more than 20 participants. The meeting provided an opportunity for Hiroshi Kakinuma, Chair of the EFC International Branch, and Pascal Collet, EFC Chief Operating Officer, to introduce the organisation, outline the benefits of membership and highlight its activities and opportunities for engagement.

Hiroshi Kakinuma also contributed to the EUROCORR programme with a keynote presentation during the joint session Hydrogen in Energy Transition. His talk, entitled *Observation of pitting corrosion-induced hydrogen entry into stainless steel in $MgCl_2$ solutions*, explored an important area of research at the intersection of corrosion science and the energy transition.

Building partnerships across the Middle East

On 15 September 2026, the EFC and the Qatar Society of Engineers (QSE) held a strategic meeting to explore opportunities for closer co-operation in corrosion management, engineering integrity, and materials engineering.

QSE was represented by its Chairs, Eng. Amna Al Nuaimi, and Eng. Saeed Al Mohannadi. The EFC delegation was comprised of Muhsen Elhaddad, Vice-Chair of the EFC International Branch; Gareth Hinds, EFC President; Patrick Keil, EFC Vice President; and Pascal Collet, EFC Chief Operating Officer.

Discussions focused on establishing a framework for technical collaboration, professional development, knowledge exchange and future joint initiatives. The meeting marked an important step towards a long-term partnership, strengthening engagement between the EFC and Qatar's engineering community while supporting the development of corrosion management and asset integrity practices across the region.

The EFC's regional presence was further reinforced by Muhsen Elhaddad's participation in the 4th Middle East Asset Integrity Management Conference & Expo (AIMCS Expo 2026), held in Abu Dhabi between 22 and 23 September.

As a featured panellist, he contributed to discussions on the future of asset integrity, highlighting the role of digital technologies, advanced inspection methods, robotics and artificial intelligence in improving asset reliability and corrosion management.

His participation reflected the EFC's commitment to knowledge exchange, international collaboration and the adoption of innovative solutions to address asset integrity challenges across the Middle East.

Looking ahead, Muhsen Elhaddad will moderate the Corrosion and Coatings conference stream at the 6th Annual Middle East Metallurgy, Corrosion and Coatings Expo (MECOC Expo 2027), taking place in Abu Dhabi, UAE, on 21–22 April 2027. The EFC will once again participate as a supporting partner, continuing to build relationships with industry stakeholders and strengthen its presence in the region.

Elsewhere, Ihsan Ul Haq Toor, based in Saudi Arabia, is facilitating ongoing discussions with the Materials Engineering Association (MEA). The aim is to develop closer cooperation and promote scientific and technological advances in materials and corrosion.

Get involved with the EFC International Branch

These initiatives demonstrate the growing commitment of International Branch members to strengthening the EFC's global network and extending its reach into regions without established Member Societies.

If you are based in a country without an EFC Member Society and would like to become more involved in the Federation's activities, you are warmly invited you to join the EFC International Branch.

Click here to visit the EFC website to learn more about the benefits of membership and how to apply, or contact EFC Chief Operating Officer Pascal Collet by email to find out more about the Branch's future activities and opportunities to get involved.

EFC Member listed among top 2% of scientists

Dr Shiladitya Paul has been named among the world's top 2% of scientists for the second successive year. The Vice-Chair of Working Party 9 on Marine Corrosion and recently appointed Secretary of Working Party 24 on CO2-Corrosion in Industrial Applications, Shiladitya has once again been named on the Stanford/Elsevier Top 2% Scientists List.

The prestigious list highlights the world's leading scientists who have made a substantial impact in their respective fields through their citation influence.

As Associate Professor and Director of the Materials Innovation Centre (MatIC) at the University of Leicester and TWI Technology Fellow in Corrosion and Materials Protection, his inclusion on the list recognises his international standing and the impact of his work in advancing knowledge and influencing the wider scientific community.

Produced annually by Stanford University in collaboration with the publisher Elsevier, the list is created using information from Elsevier's Scopus database and based upon the number of citations, co-authorship adjustments, and authorship positions, with an emphasis on meaningful scientific impact rather than research output alone.



Shiladitya is a registered Chartered Engineer (CEng) in the UK and a Fellow of the Institute of Materials, Minerals and Mining (FIMMM) who has written over 150 papers and articles on the subjects of materials, coatings and corrosion.

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IBERCorr'27 is more than a congress

It is a meeting point for science, industry, and innovation, creating new opportunities to build partnerships and shape the future of corrosion research and materials protection across the Iberian region.

Call for Papers

The submission period will be open from **02 October to 30 November 2026!**

EFC event nº564

www.ibercorr2027.org

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EUROCORR & ICC 2027



Co-organised by the EFC and International Corrosion Council, Prague will be the destination for corrosionists in 2027 to discuss the latest developments in corrosion science

The Joint EUROCORR & ICC 2027 Congress will take place at O2 universum, one of Prague's leading congress venues, offering modern facilities. Its convenient location ensures easy access by public transport, with the Ceskomoravská metro station (Line B) and several tram stops within walking distance. Prague city centre is approximately 10 minutes away.

Looking Ahead: The Future of Corrosion Science

EUROCORR & ICC 2027 will look beyond today's challenges, placing increased emphasis on the future of corrosion engineering, emerging technologies and the next generation of corrosion professionals.

The five-day congress will bring together researchers, experts and industry leaders from Europe and across the globe, providing an international platform for knowledge exchange, innovation and collaboration.

World-Class Plenary Lectures

Inspiring perspectives from academia, industry and beyond. The standard programme in sessions will be accompanied by plenary lectures. Part of the plenary lectures will be given by Awards Laureates (European Corrosion Medal, Kurt Schwabe Prize, Marcel Pourbaix Award). Dake Xu from the Northeastern University in Shenyang, China will speak about his fascinating research into the role of extracellular electron transfer in the mechanism of microbially-induced corrosion. Scott Wade from the School of Engineering at Swinburne University, Australia will open a controversial but highly necessary discussion on the way we approach publishing research results. An overview of material and corrosion protection challenges in current automotive industry will be given by Matthias Klaus Reichelt, a representative of Škoda Auto.

Discover Prague

Beyond the scientific programme, participants will enjoy a comprehensive technical exhibition, excellent networking opportunities and an inspiring social programme.

Prague, one of Europe's most beautiful historic capitals, offers a distinct combination of remarkable architecture, rich cultural heritage and a vibrant contemporary atmosphere. From the historic streets of the Old Town and the iconic Charles Bridge to the banks of the Vltava River, the city provides countless opportunities to explore and enjoy your stay.

Next Generation

Students will be offered complimentary participation in the Congress Dinner and are warmly invited to connect with colleagues, establish new partnerships and contribute to shaping the future of corrosion science and engineering.

Working Party and Joint Sessions

WP 01: Scale Inhibition → Kostas DEMADIS, University of Crete, Crystal Engineering, Crete, Greece; Zeinab ABDEL HAMID ABDEL AZIZ, Central Metallurgical R&D Institute, Cairo, Egypt
WP 02: Corrosion of Medical Implants & Devices → Patrik SCHMUTZ, EMPA, Dübendorf, Switzerland
WP 03: High-Temperature Corrosion & Degradation → Mathias GALETZ, Dechema, Frankfurt, Germany; Somrerk CHANDRA-AMBORAN, King Mongkut's University of Technology North Bangkok, Bangkok, Thailand
WP 04: Nuclear Corrosion → Stefan RITTER, Paul Scherrer Institute (PSI), Villigen, Switzerland
WP 05: Environment Sensitive Fracture → Christine BLANC, Université de Toulouse CNRS, Toulouse, France
WP 06 & 08: Mechanisms, Modelling & Methods ("3M") → Rob LINDSAY, University of Manchester, Manchester, UK; Noémie OTT, Eastern Switzerland University of Applied Sciences (OST), Switzerland; Zhongheng FU, University of Science and Technology Beijing, Beijing, China
WP 07: Corrosion Education → Yaiza GONZALEZ GARCIA, Delft University of Technology, Delft, The Netherlands
WP 09: Marine Corrosion → Philippe REFAIT, La Rochelle University, La Rochelle, France
WP 10: Microbial Corrosion → Marc JEANNIN, La Rochelle University, La Rochelle, France; Daniel BLACKWOOD, National University of Singapore, Singapore
WP 11: Corrosion of Steel in Concrete → Fabio BOLZONI, Politecnico di Milano, Milan, Italy
WP 13: Corrosion in Oil & Gas Production → Jon KVAREKVÅL, Institute for Energy Technology, Oslo, Norway
WP 14: Metallic Coatings, Inorganic Coatings, Organic Coatings, Pretreatments, Self-healing, Hydrophobic & Smart Coatings → Marie-Georges OLIVIER, Université de Mons, CRIM, Mons, Belgium; Lingwei MA, University of Science and Technology Beijing, Beijing, China
WP 15: Corrosion in the Refining & Chemical Industries → Philipp SCHEMPP, TH Köln – University of Applied Sciences, Cologne, Germany
WP 16: Cathodic Protection → Jérôme CROUZILLAC, BAC Corrosion Control, Voisins-le-Bretonneux, France
WP 17: Automotive Corrosion → Elizabeth SZALA, Aluminium Duffel, Brussels, Belgium; Smrutiranjan PARIDA, Indian Institute of Technology Bombay, Mumbai, India
WP 18: Tribo-Corrosion → Manel RODRIGUEZ RIPOLL, AC2T research GmbH, Vienna, Austria
WP 20: Corrosion in Water Systems → Johann Wilhelm ERNING, BAM, Berlin, Germany
WP 21: Corrosion of Archaeological & Historical Artefacts → Sabrina GRASSINI, Politecnico di Torino, Torino, Italy; Emma ANGELINI, Politecnico di Torino, Torino, Italy
WP 22: Corrosion Control in Aerospace → Mikhail ZHELUDKEVICH, HZG, Geesthacht, Germany
WP 23: Corrosion Reliability of Electronics → Rajan AMBAT, Technical University of Denmark, Kgs. Lyngby, Denmark
WP 24: CO2-Corrosion in Industrial Applications → Ralph BÄSSLER, BAM, Berlin, Germany
WP 25: Atmospheric Corrosion → Gino EBELL, BAM, Berlin, Germany; Zehbour PANOSSIAN, Instituto de Pesquisa Tecnológica, São Paulo, Brazil
WP 26: Corrosion in Green & Low Carbon Energy Technologies → Marc WILMS, Shell, Amsterdam, The Netherlands
TF AM: Corrosion & Corrosion Protection of AM Metals → Iris DE GRAEVE, Vrije Universiteit Brussel, Brussels, Belgium; Bowei ZHANG, University of Science and Technology Beijing, Beijing, China
JS 01: Microbial Corrosion & Biofouling Issues in Marine Environments (WP 9, 10) → Marc JEANNIN, La Rochelle University, France; et al
JS 02: Cathodic Protection in Marine Environments (WP 9, 16) → Philippe REFAIT, La Rochelle University, France; et al
JS 03: Hydrogen in the Energy Transition (WP 5, 26) → Tomas PROSEK, UCT Prague, Czech Republic; et al.
JS 04: Corrosion Control in Defence Systems (WP 9, 14, 16, 17, 22, 25) → Axel HOMBORG, Netherlands Ministry of Defence, Delft University of Technology, The Netherlands; et al
JS 05: Artificial Intelligence for Corrosion: From Fundamentals to Applications (WP 8, 4, 14, 17, 22, 25, TF AM) → Slava SHKIRSKIY, Université Paris Cité, France; et al
SS 01: Corrosion Properties of Stainless Steel – Seen from an Engineering Perspective → Václav ŠEFL, University of Chemistry and Technology, Prague, Czech Republic; et al

Congress Secretariat

GUARANT International spol. s r.o., Ceskomoravska 2510/19, 190 00 Prague 9, Czech Republic
eurocorr-icc2027@guarant.cz, www.guarant.cz

Host

Association of Czech and Slovak Corrosion Engineers (AKI), Technická 5, 166 28 Prague 6, Czech Republic
info@aki-koroze.cz, www.aki-koroze.cz

Important Dates

Call for abstracts – on-line forms opening: **NOVEMBER 2026**
Registration on-line opening: **NOVEMBER 2026**
Abstract submission deadline: **31 JANUARY 2027**
Notification of acceptance to authors: **APRIL 2027**
Submission of late posters deadline: **15 JUNE 2027**

ASSOCIATION OF CZECH AND SLOVAK CORROSION ENGINEERS



Photography by Stephen Wall Morris Photography

Women in Corrosion Lunch Sparks Conversation in Dublin

Discussing gender equality, diversity, inclusion, and lasting change in corrosion science and engineering, EUROCORR hosted to the latest annual Women in Corrosion meeting

One of the most engaging and well-attended events at EUROCORR 2026 was the Women in Corrosion Lunch, organised by members of the Young EFC and sponsored by NOF Metal Coatings. The event brought together more than 300 professionals from across the international corrosion and engineering community to discuss the factors shaping women's attraction, retention, progression and influence within the profession. The session brought together participants from a wide range of countries, sectors and career stages, creating a vibrant forum for sharing experiences, identifying challenges and, importantly, exploring solutions.

The discussions held during the lunch have informed an upcoming white paper, which captures the perspectives of attendees and highlights practical actions that can help strengthen the profession for the future.

A key theme throughout the event was the value of international collaboration and learning from diverse experiences. Reflecting on the discussion, Carolin Knab, M.Sc., Universität Kassel, commented:

"The women in corrosion lunch was a great opportunity to share experiences and discuss career-related questions. For me, it was particularly surprising how the gender gap manifests in different countries and how cultural and financial differences between Germany, the U.S. and South Africa, the home countries of my conversation partners, influence the experiences of women in engineering."

Her observation echoed one of the strongest messages from the session: while experiences may differ across countries and cultures, many of the challenges and opportunities are shared, creating valuable opportunities for collective learning and action.

Key Findings

Participants were asked to identify the systemic factors that most influence women's experiences in corrosion and engineering. The most frequently identified barriers were:

→ **47%** highlighted pregnancy, parenthood and caregiving responsibilities as a significant challenge.

