



## stayCERENA – July 2025

### June in a nutshell



- June 1<sup>st</sup>-3<sup>rd</sup> 2025 | [MATERIAIS 2025](#) - Congress of the Portuguese Materials Society was held at Instituto Superior Técnico.
- June 6<sup>th</sup> 2025 | DER Seminar *Spatial Data Sciences ...Think Spatually About Your Data Science Problems* took place at Instituto Superior Técnico.
- June 17<sup>th</sup> 2025 | The last CERENA Workshop Equipment in Research on Gas Adsorbtion was led by [Sílvia Carvalho](#). More workshops to come next year!
- June 26<sup>th</sup> 2025 | The last CERENA Seminar of the academic year by [Bárbara Fonseca](#) titled “**Abandoned mines in Portugal: toxic elements and environmental damage**” was a success. Many interested attendees and a full house at FEUP. More info [here](#).
- June 30<sup>th</sup> – July 1<sup>st</sup> 2025 | The Mining Engineering Symposium, part of the 6th Doctoral Congress in Engineering, took place at FEUP. The title of this year was *Mining the Future: Innovation, Technology, and Sustainability*. More info [here](#).



*Activities of the month of June 2025*

## Our people

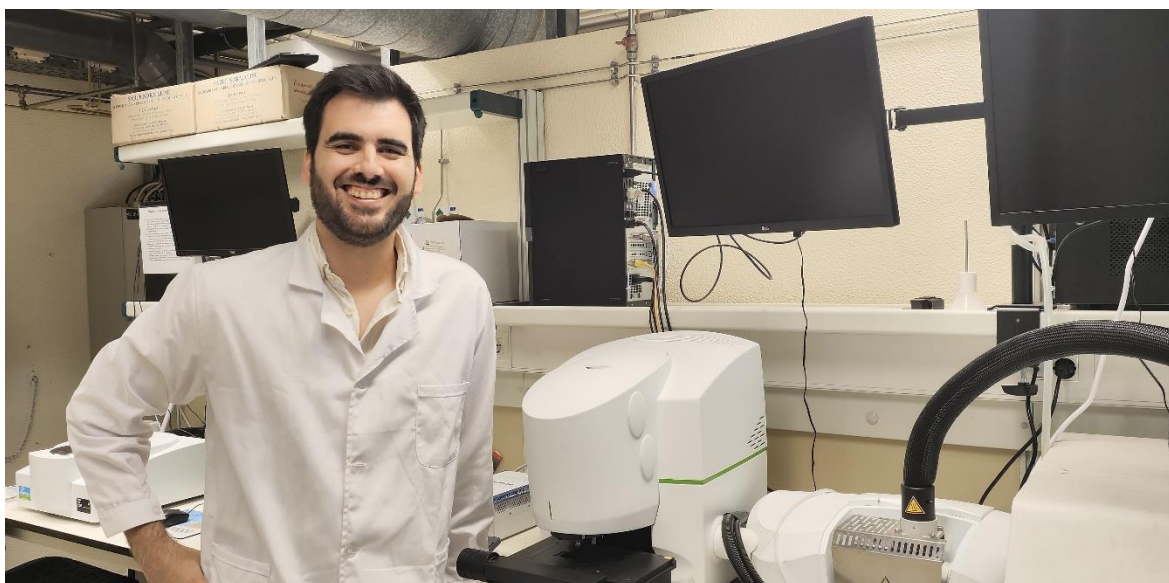


### **António Aguiar, Researcher in Chemical Engineering**

[António](#)'s academic journey has gradually taken him from Minho, near the Galician border where he grew up, further south in Portugal. He got his degree in Chemistry in Porto, then completed his PhD in Coimbra, and carried out his postdoctoral research at Instituto Superior Técnico. He officially joined CERENA in 2022, although he had already been collaborating with the group since 2021.

His background is in fundamental chemistry, but over time he has specialized in Materials Chemistry. Even if he doesn't see himself as an engineer, António enjoys working at the intersection of Chemistry, Chemical Engineering, and Materials Engineering. Since he joined CERENA and IST, he has worked in projects that combine fundamental research with practical applications.





*What is the biggest difference between a chemist and a chemical engineer?*

A: “The first difference lies in the language we use and how we structure our thinking when it comes to planning and executing task – the starting point for solving certain problems. It’s very interesting, it doesn’t mean one is more correct than the other, but the angle from which we approach things is different. For instance, I think a lot about the molecule, due to my background in organic chemistry. I look at the molecule and consider its components, while the engineer immediately thinks about properties. Once we understand this and adapt our language, we can understand each other and bring different perspectives to solve problems together.”

