

Editorial

Dear Readers,

Happy New year 2025! We are very excited with all the nice opportunities to collaborate and get together during this year. We are glad to let you know that we are creating two new Working Groups (WG) in EPNOE: The WG Chemo-Enzymatic Conversions of Polysaccharides and the WG Food and Nutrition.

These new WGs will complement the already existing four WGs in *Analytics of Polysaccharides*, Computational Resources, Safety and Sustainable by Design and the WG EPNOE Junior Scientists. WGs have full engagement of EPNOE Industry Members, being an excellent opportunity to meet new collaborators, organize targeted events and exchange creative ideas. Join EPNOE today to enjoy this interesting benefit!

2025 is the year of the *9th edition of our EPNOE conference* to be organized in Sundsvall, Sweden by Prof. Magnus Norgren and his team from Mid Sweden University. This is a must-join event with high level contributions of experts in different fields of polysaccharide science and technology.

The conference program will be based in our *EPNOE Roadmap 2040*, published last year in *Carbohydrate Polymers*. On Sunday, 24th of August, we will be organizing a pre-conference course aiming to connect academia and industry. The topic of the course, given by Professor Bjorn Lindman and Professor Lars Wagberg, is "*Polysaccharides in Solution and Solid Materials - Physicochemical Interactions and Analytical Methods*". Professor Lindman and Professor Wagberg are outstanding authorities in the field of polysaccharides sciences. Do not miss this opportunity to join us in Sundsvall. The Call for Astracts is now open and we have a limited number of seats available this time. Hurry up!

In September we are going to Salvador, Bahia, Brazil to organize our *3rd Symposium on Polysaccharide-based Materials* at the XXIII Meeting of the Brazilian Materials Research Society (B-MRS). This symposium is a continuation of the successful previous symposia in 2023 and 2024, initiated by our *EPNOE Ambassadress in Brazil, Professor Elisabete Frollini*. The Call for Abstracts is open and Salvador, known for its port and tropical coastline, is a thriving city to visit!

EPNOE is booming with opportunities for researchers, technologists, students and industry representatives. We are pleased to welcome your initiative to engage in leadership and to support us in connecting the international polysaccharide community.

Pedro Fardim President of EPNOE



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News & Announcements

Research and Development: Belgian Economic Mission to Brazil



In November 2024, Professor Fardim moderated the roundtable Bioeconomy needs R&D&I: How Can We Contribute To It during the visit of Belgian Economic Mission and HRH Princess Astrid of Belgium in São Paulo, Brazil.

The speakers, Angela Luzia Drezza of Granbio, Karolien Van Broekhoven of VITO, Julio Espirito, International Adviser on bioeconomy, and Nele Ameloot of UGent, engaged in a lively discussion. Please find some pictures of the event on our LinkedInpage and don't forget to follow us!

Education: EPNOE Working Groups



EPNOE is proud to launch two new Working Groups: WG Chemo-Enzymatic Conversions of Polysaccharides and the WG Food and Nutrition. Working Groups are members-exclusive and foster the exchange of knowledge, know-how and expertise between members of research institutions, the public sector and the industry. The



technological landscape is ever changing and the development of Al will have a great impact on how we conduct science. Furthermore, understanding of characterization of the different polysaccharides and biopolymers is vital.

If you are interested in joining EPNOE's Working Groups, please contact us in becoming a member.

Innovation: Visit to the CNPEM in Campinas, Brazil



During the visit to Brazil, **Professor Fardim** and **Katariina Torvinen**, **EPNOE's Vice-President for Innovation**, Research Manager at the VTT Technical Research Centre of Finland and a member of the Executive Team of FinnCERES - Competence Centre for the Materials Bioeconomy were invited to visit the **Brazilian Center for Research in Energy and Materials (CNPEM)**, a private, non-profit organization overseen by the Ministry of Science, Technology, and Innovation (MCTI) in Campinas.

The CNPEM is known for its 'highly specialized multi-thematic teams, globally competitive lab infrastructure that is open to the scientific community, strategic lines of research, innovative projects in partnerships with the productive sector, and training for researchers and students'.

For more information about EPNOE's visit to the CNPEM, please see here.

Become a Member Today!

Are you considering joining EPNOE as a member? Please find the **registration form** here: https://www.epnoe.eu/epnoe-membership-request-form-individual/.

There are many benefits becoming a member of the EPNOE Association such as **discounts for our events and workshops**, **members-only events focussed on mentorship**, **exchange of knowledge**, **expertise**, **skills and know-how** (*Web-Togethers*), opportunities to share the progress of your research (*Webinar Series*, innovation fairs, conferences, poster exhibitions) and to connect with experts in the field of polysaccharide research!