→ **41%** identified male-dominated leadership structures and organisational cultures as barriers to progression.
→ **25%** cited concerns around pay equity and career advancement opportunities.
→ **22%** pointed to issues relating to confidence, recognition and legitimacy in the workplace.
→ **22%** highlighted bias, stereotypes and broader inclusion challenges.
Importantly, attendees overwhelmingly viewed these as structural and cultural challenges rather than issues of capability or ambition, reinforcing the need for organisational and sector-wide approaches to change.

Solutions the Community Wants to See

When asked which actions could have the greatest impact over the next two to three years, participants focused on practical, achievable solutions:
→ **31%** identified mentoring, networking and access to role models as the most effective interventions.
→ **29%** highlighted education, awareness-building and challenging stereotypes.
→ **27%** emphasised the importance of parental support, flexible working and improved work-life balance.
→ **18%** called for increased representation of women in leadership and decision-making positions.
The importance of visibility featured strongly throughout the discussions, with attendees repeatedly emphasising that "representation matters" and that visible role models can help inspire future generations, strengthen confidence and demonstrate what is possible within the profession.

Note: Percentages are based on the total number of responses and categories were not mutually exclusive, meaning participants could identify multiple barriers and solutions.

Looking Ahead

Perhaps the most encouraging outcome from the Women in Corrosion Lunch was the sense of momentum. While attendees acknowledged that barriers remain, the conversation focused on opportunities, collaboration and solutions. Mentoring, leadership development, stronger professional networks, allyship and flexible career pathways were all identified as realistic steps that can drive meaningful progress.

The upcoming white paper will explore these findings in greater detail and provide recommendations for employers, professional institutions and individuals seeking to foster a more inclusive and sustainable profession.

The message from EUROCORR 2026 was clear: by sharing experiences, supporting one another and working collectively to remove barriers, the corrosion community can continue building a stronger, more diverse and more innovative future.

NOF METAL COATINGS GROUP







Photography by Stephen Wall Morris Photography

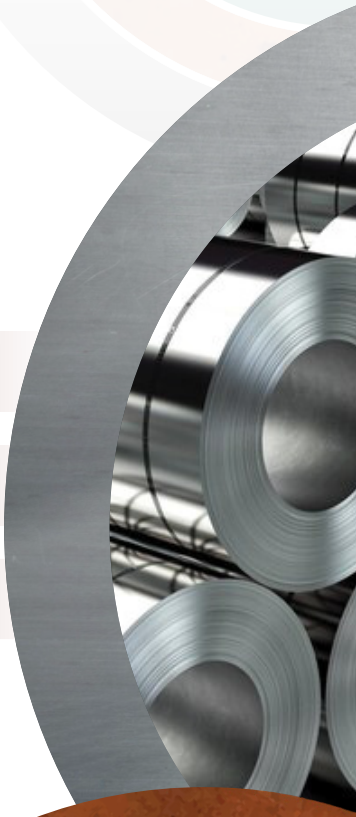
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WP 23 ZESTRON Best Paper Award Crowned at EUROCORR

The award for Junior Researchers was presented at EUROCORR 2026 in Dublin to Jyothsna Murli Rao from the Technical University of Denmark

The ZESTRON Best Paper Presentation Award for Junior Researchers within the Working Party 23 was presented for the second time during EUROCORR 2026 in Dublin, Ireland. The award recognises outstanding scientific contributions by young researchers in the field of corrosion reliability of electronic systems and underlines the joint commitment of Working Party 23 and ZESTRON to supporting the next generation of corrosion scientists.

This year's award was presented to Jyothsna Murli Rao from the Technical University of Denmark (DTU) in recognition of her excellent contribution *Effect of PCB orientation on droplet morphology during condensation triggering ECM* within the Working Party 23 session *Corrosion Reliability of Electronics*.

The session brought together experts from academia and industry to discuss current challenges related to corrosion mechanisms, functional failures in electronic and power electronic systems, and innovative approaches for improving reliability under demanding operating conditions.

At the award ceremony, Dr. Markus Meier (ZESTRON) and representatives of Working Party 23 congratulated Jyothsna Murli Rao on her achievement and presented the award certificate. The above photo shows Dr. Markus Meier (left) and Prof. Rajan Ambat (right) presenting the WP23 ZESTRON Best Paper Presentation Award for Junior Researchers to Jyothsna Murli Rao (Technical University of Denmark) during closing ceremony at EUROCORR 2026 in Dublin.

The continued success of the award, following its introduction and first presentation at EUROCORR 2025 in Stavanger, reflects the importance of encouraging young researchers and fostering scientific exchange within the corrosion community. By recognising outstanding research and presentation skills, the award aims to support emerging talent and strengthen collaboration between academia and industry.

Young EFC Annual Meeting at EUROCORR 2026

Bringing the next generation together in Dublin, Young EFC's Annual Meeting continues to attract young corrosionists keen to further themselves in a group environment

Good conversations, fresh perspectives, and a shared passion for corrosion science. The Young EFC Annual Meeting at EUROCORR 2026 once again brought the community together. With over 200 participants, the event offered an opportunity to discover Young EFC activities, exchange ideas, and connect with fellow corrosion professionals.

Sponsored by Corrosion Science, the meeting was opened by the journal's Editors-in-Chief, Prof. Dawei Zhang (University of Science and Technology Beijing, China) and Prof. Arjan Mol (TU Delft, the Netherlands). They introduced the journal and presented a new initiative to support early-career scientists to gain insights into the editorial process.

Patrick Keil, EFC Vice-President, gave an inspiring talk on the evolution of Young EFC and its growing importance within the corrosion community. Representatives from Young EFC, Young iCorr, and junge GfKORR then shared insights into their activities and collaborations.

Once the presentations wrapped up, it was time to enjoy the social side of the evening. With drinks and snacks, participants had plenty of time to mingle, exchange ideas, and get to know fellow corrosionists beyond their usual circles. To get the conversations going, Young EFC prepared a trivia quiz with a twist: participants had to build teams by finding people they had never worked with before. A fun way to break the ice, spark new conversations, and meet someone new.

The atmosphere throughout the evening was fantastic, and the overwhelmingly positive feedback showed just how much these opportunities to connect are valued. It was great to see conversations flow, new connections form, and the Young EFC community grow stronger. A big thank you to everyone who joined us, and a special thanks to Corrosion Science for sponsoring the event!



Photography by Stephen Wall Morris Photography





Early-career researchers discussing different career paths with exhibitors at the EUROCORR2026 exhibition (top); Leonardo B. Coelho delivering the Young EFC Plenary Lecture at EUROCORR2026 (above); Sunday evening get-together of the Young EFC board members in Dublin (below)



Young EFC Career Fair: Connecting with industry

Are you curious about career opportunities in the corrosion industry? At EUROCORR 2026, the Young EFC Career Fair took a new approach by bringing career conversations directly to the exhibition hall.

Participating exhibitors wore special badges inviting early-career professionals to ask about job opportunities, explore different career paths, or learn more about working in industry. During the lunch break, attendees were encouraged to approach exhibitors and start a conversation – making the exhibition a place not only to discover new technologies, but also to explore future career possibilities.

Plenary Lecture: Celebrating Early-Career Excellence

The Young EFC Plenary Lecture is a highlight for early-career corrosion scientists at EUROCORR, offering a chance to share their work with the wider community.

This year, Leonardo B. Coelho (pictured left) delivered the plenary lecture *A data-centric view of corrosion: From local behaviour to macro outdoor prediction*. Congratulations to Leonardo on this achievement, and a big thank you to everyone who contributes to making early-career research visible across the corrosion community.

Be the YEFC Plenary Lecturer at EUROCORR 2027

Ready to take the stage? The call for the 3M Plenary Lecture Competition is now open! Apply for the opportunity to present your research at EUROCORR 2027 in Prague, Czech Republic, from 12 to 16 September 2027.

Submit your application by 15 January 2027 and take your research and science communication skills to the next level. Click here for details on eligibility and the application process here.



Photography by Stephen Wall Morris Photography

Celebrating Outstanding Presentations at EUROCORR

Great research deserves to be heard! This year, the Young EFC Best Oral Presentation Awards recognised two outstanding early-career researchers: Ilana Bidon (University of Nantes), for her presentation *Impact of welding on the microstructure and corrosion resistance of AA2219 Friction stir welds* and Cristhiana Albert (ETH Zürich), who presented *Decoupling the drivers of steel corrosion in carbonated concrete*.

Both presentations stood out for combining innovative corrosion research with clear and engaging science communication. Congratulations to both award winners. And special thanks to DÖRKEN Coatings for sponsoring the awards and supporting early-career talent in the corrosion community.

YEFC Sponsors

The Young EFC activities at EUROCORR2026 were sponsored by NOF metal coatings, Dörken coating and Elsevier! Their commitment to empowering the next generation of professionals and strengthening cross-industry networks creates invaluable opportunities for young talents to connect, learn, and grow.

Support the Next Generation

The Young EFC is seeking sponsors for its upcoming activities, including EUROCORR 2027 in Prague and the Young EFC Summer School. Partnering with the Young EFC is a unique opportunity to empower early-career researchers, connect with future leaders, and enhance your organization's visibility within the corrosion community.

For sponsorship opportunities, please e-mail the Young EFC team for more details @ yefc@efcweb.org

DÖRKEN

Meet the Young EFC Board


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Kathleen Purnell


Noémie Ott


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Vishant Garg


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Valentina Valbi


León Zendejas Medina

Chair: Johanna Frenck (Western University, Canada), **Co-Chair**: Kathleen Purnell (University of Leeds, UK), **Past Chair**: Noémie Ott (OST, Switzerland), **Podcast and Corrosion Fighters series:** Arthur Boidot (NOF Metal Coatings Europe SA, France), Arshad Yazdanpanah (University of Padua, Italy), **Corrosion Awareness Day activites**: Ana Kraš (Jožef Stefan Institute, Slovenia), Sajjad Akbarzadeh (UMons, Belgium), Nikola Macháčková (VŠCHT Praha, Czech Republic), **Webinars**: Reynier Revilla (VUB, Belgium), **EUROCORR**: León Zendejas Medina (KTH Royal Institute of Technology, Sweden), Valentina Valbi (Laboratoire de recherche des monuments historiques, France), **Women in Corrosion**: Clara Vestberg, RISE, Sweden, **Sponsoring**: Bartlomiej Guzik (Mankiewicz Gebr. & Co, Poland), EUROCORR activities: Vishant Garg (Friedrich-Alexander University, Germany), Alessandra Segatto (TU Delft, Netherlands)

Opportunities for Emerging Corrosionists

Are you ready to take your research – and your career – to the next level? The EFC is opening applications for two prestigious grants that empower young scientists to connect, collaborate, and shine internationally.

EUROCORR Travel Grant

Want to share your research on one of the biggest stages in corrosion science? The EUROCORR Travel Grant helps young corrosion researchers and students attend EUROCORR 2027, where you will present your work, network with experts, and exchange ideas that drive the field forward.

Ready to Take Your Corrosion Research Abroad? EFC Young Scientist Grant

Dreaming of an international research experience? This grant supports a scientific visit abroad, giving you the chance to collaborate with a senior corrosionist at their home institute. Strengthen your expertise, build lasting collaborations, and explore new scientific perspectives.

Tip: Start now by finding your host institution! Use the EFC Working Party and EFC LinkedIn group to connect with potential hosts within the EFC network.

Important deadline for both grants: **15 February 2027**

A Note of Thanks to Departing WP Chairs

Elections for several EFC Working Party Chair and Vice-Chair positions took place at this year's EUROCORR in Dublin, bringing new leadership to a number of groups. As we welcome those taking on these roles, we also bid farewell to several long-standing Chairs. We would like to take this opportunity to thank them for their hard work, commitment and invaluable contribution to the EFC.

Among them, Daniela Zander has stepped aside as Chair of Working Party 7 and will now act as Vice-Chair, Pierangela Cristiani finishes her term leading Working Party 10, and Michael Raupach completes his tenure as Working Party 11 Chair. In addition, George Winning completes his role as Chair of Working Party 13, Johan Tidblad leaves his role in charge of Working Party 25 to become Vice-Chair, and Delphine Neff will be acting as Vice-Chair of Working Party 21. Thank you all for their hard work.

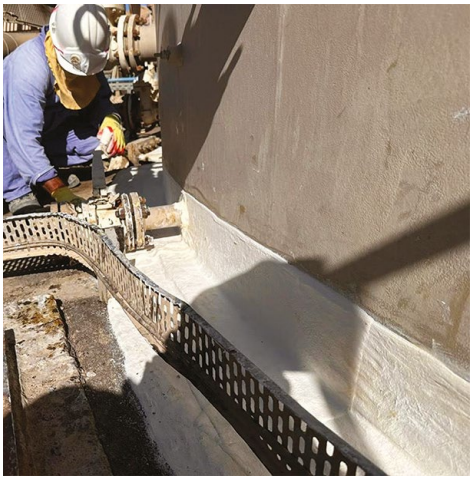
In their place, Yaiza Gonzalez Garcia has swapped her Vice-Chair role at Working Party 7 for the top position, Marc Jeannin assumes the Chair of Working Party 10, Fabio Bolzoni takes over as Chair of Working Party 11, and Sabrina Grassini becomes Chair of Working Party 21, while Jon Kvarekvål has been appointed the new Chair of Working Party 13, and Gino Ebell has been elected as Chair of Working Party 25.

All changes will come into effect as of 1 January 2027. Click here to read to full directory of EFC Working Party Chairs and Vice-Chairs.

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The Pulse of Nuclear Corrosion with WP 4

The Working Party on Nuclear Corrosion celebrate their record-breaking session at EUROCORR 2026 in Dublin

The Nuclear Corrosion Working Party (WP 4) enjoyed an exceptionally successful EUROCORR 2026 in Dublin, hosting the largest Nuclear Corrosion programme in the history of the conference.

The session featured 56 oral presentations and 13 posters, attracting strong participation from academia, research organisations, utilities, vendors, and regulators from around the world. The programme covered the full spectrum of nuclear corrosion challenges, from current light water reactors to advanced reactor concepts, fuel cycle facilities, decommissioning, and radioactive waste disposal.