*What do you value in your current workplace?*

A: “CERENA is the fourth research unit I’ve worked in, and I really value how open it is. From my personal experience, researchers receive more information, we know what’s happening in the center and in the departments at IST—this transparency pays off. I’m very grateful to my colleagues at CERENA and Técnico, and to the lab I’m part of, led by Professor [Ana Clara Marques](#). Another thing I really enjoy is working at the intersection of fields, where I can do fundamental research, produce scientific literature, and also engage in very practical applications with industrial partners, for example. This constantly reminds us of the practical and tangible impact of our research. I’ve evolved and grown a lot in that area.”

*What is the biggest challenge for science and engineering today?*

“I feel that scientists need to be more aware of the importance of communicating beyond the academic sphere. For example, since we’re funded by public money—European and national—we have a certain duty to give back to the population the results of our work in a way that everyone can understand what we do and how future generations can benefit from it. To achieve this, we need to greatly improve communication. This also generates a return in terms of investment—authorities may be more open, or not, to increasing funding. We scientists also need to show that we can do this, to share our work on social media and

demonstrate to fellow scientists, engineers, and companies that social media is a powerful vehicle for creating win-win situations.”

## Dates to diary



- July 14th 2025 | Lecture on **“Organic Petrography and Palynofacies in the Study of Potential Hydrocarbon Source Rocks”**, presented by Dr. Consuelo Navarro, Associate Professor at the State University of Feira de Santana (UEFS), Bahia, Brazil. More info [here](#).
- July 16<sup>th</sup>-18<sup>th</sup> 2025 | Short-course Life Cycle Assessment (LCA) in the Context of Circular Economy and Sustainable Development. More info [here](#).

## Publications

Jiang, Z., Lei, Y., Zhang, J., Pinto, M. L., Liu, Q., & Qian, G. (2025). [Enhanced adsorption and regeneration performances for methyl mercaptan capture by a metal–organic framework incorporated in a mesoporous silica](#). *Separation and Purification Technology*, 357, 130041.

Gajendra, N., Yilmaz, D., Vila, M. C., de Lurdes Dinis, M., Levei, E. A., Török, A. I., ... & Ferrando-Climent, L. (2025). [Towards a European sustainable beneficiation of rare earth elements bearing minerals: a review](#). *Science of the Total Environment*, 980, 179386.

Nazari, S., Silva, E. R., Trdan, U., & Culliton, D. (2025). [Computational fluid dynamics analysis of superhydrophobic and superhydrophilic micro-textures for biofouling mitigation](#). *Results in Engineering*, 26, 104627.

Bollati, I. M., Masseroli, A., Al Kindi, M., Cezar, L., Chrobak-Žuffová, A., Dongre, A., ... & Zucali, M. (2025). [Correction to: The IGCP 714 Project “3GEO–Geoclimbing & Geotrekking in Geoparks” – Selection of Geodiversity Sites Equipped for Climbing for Combining Outdoor and Multimedia Activities](#) (Geoheritage,(2024), 16, 3,(79), 10.1007/s12371-024-00976-4). *Geoheritage*, 17(2), 50.

Al-Shomali, Z., Pereira, A., Marques, A. C., & de Lurdes Dinis, M. (2025). [State-of-the-Art Review on Removal of Naturally Occurring Radioactive Materials in Water](#). *International Journal of Environmental Research and Public Health*, 22(5), 727.

Marques, R. T., Almeida, J. C., Realista, S., Paz, V., Miras, H. N., Cabral, A., Branco L. C., Galhano dos Santos R. & Martinho, P. N. (2025). [Photocatalytic CO<sub>2</sub> Reduction Using Ni \(II\) and Co \(II\) Cryptates: Influence of Ionic Liquids and Light Sources](#). *ChemCatChem*, 17(9), e202402036.

Alves de Campos, A., Torres Ferreira, B., Gonçalves, A., Leite, M., Ribeiro, I., L. Magee, C., & Henriques, E. (2024). [Empirical estimation of metal powder bed fusion technological improvement rate](#). *Progress in Additive Manufacturing*, 1-21.

