

Report activities September 2024 – February 2025

1. YEFC board

The YEFC board consists of Sajjad Akbarzadeh (UMons, Belgium), Arthur Boidot (NOF Metal Coatings Europe SA, France), Mirsajjad Mousavi (Teijin Aramid BV, Netherlands), Noémie Ott (OST, Switzerland), Can Özkan (Delft University of Technology, Netherlands) and Reynier Revilla (VUB, Belgium).

In addition, we welcomed in September Nikola Macháčková (VŠCHT Praha, Czech Republic), Valentina Valbi (Institut de Recherche de Chimie Paris – CNRS, France) and León Zendejas Medina (KTH Royal Institute of Technology, Sweden)

The YEFC board benefits from the support of the EFC board member, Bartłomiej Guzik (Mankiewicz Gebr. & Co, Poland).

Andressa Trentin left the YEFC board for new endeavors. The YEFC board would like to thank her for her immense support in shaping the YEFC community over the past few years. She will continue to remain involved in the EFC social media team and EDI task force.

2. YEFC activities @ Eurocorr2024

Annual Meeting combined with a career fair (Noémie Ott, Mirsajjad Mousavi)

The **10th annual meeting of the Young EFC** took place on Monday evening, September 2nd 2024 with more than 100 early career corrosionists present. We are grateful to Yolanda Hedberg (UWO, Canada) who introduced the CREATE CORRECT program and Danny Burkle who introduced the Institute of Corrosion and its activities.

The get-together event/career fair in the Foyer Bordeaux allowed young professionals to meet and discuss with representatives of leading companies, research institutes and/or higher education organizations in corrosion-related fields.

We are grateful to **Mankiewicz that sponsored the event** and contributed to its success.

The concept of the career fair was well received by the young corrosion community but its organization and implementation need to be further improved if it were to be reconducted. It conflicted with the "Exhibition opening ceremony" so many company representatives could not attend. The booth organized by Mankiewicz was well received and many participants wished to have had more booths to visit rather than informal chats with more senior professionals.

YEFC plenary lecture competition (Noémie Ott)

Emilio Martínez-Pañeda, associate professor of Engineering Science at the University of Oxford (UK) was selected as YEFC plenarist by a jury (YEFC board members + 7 external jury members) based on a 3 minute video presentation about his research. His plenary lecture entitled "towards a Virtual Corrosion Lab: a new generation of mechanistic, multi-physics models for pitting and stress corrosion cracking" provided insights in the use of phase field algorithms and multi-physics modelling to enable physics-based corrosion predictions.

Best oral presentation awards (Noémie Ott)

This year again, we coordinated the best oral presentation award competitions.

Eleven early-career corrosionists were preselected for the final of the best oral presentation competition, based on their topics and a 3 min video. Amber Sykes (University of Leeds, UK), and Vincent Vangrunderbeek (VUB, Belgium) were awarded the best oral presentation prizes but all candidates demonstrate outstanding presentation skills.

The YEFC would like again to thank all jury members for their support and Mankiewicz who kindly sponsored these awards.

A new evaluation form needs to be designed in order to make the evaluation fairer. At the moment, it is rather challenging to guarantee a proper fair evaluation for all candidates.

EFC corrosion summer school (Valentina Valbi, Noémie Ott)

The EFC Summer School "Corrosion in green energy technologies" took place a few days before Eurocorr2024 in Palaiseau. The YEFC supported the organization of the summer school and sponsored a networking event.

On Thursday evening the participants could enjoy a wine and cheese tasting in the relaxed atmosphere of Le Julie's!

3. YEFC activities @ Eurocorr2025 and Eurocorr2026 (Noémie Ott, León Zendejas Medina)

Activities related to Eurocorr2025 (Women Lunch, Career Fair, YEFC annual meeting, EFC summer school, best oral presentation awards) are currently being discussed with the local organizing community.

Kudos to the local organizers of Eurocorr2026 that already started planning Eurocorr 2026 and have involved a YEFC representative in the LoC.