A particular highlight was the keynote lecture delivered by Hans Peter Seifert (Paul Scherrer Institute, Switzerland), who presented a comprehensive overview of the current understanding of stress corrosion cracking of stainless steels in light water reactor environments. The keynote provided an excellent framework for the subsequent technical discussions and was very well received by both newcomers and experienced specialists.

The technical programme reflected the remarkable breadth of ongoing research in nuclear corrosion. Significant attention was devoted to environmentally-assisted cracking of stainless steels and nickel-base alloys in light water reactors, including SCC mechanisms, hydrogen effects, corrosion fatigue, mitigation strategies such as zinc injection and cavitation peening, and the performance of additively manufactured materials.

Advanced reactor technologies formed another major topic, with presentations addressing corrosion in molten-salt reactors, lead and lead-bismuth cooled systems, small modular reactors, sodium-cooled fast reactors and novel high-entropy alloys.

Further sessions focused on fuel cladding degradation, flow-accelerated corrosion, microbiologically influenced corrosion, protective coatings, corrosion issues related to decommissioning, and the long-term performance of materials for deep geological repositories for radioactive waste.

During EUROCORR 2026, WP 4 also recognised outstanding contributions to the field through three prestigious awards. The 2026 Honorary Medal of WP 4 for outstanding contributions to corrosion science and engineering in the nuclear field was presented to Catherine Guerre (CEA, Saclay, France) during the WP 4 Business Meeting. Her long-standing contributions have significantly advanced the understanding and application of corrosion science in the nuclear sector.

The Best Early-Career Presenter Award was presented during the EUROCORR closing ceremony to James Hall (The University of Manchester, United Kingdom) for his presentation *Characterisation and Performance Testing of Additively Manufactured Alloy 625 in High Temperature Water*. The Best Poster Award was presented to Leyla Franz (Karlsruhe Institute of Technology, Germany) for the poster *Corrosion Resistance and Applicability of EUROFER97 in Stagnant Lead-Based Breeding Blanket Environments for Fusion Reactors*. Congratulations to all the winners. The EFC gratefully acknowledge Elsevier, ZAG, and CEA for their generous sponsorship of the prizes.

Please note that during EUROCORR 2027 all prizes will be awarded again. The prize rules can be found on the EFC Working Party 4 website.

The Working Party thanks all presenters, authors, session chairs and attendees whose contributions made the Nuclear Corrosion programme one of the highlights of EUROCORR 2026. We look forward to continuing this momentum at future WP 4 activities and EUROCORR conferences - and don't forget to submit your abstract for the next EUROCORR in Prague by end of January 2027.

WP 4 Nuclear Corrosion

The Growing Role of AI in Corrosion Research

Co-hosted by WP 4 and the PEPR DIADEM initiative, the CAICOR Workshop shone a light on the rise of AI in corrosion research manufacturing

Immediately following EUROCORR 2026, the EFC Workshop *CAICOR – Contribution of AI to Corrosion Research*, jointly organised by the French PEPR DIADEM initiative and EFC/WP 4, brought together more than 40 participants from 14 countries for an engaging afternoon dedicated to the rapidly expanding application of artificial intelligence in corrosion science.

The workshop featured a plenary lecture by Mikhail Zheludkevich (Helmholtz-Zentrum Hereon, Germany) on AI-driven corrosion inhibitor design, followed by presentations covering machine learning for corrosion prediction, corrosion sensing, atmospheric and high-temperature corrosion, molten salt systems, flow-accelerated corrosion, and stress corrosion cracking.

The programme highlighted how data-driven methods are increasingly supporting materials development, corrosion monitoring, mechanistic understanding and predictive modelling across a wide range of corrosion challenges. The lively discussions and strong international participation clearly demonstrated the growing interest in harnessing AI to accelerate corrosion research and innovation.

The workshop concluded with a general discussion centred on a shared commitment to keep this new community - dedicated to AI in corrosion research - active within the EFC, regardless of the specific fields of application.

NuCoSS-27: A Unique Training Opportunity in Nuclear Corrosion

Following the success of the previous three editions, registration is opening soon for the 4th edition of the Nuclear Corrosion Summer School (NuCoSS-27, EFC Event No. 562), which will take place from 4-9 July 2027 at Hotel Špik in the beautiful alpine region of Gozd Martuljek, Slovenia.

Organised by EFC WP 4 together with the local host ZAG, the summer school provides a unique opportunity to obtain a comprehensive introduction to nuclear corrosion within a single week.

Lectures will be delivered by internationally renowned experts and will cover topics ranging from the fundamentals of electrochemistry and corrosion to light water reactor corrosion, environmentally assisted cracking, corrosion in advanced reactor systems, nuclear waste disposal, ageing management, and advanced characterization techniques.

The programme is specifically designed for participants from industry, regulatory authorities, research organisations and universities, while the informal setting offers extensive opportunities for discussion, networking and knowledge exchange between experienced specialists and early-career professionals.

As participation is limited, interested colleagues are encouraged to register early. Further information is available at the NuCoSS website.

Click here for more information.



Working Party 7 host flagship event at EUROCORR

The EFC Corrosion Summer School at TU Dublin ran alongside the WP 7 session on Corrosion Education during a busy and well received conference



Working Party 7's annual EFC Corrosion Summer School TU Dublin brought together PhD students, postdocs, and industry engineers for the three-day event

From 3 to 5 September 2026, just ahead of EUROCORR 2026, Working Party 7 on Corrosion Education held its flagship annual event, the EFC Corrosion Summer School, at TU Dublin. The event brought together PhD students, postdocs, and industry engineers to explore one of the defining challenges of the energy transition: corrosion.

As renewable and low-carbon technologies scale up, materials face increasingly demanding environments; offshore structures, hydrogen systems, geothermal brines, and carbon capture processes all push corrosion science into new territory. This year's programme was built around that theme, opening with a site visit to the Mount Lucas Wind Farm, where participants toured wind turbine infrastructure and zero-energy buildings firsthand.

The three-day lecture programme brought together speakers from academia and industry: Prof. Polina Volovitch (Chimie ParisTech – PSL) on climate, the energy mix, and corrosion; Dr.-Ing. Tom Marquardt (Muehlhan) on coating processes for offshore wind structures; Dr. Mirjam J. Theelen (TNO) on end-of-life management of photovoltaic panels; Dr. Marc Wilms (Shell) on corrosion challenges in carbon capture and sequestration; Prof. Sigrún Nanna Karlsdóttir (University of Iceland) on geothermal energy; and Dr. Leonardo Bertolucci Coelho (VUB) on applied AI and machine-learning workflows for corrosionists. A laboratory visit at TU Dublin and a social gathering in Dublin city centre, organised by Young EFC, rounded out the programme.

The event drew 18 participants from ten countries, with a strong majority from academic institutions alongside a meaningful contingent from industry — a mix that fuelled lively discussion throughout. Many thanks to local organiser Prof. Brendan Duffy, who managed logistics in Dublin, and programme organiser Prof. Polina Volovitch, who shaped the topics, as well as to Young EFC for organising the social programme. The next EFC Corrosion Summer School will take place in 2027, ahead of EUROCORR in Prague, 8–11 September.

WP 7 session on Corrosion Education

The WP 7 session on Corrosion Education at EUROCORR 2026 in Dublin brought together contributions on strengthening corrosion education and training across contexts, from engineering education to specialised professional training. Presentations covered the design and experimental validation of a cathodic protection system developed during a mechanical engineering internship, quality and reliability training for automotive electronics, evidence-based training in MIC, and the use of AI in corrosion engineering and specialised electrochemical knowledge. The session closed with an engaging discussion on the role of AI in corrosion education, weighing its opportunities and challenges from an educator's perspective: how can AI enhance learning while preserving academic integrity, critical thinking, and responsibility in engineering education? Many thanks to all speakers and participant. Click here for more information.

Working Party 8 grows into data analysis

A second vice chair brings in expertise in machine learning, while a joint webinar introduces ab initio modelling in corrosion



Following the Business Meeting at EUROCORR it can be announced that Viacheslav (Slava) Shkirskiy (Université Paris Cité, France) has joined WP 8 as second vice-chair to reinforce the work of Noémie Ott and Santiago Garcia. Slava's research focuses on machine learning and the development of advanced optical microscopy techniques for corrosion studies. His expertise will support WP 8 activities related to artificial intelligence, data management, and data-driven approaches to corrosion research, complementing the expertise already represented within the WP 8 leadership team.

Colleagues are invited to submit abstracts to the WP 8 sessions at EUROCORR 2027 and to join activities throughout the year – helping to shape the next generation of reliable, comparable, and data-enhanced corrosion testing methods.

101 Tutorial Series

Building on the success of the previous editions, the EFC Working Parties 6, 8, and 13, in collaboration with the International Corrosion Council (ICC), are pleased to announce the third online 101 tutorial series, this time focusing on *Ab initio Modelling of Corrosion*. It will take place on December 8th at 2.00 pm (CET).

This educational initiative aims to provide accessible, high-quality learning opportunities that bridge fundamental principles and practical applications in corrosion science and engineering. Programme: Dominique Costa: *Atomistic Models for Corrosion: From Experimental Observations to Theoretical Understanding*. Anton Kokalj: *From Adsorption to Corrosion Inhibition: Insights from Computational Modelling*.

Join us for an engaging introduction to how first-principles modelling is transforming our understanding of corrosion processes, surface interactions, and corrosion inhibition mechanisms at the atomic scale. Do not miss this opportunity to gain insights from leading experts in computational corrosion science. Click here to register or click here for more information.

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Introducing the new Chairs of Working Party 11

The Working Party 11 Business Meeting in Dublin marked a productive step forward, with the election of a new Chair, Vice-Chair and Secretary for the 2027–2029 term

Chair: Fabio Bolzoni (Politecnico di Milano)

An Associate Professor in Materials Science and Technology in the Department of Chemistry, Materials and Chemical Engineering "Giulio Natta" at Politecnico di Milano, Fabio has taught courses on materials science and technology, materials durability and corrosion and protection for students in civil engineering, architecture-engineering, architecture, and materials engineering since 1998.

A supervisor of numerous master of sciences and three pHD theses, he is also a member of the board of the pHD in Materials Engineering at the Politecnico di Milano.

His scientific activity includes: durability of reinforced concrete structures, hydrogen embrittlement, cathodic protection in soil and seawater, atmospheric corrosion, localised corrosion.

From 2019 to 2025, he was Chairman of the technical committee *Corrosion* (Italian association of metallurgy - AIM). During the term 2024-2026 he was Vice-Chair of Working Party 11.

Co-Chair: Christian Helm (Institute of Building Materials Research, RWTH Aachen University)

A Researcher and Head of the Steel and Corrosion Research Group at the Institute of Building Materials Research, RWTH Aachen University, Christian has a strong scientific track record that has helped him develop expertise in his field.

His expertise include, corrosion protection and reinforced concrete durability, cathodic protection and electrochemical processes, and numerical modelling of current and potential fields. Christian holds a PhD with distinction at RWTH Aachen, a Borchers Plaque awarded from 2020, has had a number of peer-reviewed publications in Materials and Corrosion, and is a member of the GfKORR working group on structural corrosion protection.

Secretary: Rebecca Achenbach (Institute of Building Materials Research, RWTH Aachen University - University of Applied Science, Münster)

Rebecca earned a PhD at RWTH Aachen University on Corrosion protection of steel reinforcement by alternative binder types in 2024 and has since led the working group Conservation and Repair at the Institute of Building Materials Research (ibac, Prof. Michael Raupach)

Starting in October 2026, Rebecca joined University of Applied Science FH Münster, MK Ingenieure GmbH.
Rebecca has been a member EFC Working Party 11 since 2018 and has collaborated on the task group on "Steel corrosion in alkali-activated materials"

A board member of the gfkorr, further activities include RILEM and dgzfp.

Many thanks to the current president Michael Raupach for its great contribution to the activities of the Working party and also to the current secretary Gino Ebell, that will serve as Chair of Working Party 25 on Atmospheric Corrosion. Click here for more information about Working Party 11.



WP 13 Reports Strong Engagement at EUROCORR

Record EUROCORR abstract submissions, new training opportunities for young corrosionists, and a refreshed committee contribute to an optimistic outlook for Working Party 13

The Working Party 13 on Corrosion in Oil and Gas Production held its annual business meeting during EUROCORR 2026, reflecting on a successful year of technical activity, international collaboration, and committee development.

The conference attracted more than 1,200 delegates and featured 15 technical streams each day, demonstrating the continued growth and importance of the corrosion community.

Record Interest in WP 13 Symposium

WP 13 experienced a particularly strong response for its technical programme. More than 80 abstracts were submitted to the working party, contributing to over 800 abstracts received by the conference overall. Following the review process and unavoidable withdrawals, the final programme consisted of 38 oral presentations and seven posters delivered across four sessions over three days.

The symposium covered a broad range of topics relevant to the oil and gas sector, including Corrosion Resistant Alloys (CRA), Carbon steel corrosion, H□S corrosion and Sulphide Stress Cracking (SSC), CO□ corrosion and Stress Corrosion Cracking (SCC), Corrosion management, integrity and inhibition, and Flexible pipe technologies.

Special recognition was given to the volunteer review team for their significant contribution in assessing submissions and maintaining the high technical quality of the programme.

Strengthening International Collaboration

WP 13 maintained a strong presence across several international corrosion events during 2025-2026. Representatives participated in the AMPP Middle East Corrosion Conference, AMPP 2026, and AMPP Italy 2026.

A dedicated symposium on sour corrosion at the Italian event featured eight technical presentations and was well received by attendees, creating opportunities for future joint sessions.

New Training Initiative for Young Professionals

The Young EFC initiative, led by Ajay Krishnan, continues to make excellent progress with an online corrosion education programme.

Four training topics have been selected, each consisting of two-hour sessions that combine theoretical principles with practical industry experience. The programme is being developed in collaboration with the University of Manchester and aims to increase accessibility to corrosion education for early-career professionals.

Expanding Global Reach

Discussions are ongoing with the EFC International Branch regarding a future webinar focused on the Middle East region, particularly Saudi Arabia, planned for later in 2026. This initiative aims to further strengthen engagement with regional industry professionals and expand WP 13's international footprint.