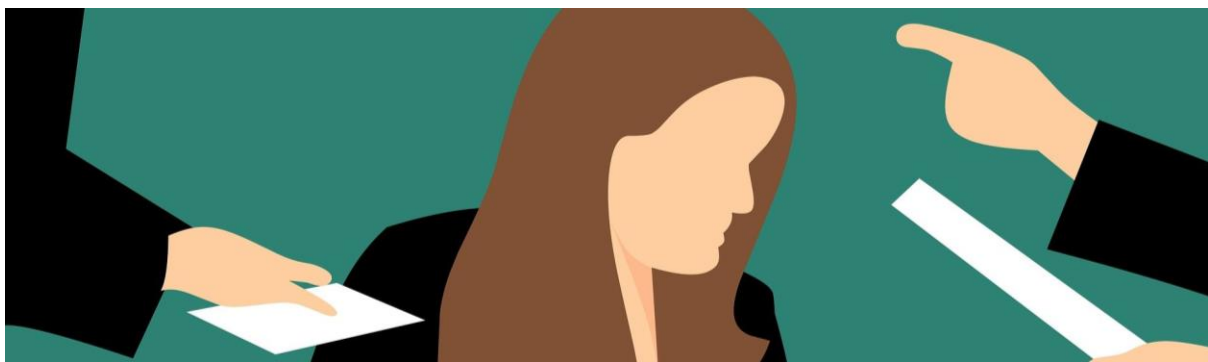
Senra, J., Dionísio, A., & Paneiro, G. (2025). [Cladding thickness influence on flexural strength under concentrated load of limestones](#). *Materials and Structures*, 58(4), 109.

Santos-Lopes, M., Araújo, R., David, R., & Correia, P. L. (2025). [Automated analysis of bird head motion in unconstrained settings: a foundational study on semicircular canal evolution in archosaurs](#). *Journal of the Royal Society Interface*, 22(226), 20240919.

Lourenço M.C., Nascimento T., Filho P.J.S., Marques A.C., Ramos-Andrés M. (2025) [Acidic Oxidative Depolymerization Towards Functionalized Low-Molecular-Weight Lignin and High-Value-Added Aliphatic Monomers: Operating Conditions, Scale-Up, and Crosslinking](#). *International Journal of Molecular Sciences*; 26(10):4872. <https://doi.org/10.3390/ijms26104872>

## Health and Wellbeing

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### Recognizing Moral Harassment at Work

Moral harassment, or *assédio moral* in Portuguese, is a form of repeated and intentional mistreatment in the workplace that can harm a person's dignity, mental health, and professional confidence. It often shows up as public humiliation, isolation, unrealistic demands, or withholding important information. In Portugal, CITE ([Comissão para a Igualdade no Trabalho e no Emprego](#)) highlights that these behaviors must be ongoing to be considered harassment—not just one-off incidents.

If you feel you're facing this kind of situation, don't ignore it. Keep a record of what happens—emails, messages, dates—and talk to someone you trust, like a supervisor or HR. If needed, you can also reach out to ACT ([Autoridade para as Condições do Trabalho](#)) or a legal advisor.

Everyone deserves a safe and respectful workplace. Speaking up is a powerful step toward protecting your well-being and helping build a healthier work culture.

References: Suggala, S., Thomas, S., Kureshi, S. (2021). [Impact of Workplace Bullying on Employees' Mental Health and Self-Worth](#). In: Dhiman, S.K. (eds) *The Palgrave Handbook of Workplace Well-Being*. Palgrave Macmillan, Cham.

## Pre-Award Section

### Great news for CERENA!

We're thrilled to share that CERENA has secured another ERA Fellowship under the MSCA Postdoctoral Fellowship 2024 call! After initially landing on the reserve list, the proposal has now been funded — a huge achievement.

👉 **André Ohara**, currently at [Imperial College London](#), will be joining CERENA and iBB under the supervision of [Ricardo Araújo](#) and **Arsénio Fialho** to carry out his exciting project, **ENDOMICS** — exploring the evolution of endothermy using an innovative endolymphomics approach.

André's work is set to kick off in **June 2026**, and we can't wait to see the impact of this project.

👏 Congratulations to everyone involved!

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### Ready to level up your Horizon Europe proposal writing skills?

We're excited to announce the 5th edition of the Horizon Europe Collaborative Projects Training, happening July 14–18, 2025 — and this time, with a twist!