4. Get to know the corrosion fighters (Arthur Boidot)

This series of short interviews aims at giving more visibility to the winners of the EFC awards and attracting young researchers and engineers in the field of corrosion, as well as encouraging young people to apply for EFC prizes.

Arthur redesigned the interviews to make it more engaging. The first interviews series of 2024 awardees have been complemented and have been posted on LinkedIn and on the EFC website.

5. YEFC webinar for scientific writing in partnership with Elsevier (Reynier Revilla)

The **webinar series for scientific writing** is organized in partnership with Elsevier. We are **very grateful to the editors of Corrosion Science**: Prof. Arjan Mol and Prof. Dawei Zhang to support this initiative and sharing their knowledge and experience.

The last webinar was held on November 27th and focused on "Insights on Revising and Reviewing Scientific Articles." It benefitted from the support of Marlene Silva, Elsevier-Publisher Materials Science as well as Prof. Arjan Mol and Prof. Dawei Zhang. There were more than 50 participants. The topics of future webinars are under discussion.

All presentations are available upon request to the YEFC community.

6. Women in Corrosion (Valentina Valbi, Nikola Macháčková)

As shown last year at Eurocorr and throughout the year, there is a need to improve the visibility of women in corrosion.

In the frame of the International Day of Women and Girls in Science (February 11th), the YEFC and EFC EDI task force launched a photo campaign to celebrate women working in a corrosion-related field.

We ask female corrosionists to send a picture of them at their work place with a short description of their work. We had more than 60 participants. Through the photo campaign that runs from February 11th to June 23rd (International Women in Engineering Day), we hope to promote women in corrosion and inspire the next generation. The first posts have already met a lot of positive feedback on LinkedIn.

7. Corrosion Awareness Day

April 24th has been designated as **Corrosion Awareness Day** by the World Corrosion Organization (WCO).

For the 2025 edition, the YEFC supports and organizes three main activities:

Advertisement of activities organized by EFC member societies and affiliated members (Sajjad Akbarzadeh)

The YEFC supported and encouraged the corrosion community to organize events and activities, aimed at raising awareness about the impact of corrosion in our societies and industries.

This year, less activities have been registered, 12 compared to more than 20 last year, but a stronger engagement has been observed, as shown by the WCO social media campaign.

YEFC photo competition (Nikola Macháčková, Sajjad Akbarzadeh and Ana Kras (Jožef Stefan Institute, Slovenia))

The YEFC photo competition encourages corrosionists as well as the general public to send their best corrosion picture. 2 categories will be evaluated: corrosion in the macro world (photos taken with a conventional camera/mobile) and corrosion in the micro world (photos taken with different types of microscopes). Photographs and images will be rated in terms of their aesthetic quality and their ability to inspire and amaze, to convey or illustrate knowledge, to tell a human story or to let us discover a new universe.

WCO World Corrosion Day (Sajjad Akbarzadeh, Noémie Ott)

Following the success of last year, WCO, AMPP, EFC supported by YEFC, launches once again on April 24th a campaign on social media to raise corrosion awareness (more details in the social media report).

8. Joint activities CREATE CORRECT and YEFC (Yolanda Hedberg, Noémie Ott)

We decided to join force to organize events that can benefit both our communities.

Personal development - grant writing

YEFC and CREATE CORRECT organized a webinar on grant writing. Yolanda Hedberg (UWO, Canada), Emilio Martínez-Pañeda (University of Oxford, UK), and Santiago J. Garcia (TU Delft, Netherlands) shared their experience in writing proposals and gave some tips and insights (finding grant opportunities, ideation, writing strategies, tips based on personal experiences).

The webinar took place on January 20th with more than 40 participants.

Joint CORmentor and YEFC summer school

The YEFC and CREATE CORRECT organizes a Corrosion Summer School from June 9th-13th.

It will be held in person in Canada and online for the rest of the world, with common online activities during Canadian mornings and European afternoons.