Progress on Green Book Activities

The working party continues to support development and updates of key EFC Green Books. Attention is currently focused on updating the Corrosion Management Green Book, with funding secured to help support editorial activities. Additional volunteers are being sought to contribute technical expertise and help broaden the publication's scope beyond its current focus on oil and gas pipelines.

Committee Changes for 2027

Members were presented with a proposed committee structure for January 2027. The new leadership team consists of:



Chair: Jon Kvarekval



Vice Chair: Pilar Esteban



Secretary: Karsten Wiegers



YEFC Rep: Ajay Krishnan



Committee: Torben Skovhus



Committee: Emmanuel Marcus



Past Chair: George Winning

Looking Ahead

The meeting concluded with thanks to all volunteers, reviewers, speakers, and committee members who contributed to another successful year for WP 13. Members were encouraged to remain actively involved in future initiatives and preparations for next year's conference in Prague.

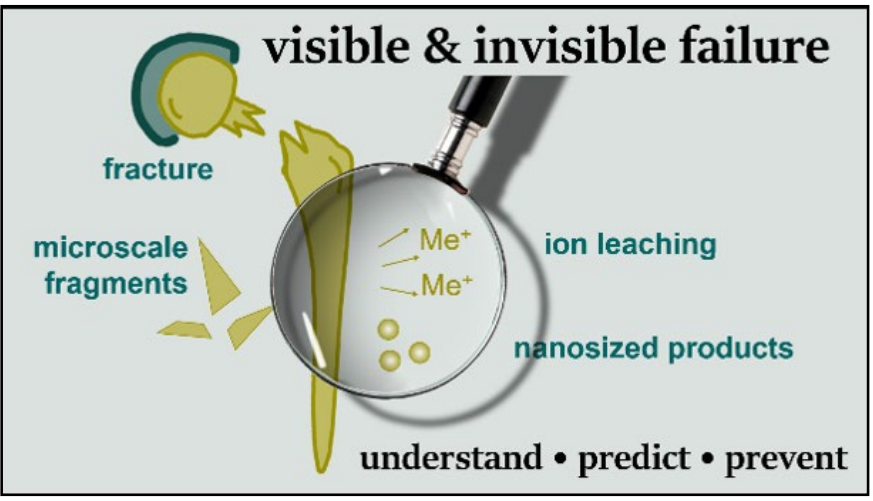
Overall, 2026 has been a year of growth for WP 13, marked by strong technical participation, expanding international engagement, new educational initiatives, and a clear focus on supporting the next generation of corrosion professionals.

Click here for more information.

EFC Working Party directory

valid from 1 January 2027

WP 1: Corrosion and Scale Inhibition → Chair: Prof. Dr. Kostas DEMADIS (University of Crete, Crystal Engineering, Growth & Design Laboratory, Crete, Greece). Vice-Chair: Dr. Argyro SPINTHAKI (Kurita Europe Technology Center, Viersen, Germany)
WP 2: Corrosion of Medical Implants and Devices → Chair: Dr. Patrik SCHMUTZ (EMPA, Dübendorf, Switzerland). Vice-Chair: Dr. Sviatlana LAMAKA (HZG, Geesthacht, Germany). Secretary: Martina CIHOVA
WP 3: High-Temperature Corrosion and Degradation → Chair: PD Dr. Mathias GALETZ (Dechema, Frankfurt, Germany). Vice-Chair: D.Sc. (Chem.) Juho LEHMUSTO (Åbo Akademi University, Turku, Finland). Secretary: Lisa ZANDER (Dechema, Frankfurt, Germany)
WP 4: Nuclear Corrosion → Chair: Stefan RITTER (Paul Scherrer Institute (PSI), Villigen, Switzerland). Vice-Chair: Dr. Laure MARTINELLI (CEA Saclay, Gif-sur-Yvette, France)
WP 5: Environment Sensitive Fracture → Chair: Prof. Christine BLANC (Université de Toulouse CNRS, Toulouse, France). Vice-Chair: Prof. Dirk ENGELBERG (University of Manchester, Manchester, UK)
WP 6: Surface Science and Mechanisms of Corrosion and Protection → Chair: Dr. Rob LINDSAY (University of Manchester, Manchester, UK). Vice-Chair: Dr. Maryna TARYBA (Universidade de Lisboa, Lisboa, Portugal)
WP 7: Corrosion Education → Chair: Dr. Yaiza GONZALEZ GARCIA (Delft University of Technology, Delft, The Netherlands). Vice-Chair: Prof. Dr.-Ing. Daniela ZANDER (RWTH Aachen University, Aachen, Germany)
WP 8: Corrosion Testing Methods and Data Management → Chair: Dr. Noémie OTT (Eastern Switzerland University of Applied Sciences). Vice-Chair: Santiago GARCIA (Delft University of Technology, Netherlands). Co-Vice Chair: Slava SHKIRSKIY
WP 9: Marine Corrosion → Chair: Prof. Philippe REFAIT (La Rochelle University, La Rochelle, France). Vice-Chair: Dr. Shiladitya PAUL (TWI & University of Leicester, UK). Secretary: Dr. Malo DUPORTAL (La Rochelle University, La Rochelle, France)
WP 10: Microbial Corrosion → Chair: Dr. Marc JEANNIN (La Rochelle University, La Rochelle, France). Vice-Chair: Dr. Andrea KOERDT (BAM, Berlin, Germany). Secretary: Dr. Dake XU (Northwerstern University of Shenyang, China). Young EFC Representative: Sara TAGHAVI KALAJAHI (BAM, Berlin, Germamy)
WP 11: Corrosion of Steel in Concrete → Chair: Prof. Fabio BOLZONI (Politecnico di Milano, Milan, Italy). Co-Chair: Dr. Christian HELM (RWTH Aachen University, Aachen, Germany). Secretary: Dr. Rebecca ACHENBACH (RWTH Aachen University, Germany)
WP 13: Corrosion in Oil and Gas Production → Chair: Jon KVAREKVÅL (Institute for Energy Technology, Oslo, Norway). Vice-Chair: Pilar ESTEBAN (TUBACEX, Bilbao, Spain)
WP 14: Coatings → Chair: Prof. Marie-Georges OLIVIER (Université de Mons, CRIM, Mons, Belgium). Vice-Chair: Dr. Michele FEDEL (University of Trento, Trento, Italy). Secretary: Dr. Peter VISSER (AkzoNobel, Sassenheim, The Netherlands)
WP 15: Corrosion in the Refining and Chemical Industries → Chair: Prof. Dr. Philipp SCHEMPP (TH Köln – University of Applied Sciences, Cologne, Germany). Vice-Chair: Gino DE LANDTSHEER (Borealis, Kallo, Belgium)
WP 16: Cathodic Protection → Chair: Jérôme CROUZILLAC (BAC Corrosion Control, Voisins-le-Bretonneux, France). Vice-Chair: Marco ORMELLESE (Politecnico di Milano, Milano, Italy)
WP 17: Automotive Corrosion → Chair: Elizabeth SZALA (Aluminium Duffel, Brussels, Belgium). Vice-Chair: Richard WAUDBY (Toyota Motor Europe NV/SA, Zaventem, Belgium). Secretary: Vishant GARG (CNRS Chimie ParisTech, Paris, France)
WP 18: Tribo-Corrosion → Chair: Dr. Manel RODRIGUEZ RIPOLL (AC2T research GmbH, Vienna, Austria). Vice-Chair: Dr. Anna IGUAL MUNOZ (EPFL, Lausanne, Switzerland)
WP 20: Corrosion in Water Systems → Chair: Dr. Johann Wilhelm ERNING (BAM, Berlin, Germany). Vice-Chair: Olivier ROD (Swerim AB, Stockholm, Sweden)
WP 21: Corrosion of Archaeological and Historical Artefacts → Chair: Sabrina GRASSINI (Politecnico di Torino, Torino, Italy). Vice-Chair: Dr. Nicola EMMERSON (Cardiff University, UK). Co-Vice Chair: Dr. Delphine NEFF (CEA Saclay & CNRS, Gif-sur-Yvette, France). Young EFC Representative: Leïla ES SEBAR (Politecnico di Torino, Torino, Italy)
WP 22: Corrosion Control in Aerospace → Chair: Prof. Dr. Mikhail ZHELUDKEVICH (HZG, Geesthacht, Germany). Vice-Chair: René BÖTTCHER (Airbus, Taufkirchen, Germany). Secretary: Mats MEEUSEN (Vrije Universiteit Brussel, Brussels, Belgium). Young EFC Representative: Esther LOPEZ (Tekniker, Eibar, Spain)
WP 23: Corrosion Reliability of Electronics → Chair: Prof. Dr. Rajan AMBAT (Technical University of Denmark, Kgs. Lyngby, Denmark). Vice-Chair: Markus MEIER (ZESTRON, Ingolstadt, Germany). Secretary: Balint MEDGYES (Budapest Univ. of Technology and Economics (BME), Budapest, Hungary)
WP 24: CO2-Corrosion in Industrial Applications → Chair: Dr. Ralph BÄSSLER (BAM, Berlin, Germany). Vice-Chair: Dr. Bjørn MORLAND (Institute for Energy Technology, Kjeller, Norway). Secretary: Dr. Shiladitya PAUL (TWI & University of Leicester, UK)
WP 25: Atmospheric Corrosion → Chair: Dr. Gino EBELL (BAM, Berlin, Germany). Vice-Chair: Prof. Johan TIDBLAD (RISE, Sweden)
WP 26: Corrosion in Green & Low Carbon Energy Technologies → Chair: Marc WILMS (Shell, Amsterdam, Netherlands). Vice-Chair: Prof. Polina VOLOVITCH (CNRS - Chimie ParisTech, France). Secretary: Jean KITTEL (IFP Energies Nouvelles, Lyon, France)
TF: Corrosion and Corrosion Protection of Additive Manufactured Metals → Chair: Prof. Iris DE GRAEVE (Vrije Universiteit Brussel, Belgium). Vice-Chair: Dr. Reynier Inocente REVILLA CASTILLO (Vrije Universiteit Brussel, Belgium)



Task Force becomes new Working Party 2

The Task Force on Corrosion of Medical Implants and Devices was designated a WP at EUROCORR, where the TF also honoured an early-career corrosionist

The EFC Board approved the proposal to transition the Task Force on Corrosion of Medical Implants and Devices into an official EFC Working Party at EUROCORR in Dublin. The newly established group will hold its Kick-Off Meeting and first Scientific Workshop on 28–29 January 2027 at Empa in Dübendorf, Switzerland. EFC members are invited to take part in this milestone event, share scientific insights, forge new collaborations, and help shape the new WP's future activities.

The Task Force was officially established in 2023 in response to the still limited understanding of how medical materials interact with biological matter, and to the growing number of reported failures, suggesting that the associated risks to material stability and function are sometimes significantly underestimated. New medical devices and materials entering clinical use also raise scientific questions regarding their chemical stability and biocompatibility.

In fact, current understanding of the material-biology interactions shows that macroscopic manifestations of implant and medical-device failure, such as fractures or the release of wear particles, are already documented. However, the underlying processes that lead to the formation of micro- and nanoscale corrosion products, ionic leaching, and their consequences remain poorly understood. The Task Force's activities therefore focus strongly on elucidating these "invisible" processes to improve the prediction of bio-corrosion and ultimately prevent implant and medical-device failure (see Figure above).

The TF EUROCORR symposia have been well attended, typically featuring around 25 scientific presentations. A series of webinars has been established, and a special issue on implants corrosion has been coordinated and published in npj Materials Degradation. Building on this interest and the many open questions related to (electro)chemical interactions at implant and device surfaces, particularly at the nanoscale, the time was right to consolidate these activities. Click here for more information about the programme.

Early Career Best Presentation Award

In addition to expanding its scientific activities, the TF is committed to promoting early-career scientists. Its second Early Career Best Presentation Award 2026, sponsored by Oerlikon Balzers, was presented during EUROCORR 2026 in Dublin. The award recipient, selected by a panel of six external experts, was Maxence Hannard (below) from Empa, Switzerland, who was recognised for his work on *Physiological trace-iron redeposition on high-purity magnesium: implications for biodegradable implant corrosion*. The jury recognised the originality and high quality of his work on magnesium degradation, which highlights the often-overlooked influence of reactive species in body fluids, even at trace concentrations.

Working Party 2 would like to thank the award sponsor: *Oerlikon is a leading global technology company specializing in surface engineering, advanced materials, and coating solutions, with a strong presence in Europe, Asia, and the Americas. Through its expertise in thin-film technologies, thermal spraying, and functional coatings, Oerlikon drives innovation across a wide range of sectors including aerospace, energy, automotive, medical technology, and advanced manufacturing.*



ICorr show support for the European corrosion community

The EFC Member Society strengthened international collaboration in Dublin, where ICorr President Dr Yunnan Gao received the 2026 WCO Corrosion Awareness Honour



EUROCORR 2026 brought the international corrosion community together in Dublin from 6–10 September for five days of scientific exchange, technical discussion, professional networking and collaboration. Held under the theme *Investing in our future: corrosion challenges for green technologies*, the congress welcomed more than 1,200 delegates from 48 countries and regions, with a programme spanning 656 abstracts and 158 posters.

For the Institute of Corrosion (ICorr), the event was particularly significant. EUROCORR 2026 provided an important opportunity for ICorr, IOM3, EFC and DECHEMA to support the European corrosion community and demonstrate the value of international collaboration.

ICorr maintained a strong presence throughout the congress, with contributions from its leadership, technical divisions and members. The 67th Corrosion Science Symposium, organised by ICorr's Corrosion Science Division, formed part of the EUROCORR programme, giving students and early-career researchers an opportunity to present their work to an international audience. Topics ranged from marine corrosion and coatings to hydrogen, green energy systems, AI-supported corrosion testing, nuclear corrosion and low-carbon technologies.

Corrosion awareness and advocacy were also prominent. ICorr President Dr Yunnan Gao received the 2026 WCO Corrosion Awareness Honour, recognising his contribution to promoting corrosion awareness, strengthening international collaboration and supporting the next generation of corrosion professionals. ICorr also contributed to the congress Plenary Session on Advocacy, which explored how the corrosion community can communicate more effectively with industry, governments and wider society.