👉 This edition is part of the DIG4BIO project, and brings you a brand-new module exploring how AI can boost your grant writing — think smarter, faster, more efficient proposals!

🌟 What you'll get:

- Practical tips to craft winning collaborative proposals
- Insights on European policies
- A chance to connect with other motivated researchers
- Brand new strategies using AI-powered tools

Language: English

Format: fully online

Cost: completely free (but spots are limited!)

Target group: Teachers and researchers from IST/IST-ID, IST/INESC-ID, IST/IT, IST/IDMEC, IST/INESC-MN, IST/LIP, TU Berlin, and DTU, who know the Horizon Europe basics and plan to apply in 2025 or 2026 — especially RIA or IA topics.

👉 Only 30 places available! Pre-register by July 7th here:

<https://forms.gle/ntTGfi8KWwjRunVp6>

Selected participants will hear from us by July 9th.

📅 Check out the full programme and see what's in store for each of the five modules!

Don't miss this opportunity to future-proof your grant writing skills — register now!

[Training Program DIG4BIO.pdf](#)

### **Call for Experts – COST & Horizon Europe**

Contributing as an external expert is an excellent way for researchers to gain deeper insight into the evaluation process, strengthen their own proposal-writing skills, and expand their professional networks across Europe.

Two current opportunities are open:

#### ◆ **Become a COST External Expert**

Support the evaluation and monitoring of COST Actions by registering or updating your **e-COST** profile. Be sure to include your core and additional expertise, CV, and ORCID ID, and indicate your availability as an expert.

👉 [Call for COST External Experts](#)

#### ◆ **European Commission – Experts for Horizon Europe**

The European Commission is seeking experts to evaluate and monitor proposals and projects under **Horizon Europe**. An **Info Day** took place on **June 19**, you can

👉 [Work as an Expert – European Commission](#)

Participating as an evaluator provides concrete benefits: you gain behind-the-scenes knowledge of how proposals are assessed, become a more competitive applicant, and connect with fellow researchers and policymakers across Europe.

## Wishing you a restful holiday season

As we approach the holiday period, we want to take a moment to thank our big and mixed community for your dedication and collaboration throughout the academic year.

We hope this holiday season brings us all some well-deserved rest and serenity!

Happy holidays from all of us at CERENA, and see you in September!



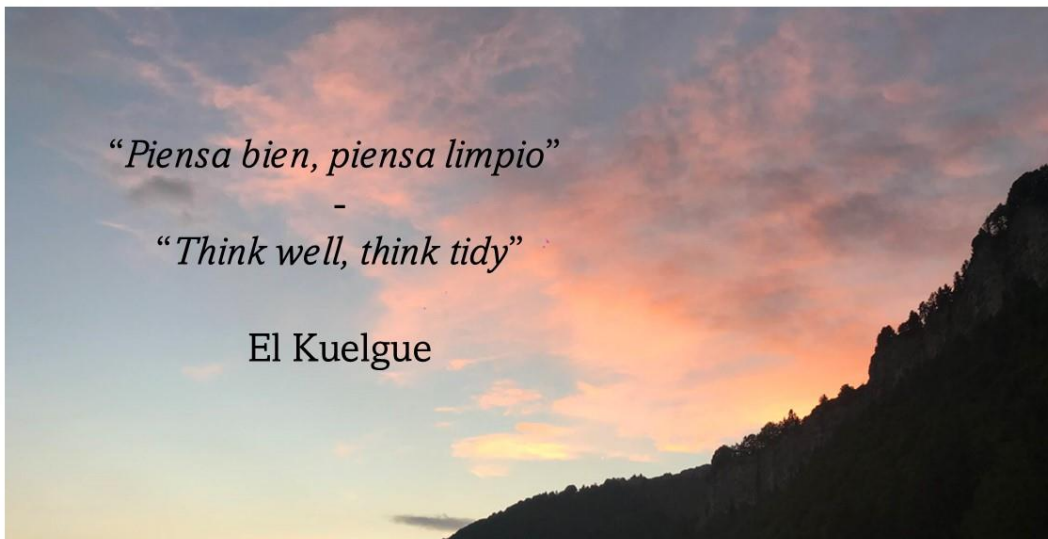
## Quote of the month

*“Piensa bien, piensa limpio”*

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*“Think well, think tidy”*

El Kuelgue





## Contact us

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 CERENA [Restricted Area](#): here you can find forms, regulations, institutional graphical material and tips.

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