We will discuss the issues related to ethics and politics in corrosion science and engineering:

- corrosion issues and management related to nuclear power plants
- corrosion issues and monitoring in the oil and gas industry
- corrosion considerations to advance preservation of cultural heritage
- implications and perspectives of the use of artificial intelligence and machine learning in the corrosion field

The program is being finalized and will be advertised shortly.

CORmentorship program

The YEFC is happy to promote the CORmentor program that supports corrosion students, early career professionals and established professionals, embarking on a major career change.

The first round of the international corrosion mentorship program, CORmentor, ended in August 2024. We had 50 pairs of mentors and mentees in 16 countries.

A summary of the program was presented at Eurocorr in Corrosion Education symposium.

For the new call, there was only 16 pairs of mentees/mentors matched worldwide.

9. YEFC VIPCOAT consortium - Open Innovation Platforms for science webinar (Can Özkan)

The YEFC and the VIPCOAT (Virtual Open Innovation Platform for Active Protective Coatings Guided by Modelling and Optimization) consortium organize a webinar on open innovation platforms for science on March 20th.

Marko Horvat (Wikki Ltd., UK), Lisa Sahlmann (Helmholtz-Zentrum Hereon, DE), Katja Schladitz (Fraunhofer Institute, DE), Nourhan Abdelrahman (Vrije Universiteit Brussel, BE), and Mats Meeusen (Vrije Universiteit Brussel, BE) will share their experience in how to create an open innovation platform and explain why it is important for contemporary scientific-societal collaborations.

10. Sponsorship (Bartłomiej Guzik)

Bartek did an amazing job in organizing sponsorship from Mankiewicz for the YEFC activities at Eurocorr2025. They will sponsor the following:

- 1) Best oral presentation awards: 2 x 500 euros
- 2) Women lunch: 1000 euros
- 3) Career fair: 1000 euros

11. Microsoft 365

We are slowly migrating from our Gmail account to our new Microsoft 365 account. Aim is to be done by end of March 2025.

12. Other activities

- Organizing of feedback/survey to address the needs of the YEFC community
- Contribution to EFC summer school organization
- Collaboration with different WPs to promote the synergy between YEFC community and WPs
- Contribution to the EFC newsletter, summarizing the YEFC activities
- Active diffusion of news and advertisement of events (conferences, doctoral schools) with the YEFC network
- Participation as jury members for different EFC prizes/grants
- Regular YEFC board meetings
- Participation in the EFC virtual meetings

Budget

	Income	Expense	Item
BUDGET 2023			
Income	€ 5,500		4,000 € allocated by BoA + 1,500€ underspent from 2022
	€ 600		Sponsorship for SciComm workshops (300 € Anton Paar TriTec SA + 300 € Metrohm Schweiz AG)
expense		€ 790	Eurocorr2023 – Registration fees for 1 YEFC board member
expense		€ 1,508	Eurocorr2023 – YEFC Annual meeting + get together event
expense		€ 380	Eurocorr2023 – flyers, goodies
expense		€ 456	EFC summer school event
expense		€ 208	PRAKTIKOR – YEFC activities promotion
expense		€ 1,872	Science communication workshops (B. Fitzgerald)
Expense		€ 170	Mentimeter (interactive tool)
Remaining Budget 2023		€ 716	

	Income	Expense	Item
BUDGET 2024			
Income	€ 6'000		allocated by BoA
	€ 1'000		Sponsorship Best oral presentation @Eurocorr24 – Mankiewicz
	€ 500		Sponsorship Career fair @Eurocorr24 – Mankiewicz
expense		€ 2'580	Eurocorr2024 – Registration fees for 3 YEFC board members
planed		€ 2'606.4	Eurocorr2024 – YEFC Annual meeting + get together event
planed		€ 500	Eurocorr2024 – flyers, goodies
planed		€ 1'243	EFC summer school event
planed		€ 1'000	Eurocorr2024 – best oral presentation awards
Remaining Budget 2024		€ -429.4	