EUROCORR also provided opportunities to strengthen relationships with the EFC, WCO, CSCP, AMPP and Saudi Arabia's MEA, with discussions covering professional development, education, technical exchange, knowledge sharing and future joint activities. Particular progress was made on ICorr's collaboration with MEA, including plans for ICorr engineering courses in Saudi Arabia.

EUROCORR highlighted the breadth and growing importance of corrosion management across emerging technologies, from hydrogen and renewable energy to carbon management, nuclear technologies and advanced materials. For ICorr, it was an opportunity to contribute technically while strengthening global partnerships and supporting a more sustainable and resilient future.

Click here for more information.



AIM host well-received EFC Approved Course in Sicily

Environmental Assisted Cracking Summer School and 70th Anniversary of the "Aldo Daccò" Centre celebrated by EFC Member Society, the Italian Association for Metallurgy (AIM)

The first edition of the Environmental Assisted Cracking (EAC) Summer School, held in Milazzo (Sicily) from 5 to 9 July 2026, concluded with excellent participation and highly positive feedback from both attendees and lecturers. The initiative was organized by the Italian Association for Metallurgy (AIM) in collaboration with the University of Bergamo, the University of Messina, and the University of Manchester, with the aim of providing advanced training on one of the most challenging topics in corrosion science and engineering.

This EFC Approved Course welcomed 36 participants, the majority of whom were PhD students, together with early-career researchers and professionals from both academia and industry. The international character of the event was reflected in the diverse audience, with participants coming from Italy as well as other countries, creating a stimulating environment for scientific exchange and networking.

Throughout the five-day programme, internationally recognised experts from universities and research institutions delivered lectures covering the fundamental mechanisms of environmentally assisted cracking, including stress corrosion cracking, hydrogen embrittlement, corrosion fatigue, and related degradation phenomena. Applications include key industrial sectors, including civil and industrial infrastructure, oil and gas, nuclear power, aerospace, pipelines, chemical processing, and biomedical components. The program also includes a guided tour with technical insights into the Milazzo refinery plant.

The residential format also offered valuable opportunities for informal networking. Social activities, including an excursion to the Aeolian Islands, allowed participants and lecturers to strengthen professional relationships in a relaxed setting while discovering the unique natural and cultural heritage of Sicily. These moments of social

interaction contributed to creating a collaborative and inspiring atmosphere.

The organisers are grateful to all lecturers, participants, and supporting institutions whose enthusiasm and commitment made this inaugural Summer School a rewarding experience, laying the foundations for future editions.

Important Anniversary

Another important initiative promoted by the Italian corrosion community this year was the celebration of the 70th Anniversary of the "Aldo Daccò" Centre for Corrosion and Metallurgy at the University of Ferrara.

The commemorative event highlighted the Centre's outstanding contributions to corrosion science and technology since its founding in 1956, underscoring its long-standing role in research, education, and scientific dissemination. This rich history includes the legacy of the European Symposium on Corrosion Inhibitors (SEIC), which served for several decades as international forum in the field.

The anniversary programme also celebrated the fruitful, ongoing collaboration between academia, industry, and the Aldo and Cele Daccò Foundation and included the presentation of the prestigious Aldo Daccò Award 2025, recognising excellence in the field of foundry and solidification techniques.

The 2026 programme will conclude with another significant event for the Italian corrosion community: the 5th Pietro Pedeferri Study Day, entitled *Cathodic Protection: Science, Engineering and Industrial Applications*, to be held on 27 November at Politecnico di Milano. Continuing the scientific tradition of Professor Pietro Pedeferri, the event will bring together researchers, academics and industry professionals to discuss recent advances in cathodic protection and its applications in different environments.



Looking Ahead: Upcoming Events in 2027

The Italian corrosion community is already looking forward to two major events scheduled for 2027.

The 17th National Conference on Corrosion and Protection will take place in Messina, Italy, from 14 to 16 June 2027. Organised by AIM in collaboration with APCE, AMPP and the University of Messina, the conference will feature oral and poster presentations covering the latest scientific and technological developments in the field of corrosion and materials protection. The call for papers for the event is open until 14 December 2026.

Earlier in the year, on 9-12 February 2027 will see the next edition of the *Cecilia Monticelli* School on Electrochemical Techniques for Corrosion Studies, hosted by the University of Ferrara., named in honour of the former Associate Professor of Corrosion and Protection of Metallic Materials at the University of Ferrara (pictured above). Following the success of the previous two editions, the school will once again provide PhD students, young researchers and professionals with an intensive overview of both fundamental and advanced electrochemical techniques for corrosion investigation, combining theoretical lectures with practical guidance from leading experts in the field.

Click here for more information.

ASSOCIAZIONE ITALIANA DI METALLURGIA

CEFRACOR host popular Congress on Cathodic Protection

Aix-en-Provence played host to the 8th Congress on Cathodic Protection and Associated Coatings, where tributes were also paid to François Castillon

The 8th Congress on Cathodic Protection and Associated Coatings, organized by the Topical Committee on Cathodic Protection and Associated Coatings (PCRA) of CEFRACOR (The French Corrosion Society), EFC event n°536, was held in Aix-en-Provence from 29 September to 1 October 2026, bringing together over 130 participants from across the corrosion protection community.

A historic venue for the event, Aix-en-Provence has previously hosted the congress in 1994, 1999, 2002, 2006 and 2011. The congress was subsequently held in Antibes Juan-les-Pins in 2014 and again in 2022, before returning to Aix-en-Provence for its 2026 edition. The return to Aix provided an ideal setting for technical exchanges and networking among specialists, engineers, researchers, and manufacturers interested in cathodic protection and associated coating technologies.

A Key Meeting Point for the Industry

Over three days, attendees from France, Belgium, Italy, Germany, and the United Kingdom, exchanged knowledge and experience on a wide range of topics, including industrial applications, design and monitoring techniques, European and international standardization, inspection practices, and the certification of personnel involved in cathodic protection and coating systems.

The congress continues to be recognized as a major forum for both experienced practitioners and newcomers seeking to deepen their understanding of corrosion control technologies.

Technical Programme

The cathodic protection congress featured a comprehensive technical programme comprising oral presentations, primarily delivered in French but also in English for some of them, and organised into several thematic sessions that covered:

- →General aspects of cathodic protection;
- →Metallic structures in concrete;
- →Buried and immersed metallic structures;
- →Marine metallic structures;

The presentations highlighted recent developments, operational feedback, research findings, and innovative solutions across the various application sectors of cathodic protection.

A particularly moving moment of the congress was the tribute paid to François Castillon (pictured on next page) in recognition of his long-standing contribution to the PCRA community. Throughout the years, he consistently supported the organisation of the PCRA conferences and actively shared the results of his work with participants. The



From left to right: Mariana Berthet, Lise Lanarde, Philippe Marcus, Sylvain Fontaine, and Hassina Founas

tribute acknowledged his dedication and the significant role he played in the success and continuity of the event.

Exhibition and Networking

An accompanying exhibition brought together 20 exhibitors from France, Italy, Belgium, and Germany, offering participants the opportunity to discover the latest products, services, and innovations in corrosion prevention. The exhibition remained a central meeting place throughout the event, fostering valuable exchanges between delegates and exhibitors.

Among the exhibitors were two EFC Affiliate Members, Trenton Europe and BAC Impalloy, who showcased their solutions and expertise in the field of cathodic protection and corrosion control.

With a record of strong attendance and high-quality technical content, the 2026 conference once again confirmed its status as one of the leading events dedicated to cathodic protection and associated coatings in France and the wider European corrosion community.

The organisers of this event thank all participants and all exhibitors. They all contributed to the success of this event. Click here for more information



CEFRACOR

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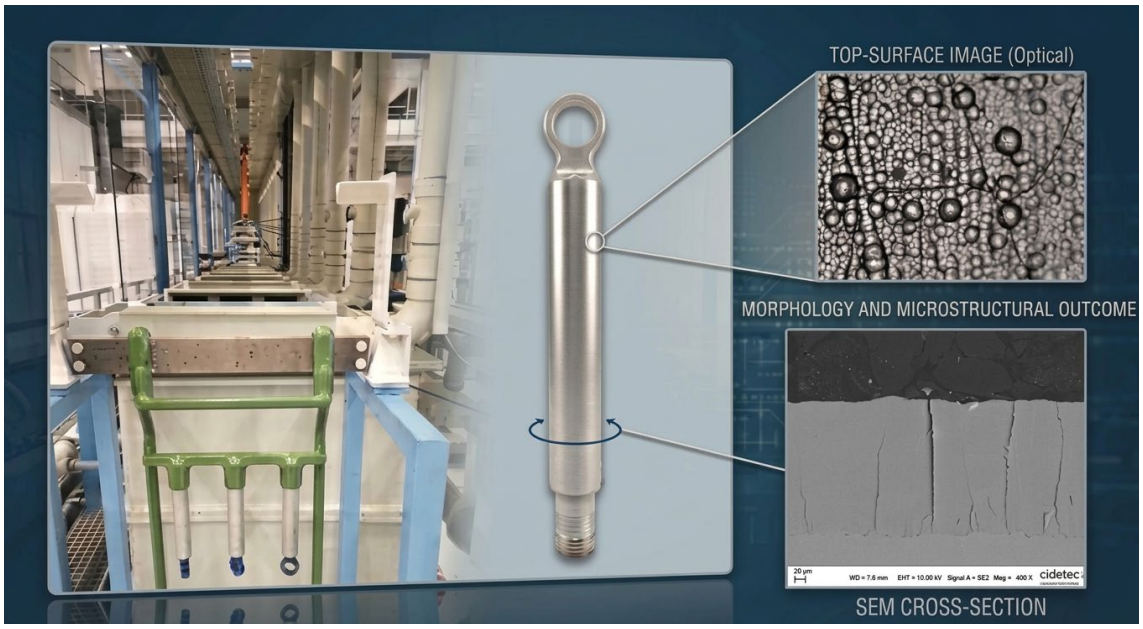
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CIDETEC Surface Engineering research project powers change

Dr. Naroa Imaz and Dr. Asier Salicio on Third Generation Trivalent Hard Chromium Coatings for Aeronautical Applications: Unlocking Robust Process Performance Through Precise Chemical Control



A joint European research innitiative bringing together SAFRAN, EFC Affiliate Member CIDETEC SURFACE ENGINEERING, SCHLÖTTER, and CHROME DUR INDUSTRIEL aims to empower the aeronautics industry with the technological expertise and process control definition required for a smooth transition from legacy Cr(VI) processes to new generation Cr(III) technologies.

For decades, hard chromium coatings obtained from chromic acid baths have provided superior wear resistance and hardness for high-demanding aeronautical applications. Despite these functional benefits, hexavalent chromium (Cr(VI)) species present major operational and health-related challenges, as they have long been included in Annex XIV (the Authorisation List) of the European Union REACH Regulation due to their severe carcinogenic and mutagenic risks. While temporary authorisations and specific extensions have provided the aerospace, automotive and defence sectors with critical time to manage substitution cycles without disrupting manufacturing chains, regulatory pressures continue to intensify. Developing and qualifying robust, environmentally friendly alternatives is no longer a future option, but an immediate operational necessity for the aerospace supply chain.

In this scenario, trivalent hard chromium (Cr(III)) processes emerged as the most direct, one-to-one technological alternative to Cr(VI)-based processes, removing workplace carcinogenicity risks and significantly reducing health, safety and environmental compliance burdens while providing superior coating features. A key advantage of this technology is its compatibility with standard plating infrastructure, enabling chromium plating process without major capital reinvestment.To transcend the technical limitations of early first-generation baths, second-generation electrolytes incorporated substantial amounts of organic ligands to address the thermodynamic inertia of Cr(III) species, extending the process ability to produce thick functional coatings. However, new trivalent electrolytes (3rd gen) overcome these carbon-induced drawbacks, delivering robust, high-performance deposits with properties closely matching traditional hard hexavalent chromium while featuring a significantly reduced organic content and superior process control. Additionally, transitioning to "Cr(III)" hard chrome plating demands a fundamental shift in operational mindset compared to hex chrome plating, requiring careful selection of construction material and significantly major bath management efforts to achieve operational repeatability and long-term quality assurance.

Second generation Cr(III) electrolytes yield thick functional coatings (up to 150 µm) on stainless steel components with hardnesses reaching 1.500 $HV_{0.1}$ after degassing, surpassing conventional Cr(VI) coatings (850-1200 $HV_{0.1}$). However, the presence of high amount of organic matter leading to carbon co-deposition along with degassing-induced phase transition promotes brittleness,

leading to severe machining failures, delamination, and the so-called leopard skin defects during the grinding operation, then, compromising their viability as a full Cr(VI) replacement. To overcome these challenges, SAFRAN, end-adopter of the proposed technology, established a collaborative research initiative bringing together SCHLÖTTER, as the chemical developer providing state of the art third generation Cr(III) chemistry, CIDETEC Surface Engineering as the surface engineering technology center responsible for process development and pilot-scale validation and Chrome Dur Industriel as final applicator of the new Cr(III) technology. This collaborative effort aims to bridge the gap along the technological value chain, enabling an effective transition towards Cr(III) processes in the industry.

SCHLÖTTER's third generation solution, the SLOTOCHROM HC4300 process, represents a gamechanger introducing a new generation electrolyte which strictly limit carbon uptake into the chromium layer. Low C content preserves the coating's structural integrity, delivering functional characteristics equivalent to traditional hard chromium, while fulfilling demanding industrial standards. Nevertheless, rigorous process management remains essential to guarantee consistent coating performance. Scaled up in CIDETEC's fully automatized pilot plant, the process incorporates the key operational features already disclosed for previous generation processes, including automated dosing, multi-step surface preparation sequence, high-quality water and careful material compatibility to avoid metallic contamination. To ensure bath stability and process reproducibility, the replenishment strategy was fine-tuned during the project trough automated replenishment executed every 100 A·h, supported by laboratory chemical analysis to iteratively optimize the replenishment rate.

Experimenal Campaign

To validate the industrial feasibility and performance of this third generation electrolyte, a comprehensive experimental campaign was executed at CIDETEC's facilities considering two distinct prototype geometries representative of critical aeronautical components. Additionally, different tooling was used during the project to test the versatility of the process. This study, rooted in a definition of dedicated bath management strategy, evaluated key features of the process during the aging of the process such as process stability, coating thickness distribution and hardness evolution under real plating conditions.

Operational stability was successfully demonstrated in CIDETEC's pilot line through tight pH control and automated A·h-based additive dosing. This third generation chemistry effectively exhibits minimal pH drift over extended operation, minimizing required manual interventions. As confirmed by regular Hull Cell testing, automated chemical maintenance, driven by a precise dosing definition, yielded uniform plating characteristics including plating rate, consistent throwing power and deposit quality.

Expertise of produced Cr(III) coatings confirmed significant mechanical and geometric advantages. Coatings produced in thickness ranges from 50 to 150 µm demonstrated excellent adhesion to the substrate and intermediate nickel strike layers, without cracking or delamination.an overall widening of the crack network occurs after the degassing treatment alongside the whole coating profile, reflecting internal stress relaxation and hydrogen desorption, similarly to conventional Cr(VI) coatings.

Outperforming Previous Generation Electrolytes

Geometric profiling revealed that, provided 2nd generation chemistries offered higher deposition rates (~ 25 µm/h) they induced significant edge buildup (so-called dog-bone effect) caused by local primary current density concentrations along edges and high-field regions. Meanwhile, third generation formulation operates at a moderate deposition rate (~ 11-15 µm/h) but yields coatings with an even thickness distribution along the part, exhibiting enhanced throwing power and achieving a remarkably consistent thickness distribution over the entire component profile.

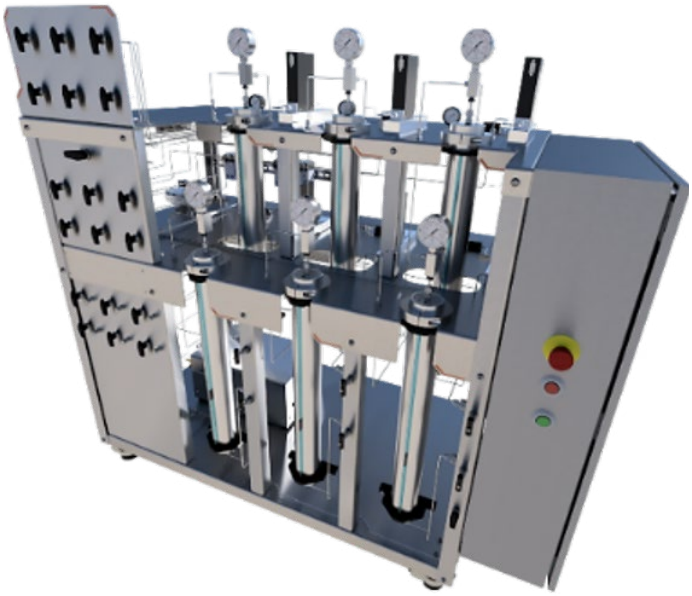
Coating hardness measurements for third generation coatings show lower values than those exhibited by previous generation (~ 1.500 $Hv_{0.1}$), which may be related to a lower C uptake into the coating. The evolution of hardness values trough process aging, for both type of plated samples, showed similar trend with a slight decrease of hardness values in the initial stages of the aging process, reaching stabilization above 15.000 A·h and remaining consistent throughout extended bath evolution, exceeding 24.000 A·h. As-plated hardness ranged 900-1.000$HV_{0.1}$ and remained remarkably stable between 1.120 and 1.160 $HV_{0.1}$, after degassing.

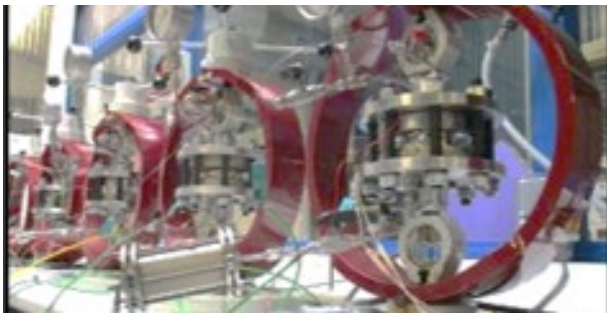
Degassed coatings were subjected to grinding operation to fulfil the whole process cycle for hard chrome plated parts. The coatings showed markedly improved mechanical resistance during machining, minimizing surface defects and achieving low surface roughness values after grinding, which can be linked to lower carbon incorporation and sustained coatings quality brought by the definition of a precise replenishment strategy. Although fine-tuning of bath chemistry and process parameters remains underway to eliminate minor defects observed during grinding, the progress achieved with third-generation trivalent chromium is remarkably promising, paving the way for a robust and effective replacement for hard Cr(VI) coatings. Third generation trivalent chromium process (SLOTOCHROM HC4300) has proven to be a technically viable, robust and sustainable replacement for Cr(VI) coatings in aeronautical applications. These promising outcomes confirm the viability of third-generation chemistries, showing that targeted effort is still required to advance the TRL level. Crucially, this cross-border collaboration lays the groundwork for the upcoming qualification of this sustainable surface technology on functional aerospace parts.

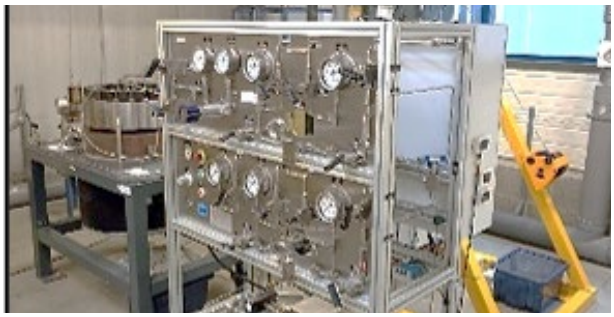
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Supporting the energy transition with FCI

French Corrosion Institute, a subsidiary of EFC Member Society, RISE strengthens its position in corrosion and materials qualification for CCUS applications







French Corrosion Institute (FCI), a subsidiary of EFC Member Society, RISE Research Institutes of Sweden, operates across three sites in France: Brest, Saint-Étienne and Lyon. The institute is expanding its expertise to support the energy transition, with a growing focus on low-carbon and next-generation energy technologies, including carbon capture, utilization and storage (CCUS), gaseous hydrogen, alternative fuels (e.g. ammonia, methanol), geothermal energy, nuclear power and electrolyzers.

FCI has been actively involved in carbon capture, transport and storage (CCTS) chain research since 2022, combining participation in collaborative research consortia activities, scientific publications and European projects (e.g. IMPACTEU-CO2 and SPECS). These initiatives strengthen FCI's role in advancing corrosion science and materials selection strategies for safe and reliable CO2 transport and storage.

Transforming Challenges

Working hand in hand with industry and research partners, FCI turns critical industrial challenges into targeted testing programmes that ensure materials assessment and qualification in impure CO2. Built to bridge the gap between laboratory testing and real-world operating conditions, FCI's tailor-made R&D capabilities combine bespoke test rigs, high-pressure autoclaves and full-scale component testing.

FCI's dedicated R&D platform for CCUS offers:

→ Batch and periodic impurity replenishment in large-volume autoclaves with controlled CO2 composition;

→ Continuous impurity-replenishment to assess CCS stream corrosivity and liquid/solid dropout, supporting the material integrity qualification for transport and storage specifications;

→ Materials selection in corrosive CO2 impurity reaction products under pressure and temperature, including strong acids (sulfuric and/or nitric acid) and solid elemental sulfur;

→ Electrochemical screening tests under high-pressure CO2 environments;

→ Fracture mechanics (SCC, FGCR) of pipeline steels under representative CO2 conditions containing impurities (e.g. H2, CO, O2);

→ Low-temperature and cryogenic testing;

→ High-pressure gas permeation through metals, polymers and composites;

→ Fit-for-purpose and full-scale tests.

To address emerging CCUS challenges, French Corrosion Institute continues to explore new and innovative testing approaches to push the boundaries of material qualification under representative operating conditions, including dynamic exposure, loop testing and rapid gas decompression (RGD).

For further information contact Driss Ben Mouhamed or Christophe Mendibide.

Introducing Corrosion, a Hidden Threat short film

Christofer Leygraf, Professor emeritus at KTH Royal Institute of Technology, Sweden and recipient of the 2013 EFC European Corrosion Medal introduces a topical short film

A few years ago, I got in touch with my former PhD student, Marc Femenia. After earning his doctorate in corrosion science, he chose a different career path and is now a professional photographer and filmmaker. Together, we produced an approximately 20-minute film titled Corrosion, a Hidden Threat.

With his background in both corrosion science and photography, Marc is most likely one of the very few people in the world who are highly qualified in both fields, and this was an opportunity I wanted to take advantage of.

From the first idea for the film to its completion, the process took almost three years. The project had to be carried out alongside all of Marc's other commitments, both as a father and as a professional photographer.

On the other hand, it was highly satisfying for both of us—accustomed as we are to working under tight deadlines—to have no time constraints whatsoever. Ideas developed gradually, and the film progressed at a relaxed pace. Eventually, we both felt satisfied with the result, and the work was completed.

First and foremost, the film is my way of expressing my heartfelt thanks to all my former colleagues and collaborators. At the same time, it offers a personal account of my own research journey and, I hope, serves as an accessible introduction to the field of corrosion science.

Please feel free to use the film for teaching or any other educational purpose. If you would like to download it, just let me know (chrisl@kth.se), and I will send you instructions.

I hope you enjoy the film!,

Christofer Leygraf,

Professor emeritus at KTH Royal Institute of Technology, Stockholm, Sweden



Get to know Christofer Leygraf



→ Born in Stockholm, Sweden (1946); Married with two grown-up children

→ Master of Science in Engineering Physics at the Royal Institute of Tecnology (KTH), Stockholm, Sweden (1969); Doctor of Science in Solid State Physics at the same university (1973)

→ Docent in Solid State Physics (1975); Docent in Corrosion Science (1980)

→ Professor of Corrosion Science at KTH (1987-2011)

→ Director for Undergraduate studies in Materials Engineering and Design, KTH (1999-2006)

→ Dean of the School of Chemical Science and Engineering, KTH (2007-2011)

→ Honorary professor at the University of Science and Technology Beijing, China (2014-)

→ Published in 370 peer-reviewed publications

→ Recipient of a number of international research awards, including the 2017 Marcel Pourbaix Award presented by the International Corrosion Council, the 2013 European Corrosion Medal, and the 2009 UR Evans Award presented by the Institute of Corrosion

Supporting a transition to data-driven management of CUI

EFC Affiliate Member, C-Cube International's handheld CQM supports joint industry project. By Jeroen Tacq (Sirris, Belgium), Guus Coolegem, Sebastian Kuniewski, and Hesam Araghi (C-Cube International, Netherlands)



Figure 1: Overview of Sirris' CUI test-rig used for sensor testing

In 2023, the InnovateCUI Joint Industry Project was launched by Sirris in Belgium. The project was funded by 11 international companies (eight operators, three coating suppliers) and aimed at supporting a transition towards data-driven management of CUI (Corrosion Under Insulation). The project focused on two aspects: (1) evaluating innovations in the field of continuous moisture monitoring; and (2) developing innovative test methods for CUI coatings. This article introduces the project, outlines the main findings and sketches our vision on how field data from moisture monitoring may potentially be used to make an estimate of coating degradation in the field.

Corrosion Under Insulation (CUI) remains a persistent challenge across many industrial sectors. It mainly affects petrochemical plants, oil and gas installations, power generation facilities, and marine assets. When insulation materials are exposed to moisture, they become ideal environments for coating degradation and corrosion. This process often remains undetected until significant damage, leaks, or even catastrophic failures have taken place, as traditional methods such as visual inspections are ineffective without (costly) insulation removal. However, change is at hand, as over the past 5 to 10 years many different CUI moisture monitoring technologies have come to the market that support truly data-driven CUI management.

All these different technologies output one kind of moisture indication or the other, but they are based on widely differing principles, effectively measuring quite different physical quantities, which are translated into a 'wetness indicator'. As a result, the information that is contained in the data is different. Understanding this is critical when deciding which sensor to use in what application and as a function of specific RBI strategies. While most of the CUI monitoring technologies are commercially available and have gone through successful field testing, there was previously little data available that allowed a direct technological comparison of the different methods. Therefore, Sirris built a dedicated test-loop of approximately 50m long (Figure 1, above) with controllable pipe temperature and calibrated water ingress in specific locations; on which six different sensor technologies were tested simultaneously.

The sensor testing showed that all technologies can detect moisture and hold great potential for reducing CUI-related costs. However, large differences in the response of the sensors to different amounts of water ingress, temperatures and dry-out were observed; understanding of which helps choose specific technologies for specific use-cases. A proof-of-concept on different types of insulation was also performed with good but not fully conclusive results because of the short test section available. So, while very important insights were already obtained, there is a need to further explore the sensor responses on longer pipe sections (allowing to evaluate impact of type of

insulation and the ideal spacing of spot sensors) and at a wider range of exposure conditions (different pipe temperatures, sweating conditions, etc.). Therefore, phase 2 of the InnovateCUI project will be launched end of this year.

While moisture is an important factor, it is not the only one. Insulated assets are typically protected using a coating. Understanding coating degradation is therefore also critical in data-driven CUI management. To achieve this, moisture sensor data could potentially be used to estimate coating degradation. This is possible if coating degradation curves (i.e. the rate at which a coating degrades) are known. Within the InnovateCUI project, the aim is to obtain coating degradation curves from laboratory testing and in-field data on exposure conditions from moisture sensors. In a first approximation it may then be assumed that the coating in the field degrades following the degradation curve when the moisture sensors indicate a wet day, and no (or very little) degradation when the sensor indicates a dry day.

Building the required coating degradation curves requires the degradation to be quantified in the stage before visual degradation becomes apparent. This is possible using Electrochemical Impedance Spectroscopy (EIS). EIS is a well-known laboratory tool, however, in its traditional form it requires immersion of the test samples, which is not practically feasible in a CUI test-setting. Therefore, an innovative



Figure 2: Schematic illustration of the three steps in coating performance evaluation: (1) accelerated coating testing, (2) long duration coating testing and (3) in-field performance evaluation

handheld Coating Quality Measurement (CQM) system was used, developed by C-Cube International, who specialises in measuring, monitoring, and predicting corrosion and coating degradation. The CQM device uses EIS to assess coating quality following NEN-ISO 4628 and ASTM D8370-22 (derived from ISO 16773) and can be used as an inspection tool (after insulation removal). As detailed in C-Cube's whitepaper, the device translates EIS measurements into two percentage-based coating quality indicators: the Barrier Index (BI) and the Permeability Index (PI). The BI is the primary indicator used to track coating degradation over time.

When using coating degradation curves from laboratory testing, the (accelerated) lab tests need to be representative of the degradation mechanisms in the field. Therefore, in the InnovateCUI project, accelerated laboratory testing with a newly designed test procedure (aimed at a 4 month test duration) was compared to results of a slow ageing test lasting 1.5 years and with conditions closer to those in the field. The comparison was based on visual inspections (for which a single-value Visual Observation Score was developed) and EIS measurements using C-Cube's CQM tool.

It was found that the differences in coating performance observed in the accelerated test were almost fully in line with those observed on the slow ageing test, albeit the observed degradation mechanisms could differ between both tests. Therefore, more representative accelerated test conditions should be explored (temperature cycling and time of wetness), allowing to choose the most suitable conditions for standardised testing (AMPP TM21442 currently allows a lot of freedom to agree on test condition between supplier and operator) and providing degradation curves under different conditions, which may be used to improve estimates of coating degradation based on moisture sensor data. These steps are planned for phase 2 of the JIP.

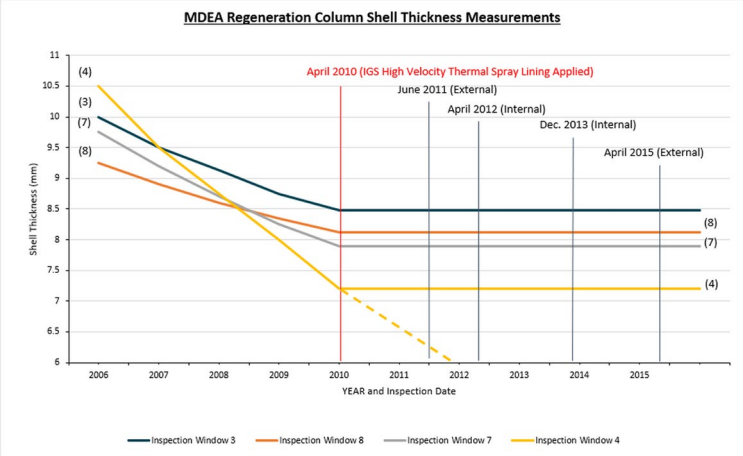
Secondly, the lab testing must allow the construction of a coating degradation curve. In phase 1 of the JIP, this was attempted using C-Cube's CQM tool. Unfortunately, the limited number of intermediate inspections and difficulty to clean insulation material from the test specimens, did not allow to obtain sufficient data points to construct reliable degradation curves. However, C-Cube has also developed a sensor allowing in-situ EIS measurements. This Coating Quality System (CQS) consists of a permanent EIS sensor embedded in a test panel that can be installed beneath the insulation. In phase 2 of the JIP, such sensors will be integrated in the accelerated coating test, allowing a data point to be collected every six hours and without a need for cleaning (as the sensor is integrated in the test panel), resulting in more data points and statistically relevant degradation curves. Using calibrated water ingress and temperature control, coating degradation curves will be determined for three different exposure conditions.

Using lab generated coating degradation curves in combination with moisture sensor data from the field to estimate coating degradation, as outlined above, remains a rough approximation. To achieve more precise predictions, the vision after phase 2 is to collect CQS data at selected locations in the field, alongside readings from moisture sensors; and use this field-data to build asset-specific degradation models. These models can then use moisture and pipe temperature measurements, including past wet-dry and temperature cycles, to predict coating condition indicators such as BI and PI, in locations where there is no CQS sensor. The trained models can then be further validated and fine-tuned with occasional CQM measurements when visual inspections with insulation removal are performed. Building asset-specific degradation models requires further development of the CQS system to allow integration on insulated pipelines and may be the scope of future work with interested parties.

The work towards transitioning to a truly data-driven management of CUI is still far from complete. If you want to join C-Cube and their partners on this journey, either by joining the InnovateCUI JIP or through other forms of collaboration, contact Sirris: Jeroen Tacq, or C-Cube: Sebastian Kuniewski. Click here for more information.

Studies in Amine Vessel Corrosion Control

EFC Affiliate Member, Integrated Global Services, explores the factors behind the effective management of amine corrosion and the challenges posed to asset integrity



Amine systems are central to modern gas processing, enabling the removal of acid gases such as hydrogen sulphide (H_2S), carbon dioxide (CO_2), and mercaptans to meet product requirements, as well as to refineries cleaning off-gases to achieve environmental requirements. Despite decades of operating experience and established design practices, amine units continue to account for a disproportionate share of corrosion-related failures, with significant metal loss often only identified during routine inspections.

Amines are not inherently corrosive; corrosion is driven by the acid gases and contaminants absorbed during service, combined with elevated temperatures, degraded amine products, high velocities, and process upsets. Mechanisms such as acid gas breakout, heat-stable amine salt formation, wet H_2S conditions, and oxygen ingress can destabilise protective films and promote localised attack, particularly areas of high flow or pressure such as regenerator reboilers, stripper bottoms, and inlet zones.

This article examines why amine vessel corrosion persists, identifies where damage most commonly occurs within amine units, and discusses practical mitigation strategies based on field experience and long-term inspection data.

1. Fundamentals of Amine System Corrosion

Corrosion behaviour in amine service is controlled by the chemical and thermal conditions established as the solvent circulates through the process. Key contributors to corrosion in amine systems include:

→ **Acid Gas Breakout**

Occurs when absorbed CO_2 and H_2S flash out of solution due to elevated temperatures, high velocities, or local pressure reductions. This results in localised acid attack, particularly at inlets, tray levels, and reboiler return zones.

→ **High Temperatures**

Corrosion rates increase significantly with temperature. In rich amine service, temperatures above approximately 220°F (104°C) can lead to severe localised corrosion, especially in regenerator bottoms and reboilers where temperature is highest.

Organic linings and coating systems are sometimes considered for corrosion protection in amine service; however, their performance is often limited by operating and maintenance conditions. Elevated process temperatures can exceed the thermal stability limits of many organic materials. In addition, steam-out procedures commonly used during shutdowns and cleaning cycles can lead to softening, blistering, loss of adhesion, or complete failure of organic systems. As a result, organic linings may deteriorate or disbond over time, creating under-film corrosion risks and complicating inspection and repair.

→ **Heat Stable Amine Salts (HSAS)**

Formed through reactions between the amine and contaminant acids introduced via feed impurities, degradation, or oxygen ingress. HSAS accumulate in the system, lower solution pH, increase conductivity, and destabilise protective surface films.

→ **Wet H_2S Environments**

While low H_2S concentrations can support the formation of protective sulphide films, elevated H_2S levels promote highly aggressive corrosion mechanisms, including hydrogen-induced cracking (HIC) under certain conditions.

→ **Contaminants and Oxygen Ingress**

Solid particulates contribute to erosion-corrosion in high-velocity regions, while oxygen accelerates amine degradation and HSAS formation, compounding corrosion risk even at low ingress levels.

Despite these challenges, carbon steel remains widely used in amine systems due to its cost-effectiveness and acceptable performance within defined operating limits. However, when these limits are exceeded, corrosion rates can increase rapidly, highlighting the importance of understanding local operating conditions and their impact on materials performance.

2. Common Locations of Corrosion in Amine Units

Within amine units, corrosion damage is concentrated in a limited number of predictable locations where thermal, chemical, and hydraulic stresses coincide. These areas are typically exposed to elevated temperatures, acid gas flashing, or high turbulence, creating environments that promote accelerated metal loss even when operating conditions appear to be within design limits. The most commonly affected locations include:

Regenerator/Stripper Bottoms and Reboiler Return Zones

→Elevated temperatures and high acid gas concentrations
→Acid gas breakout promoting accelerated corrosion
→Typical damage includes circumferential corrosion bands and localised wall thinning

Regenerator Reboilers

→Sustained high metal temperatures
→Susceptibility to process disruptions such as tube failures or maldistribution
→Typical damage includes rapid localised attack and potential pressure boundary risk

Regenerator Upper Sections and Overhead Systems

→Condensation of corrosive species such as ammonia, H_2S, and hydrogen cyanide
→Wet acid gas environments
→Typical damage includes pitting, cracking, and blistering of internal surfaces

Lean and Rich Amine Heat Exchangers

→Temperature gradients and flow turbulence
→Accumulation of contaminants and solids
→Typical damage includes erosion-corrosion, under-deposit attack, and tube failures

Inlet Nozzles, Tray Levels, and High-Turbulence Regions

→Velocity effects and flashing of absorbed gases
→Local chemistry variations and impingement
→Typical damage includes pitting and preferential metal loss

Recognising these high-risk locations allows operators to prioritise inspection activities, apply targeted mitigation measures, and reduce the likelihood of unexpected corrosion-related failures in amine processing units.

3. Integrity Assessment and Decision-Making in Amine Service

When corrosion is identified in amine vessels, the key issue is not simply the amount of wall loss, but whether the pressure boundary remains fit for continued service. Because of the localised nature of damage in amine systems, minimum thickness checks alone may not provide sufficient insight to support repair-or-replace decisions. A structured integrity assessment is therefore required to guide an appropriate response.

Step 1: Confirm the damage profile

Inspection data typically identifies a combination of:

→General wall thinning
→Localised pitting or preferential attack in high-risk areas, such as inlet zones, tray levels, and reboiler return regions

Understanding the extent and distribution of damage provides the foundation for assessing its structural significance.

Step 2: Determine fitness for continued operation

Where localised corrosion is present, operators commonly apply Fitness-For-Service (FFS) methodologies, such as API 579 / ASME FFS-1, to evaluate:

→Remaining strength and allowable minimum thickness
→Local stress effects
→Suitability for continued operation under design and operating conditions

This assessment enables differentiation between:

→Cosmetic or monitorable damage
→Degradation requiring mitigation or repair
→Conditions that warrant immediate intervention

Step 3: Identify feasible response pathways

Once structural adequacy has been established, operators can define the feasible response options. Depending on the assessment outcome, these may include vessel replacement, weld-based repair, or in-situ corrosion mitigation. At this stage, the objective is not to select a solution, but to confirm which pathways remain technically viable.

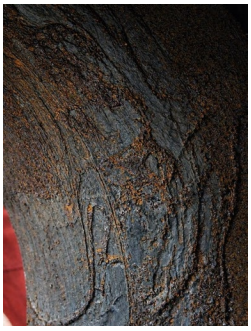
In defining feasible response options, operators must also consider the durability of materials under actual operating and maintenance conditions. Solutions that cannot reliably tolerate elevated operating temperatures or repeated steam-out cycles may introduce additional integrity risks over time, even if they appear viable initially.

Step 4: Align scope with outage and lifecycle requirements

Final selection is typically informed by practical considerations, including:

→Corrosion severity and location
→Access constraints and internal configuration
→Remaining service life requirements
→Turnaround duration and critical path impact

Integrating inspection findings with engineering assessment at an early stage reduces uncertainty, supports more accurate scope definition, and enables corrosion management strategies to shift from reactive repair toward proactive, lifecycle-based integrity control.



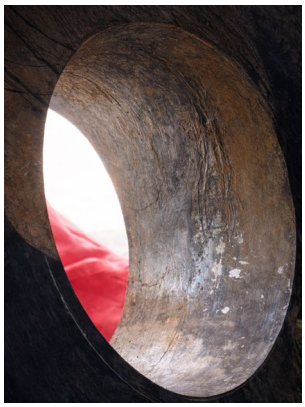


Figure 1 (above) and Figure 2 (right)

4. Case Study 1 - Corrosion Mitigation in an Amine Regeneration Column

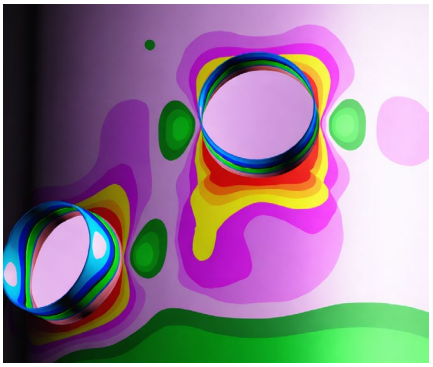
During a scheduled shutdown inspection, significant internal corrosion was identified in a carbon steel amine regeneration column at a gas processing facility (Figures 1 & 2, above). Damage was concentrated in the lower shell below trays 21–22, where wall thickness was measured between 13.1 and 13.5 mm, with localised pitting up to 2.3 mm deep. A circumferential corrosion band approximately 470 mm wide was observed around the vessel.

Similar but less severe corrosion was identified at trays 18–19, with pit depths up to 1.4 mm.

The corrosion was traced to a tube failure in the associated reboiler, which caused localised acid attack at the reboiler feed inlet. Elevated temperatures and acid gas breakout created aggressive conditions that accelerated metal loss. Vessel replacement was considered but dismissed due to long procurement lead times, while conventional weld overlay repair

would have required post-weld heat treatment and lead time of approximately three to four months.

A third-party Fitness-For-Service assessment was conducted in accordance with API 579 / ASME FFS-1 (Figure 3, below). Structural analyses confirmed the vessel remained fit for continued operation, with a minimum allowable shell thickness of 7.9 mm and a localised minimum of 6.6 mm beneath the inlet nozzle. This enabled the implementation of a mitigation strategy rather than replacement.



An in-situ corrosion-resistant alloy cladding was applied using High Velocity Thermal Spray (HVTS) technology to stop further metal loss and protect the pressure boundary. HVTS deposits the alloy without substrate dilution, avoiding a heat-affected zone and the need for post-weld heat treatment, reducing the time required to complete the application within the outage window. Subsequent inspections confirmed the cladding remained intact, with no further wall loss observed (Figure 5, on page 39). After two years of stable operation, the planned column replacement was cancelled. The vessel remained in service for a further five years until its planned decommissioning as part of a capacity expansion project, with the mitigation approach delivering an estimated US $57 million in avoided capital expenditure and production losses.

5. Case Study 2 - A Decade of Corrosion Protection in Amine Service at an NGL Facility

Long-term inspection data from an NGL processing facility operating in a sour gas environment demonstrate the durability of targeted corrosion mitigation in amine service. The facility had experienced persistent corrosion within its amine stripper column, particularly across multiple tray levels, driven by elevated operating temperatures, high acid gas loading, and localised turbulence.

To address these issues, a corrosion-resistant alloy cladding applied using HVTS technology was implemented in two phases during scheduled turnarounds:

Phase 1 (2014)

→ HVTS cladding applied from Tray 01 to Tray 07 within the amine stripper column

Phase 2 (2020)

→ HVTS cladding extended from Tray 07 to Tray 18

→ Additional protection applied to reboiler vapour line inlet nozzles

This phased approach aligned corrosion mitigation with inspection findings and evolving risk, rather than requiring full-column intervention at a single point in time.



Inspection and Performance Outcomes:

2020 inspection (four-year evaluation of Phase 1):

→ Cladding intact and in excellent condition

→ Average thickness measurements within specified limits

→ No evidence of corrosion-related degradation in protected areas

2024 inspection (10-year evaluation of Phase 1; 4-year evaluation of Phase 2):

→ Cladding from both application phases remained intact

→ Thickness measurements remained within specification

→ Effective protection maintained under aggressive amine processing conditions



Inspection in 2024 confirming HVTS reliability

No welding-related distortion, heat-affected zones, or damage to internal components were observed during inspections. The sustained performance was attributed to comprehensive surface preparation, strict QC, and disciplined inspection and monitoring practices.

Taken together, these case studies show that amine corrosion can be managed through targeted, inspection-driven mitigation rather than reactive replacement. By linking integrity assessment with location-specific corrosion control, operators can extend equipment life and maintain predictable performance in corrosive amine service.

6. Conclusion

Despite long-standing industry awareness, corrosion in amine processing units continues to challenge asset integrity and reliability. Acid gas breakout, elevated temperatures, contaminants, and process disruptions can combine to create aggressive environments that accelerate metal loss in predictable high-risk locations.

As the case studies demonstrate, effective management of amine corrosion depends on early detection, structured integrity assessment, and mitigation strategies aligned with actual damage mechanisms rather than conservative assumptions. When corrosion is evaluated in the context of fitness-for-service and addressed through targeted, in-situ solutions, operators can extend equipment life, reduce unplanned outages, and avoid unnecessary capital replacement.

Ultimately, a shift toward proactive, lifecycle-based corrosion management, integrating process control, inspection data, and materials performance, offers a more reliable and cost-effective path to maintaining asset integrity in amine service. By anticipating where corrosion is likely to occur and responding before structural limits are reached, operators can move from reactive intervention to predictable, long-term reliability. Click here for more information.

KorSEM'26 attracts more than 400 participants to Ankara

Jointly organised by EFC Member Society, Korozyon Dernegi, the international symposium strengthened links between Türkiye's corrosion community and international expertise



President of the Corrosion Association (Korozyon Derneği), Koralp Karadağ emphasised corrosion prevention from design and material selection through inspection and maintenance

>400 Registered Participants

14 Sessions

72 Oral Contributions

11 Posters

Main Topics

→Cathodic protection and infrastructure integrity
→Sustainable corrosion inhibitors
→Coatings and surface engineering
→Microbiologically influenced corrosion and biofilms
→Alloy and composite durability, including hydrogen degradation
→Marine, automotive, aerospace and energy applications

KorSEM'26, the 17th International Corrosion Symposium, took place at OSTIM Technical University in Ankara, Türkiye, on 15-17 October 2026. Jointly organised by the University and Korozyon Dernegi (Corrosion Association in Türkiye), an EFC Member Society, it focused on material durability and corrosion prevention technologies for strategic systems. The symposium recorded more than 400 registered participants.

Pascal Collet, Chief Operating Officer of the European Federation of Corrosion, presented the EFC's mission and its Working Parties, publications, educational activities and Young EFC network. His participation strengthened links between Türkiye's corrosion community and international expertise.

Scientific highlights ranged from Prof. Ali Fuat Çakır's work on corrosion costs and cathodically protected pipelines to Prof. Barbaros Çetin's computational approaches to cathodic protection design. Luca Murachelli of AMEL addressed microbiologically influenced corrosion in soil and agrivoltaic applications. Merve Vatansever of TOFAS connected automotive corrosion prevention with laboratory testing, vehicle validation and field performance.

In his opening address, Association President, Koralp Karadag emphasised corrosion prevention from design and material selection through inspection and maintenance. He called for closer university-industry cooperation and greater involvement of students and early career researchers.

The organisers thank the host university, scientific and organising committees, speakers, contributors, student volunteers and sponsors.

Click here for more information.



Introduction to Corrosion & its Prevention course

IOM3's EFC Approved one-day virtual course is set for February 2027 and is suitable for a wide range of corrosion concerns

Develop your understanding of corrosion and its prevention with this one-day virtual course from IOM3, approved by the EFC. Taking place on 11 February 2027, the course introduces common corrosion mechanisms, corrosion-resistant alloys and practical prevention methods, including coatings, cathodic protection and designing out corrosion.

Suitable for those working in engineering, production and design, as well as new starters and graduate engineers, the course will help participants make informed materials selection decisions and understand how corrosion risks can be reduced.

Core Topics Include:

→Fundamentals of corrosion mechanisms
→Corrosion-resistant alloys and stainless steels
→ Non-ferrous alloys (including nickel, aluminium, and titanium)
→ Materials selection and corrosion mitigation strategies

It is part of the Metallurgy in Practice ten-course curriculum, which allows delegates to bundle courses to earn an IOM3 Certificate (three courses) or Diploma (six courses) within a 12-month period.

Click here to find out more and book your place.

EFC partner with MECOC 2027 in Abu Dhabi

The two-day event will gather key decision makers and experts in Oil and Gas industry and provide a platform for EFC to present its activities



The EFC is pleased to announce a partnership with the 6th annual Middle East Metallurgy Corrosion and Expo MECOC EXPO 2027. This major event, combining conference and expo, will bring unparalleled experience, gathering key decision makers and experts in Oil and Gas industry together from the GCC and beyond, to discuss especially Corrosion and Protective Coatings, but not only. It will be One Event with Three Conferences, one being fully dedicated to Corrosion and Coatings, to dive deep into corrosion prevention, management, coating technologies and cathodic protection.

Two other conferences, focused on *Future Steel* and *Non-metallic Materials* will run in parallel. MECOC EXPO 2027 will feature over 60+ esteemed speakers from industry leaders and will bring opportunities to network with over 500 industry peers, decision-makers and potential partners. The conferences lectures and exhibition area will also be a platform for Innovative Solutions Showcase. As a supporting partner, the EFC will contribute by presenting its activities, especially those of the Working Parties at the EFC stand, while Mushen El Haddad, Vice-Chair of the EFC International Branch is a member of one of the conference committees. The event will take place on 21-22 April 2027 in Abu Dhabi, UAE. Click here for more information.



ICCPA2026 brings together global corrosion experts

More than 500 delegates gathered in China to explore green and low-carbon development, with strong representation from across the EFC community

The International Conference on Corrosion Protection and Application (ICCPA2026 – EFC Event No. 549) took place in Chengdu, China from 24 to 26 July under the theme *Green and Low Carbon, Open Exchange, Cooperation and Win-Win*. Co-organised by the Chongqing Association for Science and Technology, the Sichuan Society for Corrosion and Protection, the EFC, the Southwest Institute of Technology and Engineering, and with the support of many Chinese associations and companies, the ICCPA2026 gathered more than 500 experts, researchers and industry professionals from China and around the world.

Delegates from different EFC Working Parties, Young EFC, Member Societies, and Affiliate Members were all in attendance, providing invited lectures and participating in discussions. Reflecting the broad scope of modern corrosion research, the conference programme featured topics ranging from corrosion damage and protection in extreme environments to aerospace, marine, and high-temperature corrosion. Further themes included corrosion inhibition, corrosion monitoring, functional anti-corrosion and anti-fouling coatings, wear and erosion protection in energy, and activities dedicated to fostering the next generation of corrosion researchers through the Young Scientists Forum.

Plenary and keynote lecturers were delivered by Damien Féron (University Paris Saclay FR), Yunnan Gao (Institute of Corrosion UK), Theo Hack (TJoH Consulting DE), Nicolas Larché (Institut de la Corrosion FR), Juho Lehmusto (Abo Akademi University FI, EFC), Philippe Marcus (École Nationale Supérieure de Chimie de Paris FR), Noémie Ott (OST CH, YEFC), Tomáš Prošek (UCT Prague CZ, EFC), Manel Rodriguez Ripoll (C2T research GmbH AT, EFC), Václav Šefl (Technopark Kralupy CZ), and Pavel Taraba (MERO CZ).





Open Exchange

ICCPA2026 was attended by Nicolas Larché, Institut de la Corrosion FR (left), Damien Féron , University Paris Saclay FR (above, middle), Pavel Taraba, MERO CZ (below, left), and Philippe Marcus, École Nationale Supérieure de Chimie de Paris FR (below and below, left).







Stay up to date with EFC events 2026-2028

Make a date in your corrosion calendar for all the latest EFC events and conferences in Europe and around the world

EFC Webinar: Corrosion in Data Centers

Online, 24 November 2026

EFC Event No. 568

Organised by EFC WP 23, with support from CEFRACOR

Scope: This webinar will cover: →The overall perspective of data centre growth and technologies

→Conventionally cooled data centres and problems due to external environments

→Corrosion issues of electronics cooled by fluids

→Corrosion issues of electronics relevant to data centres

→Perspectives on future electronic requirements for data centres

Speakers will include market analysts, universities, research centres and industrial companies.

Click here for more information.

Online 101 tutorials - Ab Initio Modelling of Corrosion

Online, 8 December 2026

EFC Event No. 561

Co-organised by EFC WP 6 / 8 / 13

Scope: A series of online 101 tutorials focused on corrosion-related experimental/in silico methods and phenomena. Target audience is PhD and early-career researchers , who want to have more fully rounded basic knowledge, along with other newcomers to the areas.

Click here for more information.

IBERCorr'27 - 1st Iberian Corrosion Congress

Lisbon, Portugal, 26 - 28 April 2027

EFC Event No. 564

Co-organised by SPM (Portugal) and SOCIEMAT (Spain), Member Societies of EFC

Scope: IBERCorr'27 aims to bring together researchers, engineers, and industry professionals from across the Iberian Peninsula, covering a broad range of topics in the field of corrosion and materials protection.

Click here for more information.

9th International Seminar in the Field of Automotive Corrosion

Stockholm, Sweden, 26 - 27 May 2027

EFC Event No. 557

Organised by RISE, Member Society of EFC

Scope: Presentations by invited speakers from industry and research organisations in the field of automotive corrosion with special emphasis on materials and surface treatments for automotive corrosion protection, accelerated corrosion testing of automotive materials and comparison with field experience.

Click here for more information.

EFC Event 561
Online 101 Tutorials
(Working Parties 6, 8 & 13)

ICC International Corrosion Council

Ab Initio Modelling of Corrosion

8/12/26 @13:00/14:00 (UK/CET)



Dominique Costa
Atomistic Models for Corrosion: From Experimental Observations to Theoretical Understanding



Anton Kokalj
From Adsorption to Corrosion Inhibition: Insights from Computational Modelling

Register with the QR code

ACHEMA 2027

Frankfurt/Main, Germany, 14 - 18 June 2027
Event No. 547
Organised by DECHEMA e.V. (Member Society of EFC) in cooperation with DECHEMA-Ausstellungs GmbH
Scope: World forum and leading show for life science and process industries. In parallel to the exhibition, researchers, developers and users meet at the ACHEMA congress to discuss new developments and current challenges in the process industries.
Click here for more information.

NuCoSS-27 - Nuclear Corrosion Summer School 2027

Gozd Martuljek, Slovenia, 4-9 July 2027
EFC Event No. 562
Organised by EFC WP 4 - Nuclear Corrosion
Scope: The summer school is primarily intended for people from nuclear authorities, industry and research organisations who would like to get a comprehensive overview on the whole field of nuclear corrosion in only one week.
Click here for more information.

Global Corrosion Congress: Joint EUROCORR & ICC 2027

Prague, Czech Republic, 12-16 September 2027
EFC Event
Co-organised by the EFC and the International Corrosion Council, and hosted by the EFC Member Society, the Association of Czech and Slovak Corrosion Engineers (AKI)
Scope: For only the second time in the history of both congresses, EUROCORR and the International Corrosion Congress will host a unique joint event, bringing together the European and international corrosion communities under one roof. Following the success of the 2017 edition, Prague will once again welcome leading experts, researchers and industry professionals from around the world. The call for papers is now open. Click here for more information.

PractiCORR 2027

Poland, 24-26 November 2027
EFC Event No. 566
Organised by Polish Corrosion Society(PSK)
Scope: A practical, industry-focused conference built around real challenges, proven solutions, field experience and direct exchange between professionals working across the corrosion, fire-protection and protective coatings sectors. PractiCORR gathers inspectors, coating manufacturers, raw material suppliers, designers, applicators, contractors, researchers, asset owners and representatives of both large and small enterprises from across Europe and beyond.
Click here for more information.

SAVE THE DATE

EUROCORR 2028

Ljubljana, Slovenia, 10-14 September 2028

EFC APPROVED COURSE

IOM3: Corrosion & Its Prevention
The next virtual course will take place on 11 February 2027.

Overview: EFC Approved Courses

For full details of these and a complete listing of many other future corrosion events held in Europe and throughout the world, then visit the EFC Calendar of Events.

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