Become a member today!

About Us

EPNOE is the European
Polysaccharide Network of
Excellence. We stand for
research, innovation, education
and development. Via our
member network, we create
unique opportunities to connect
with academics, representatives
from the industry and public
sector!

Membership Benefits

Networking opportunities

Collaboration academia,
industry and public sector

Knowledge sharing

Know-how

Find our different memberships here:

https://www.epnoe.eu/membership/

APA-EPNOE-GFL International Conference

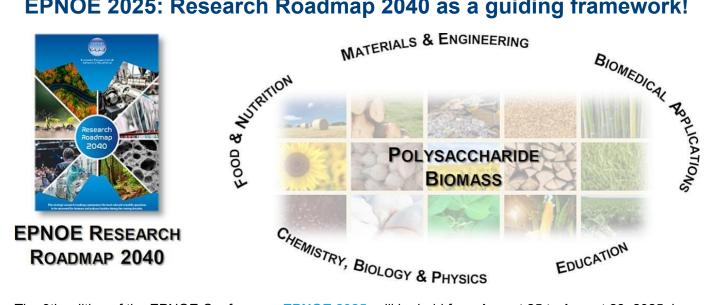
Polymers for Advanced Technology



Professor Fardim was invited to Chair the Organisation of the APA-EPNOE-GFL International Conference on *Polymers for Advanced* Technology in Jaipur, India (16-18 October 2024). Plenary talks highlighted the great potential of polysaccharides in human health.

The conference was organized by the Asian Polymer Assocation and it also hosted EPNOE's 2nd Symposium on Polysaccharides! Amongst the speakers there was also a member for EPNOE invited! Professor in Medical Chemistry, Már Másson, from the University of Iceland gave a plenary talk on the great potential of biopolymers and their innovative capabilities.

EPNOE 2025: Research Roadmap 2040 as a guiding framework!



The 9th edition of the EPNOE Conference, EPNOE 2025, will be held from August 25 to August 28, 2025, in Sundsvall, Sweden. The Conference is organized according to the research themes in the EPNOE Research Roadmap 2040, which was later published in Carbohydrate Polymers.

The themes include related sub-topics covering various aspects of polysaccharides - ranging from fundamental research to applications and products in different fields. Please scroll down to find the Call for Abstracts for EPNOE 2025.

POLREC 2nd Networking Open Call: Exciting opportunity for SMEs in plastics, rubber & composites!

The POLREC 2nd Networking Open Call is designed for SMEs in the plastics, rubber, and composites industries, helping them to develop international strategies and expand into new markets beyond their national scope through participation in business fairs, exhibitions, and matchmaking events. Targeted SMEs

may operate in various sectors, including transport and mobility, construction, renewable energy, digital and electronics, health, consumer goods, and industrial or food packaging.

Eligible applicants are small or medium sized enterprises (SME) in accordance with the SME definition of the European Union based in EU members states or in the Single Market Programme participating countries.

The applicant can either choose an event from the list of events identified by POLREC consortium and detailed in the Guide For Applicant (section 3.2 - available on the Open Call page of the Cluster Submission Platform) or propose another event **if it contributes to the objectives of polymer & elastomer recycling** and takes place before 15th July 2025. The types of events eligible to apply for a Networking sub-grant are:

- Business/ trade fairs & exhibitions in Europe and outside Europe (Oversea)
- Conferences, conventions and forums in Europe and outside Europe (Oversea)
- Matchmaking events in Europe and outside Europe (Oversea)

Source: https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/myarea/projects/cascade-

funding-details/details/9825/43252476/101074434

Opening date: 15 January 2025 - Call deadline: 14 March 2025, 6PM

Events

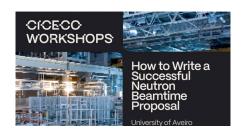
VTT Summer of Changemakers



Until the 2nd of February, 2025, you can apply for the **VTT Summer of Changemakers traineeship program**. VTT Summer of Changemakers traineeships are paid, full-time, and typically last 3–6 months. Start dates and duration are flexible. Read about our recruitment process here.

VTT offers summer traineeships in all our three business areas: Carbon neutral solutions, Sustainable products and materials, and Digital technologies: https://www.vttresearch.com/en/summer-changemakers.

CICECO Workshops



CICECO - Aveiro Institute of Materials in Portugal is organizing the CICECO Workshops from the 5th of March, 2025 until the 14th of March, 2025. The Workshops focus on proposal writing for grants and funding: **How to Write a Successful Neutron Beamtime Proposal**.

The **CICECO Workshops** will take place at the University of Aveiro,



including top facilities like ISIS Neutron and Muon Source!

Registration for the CICECO Workshops can be completed via the following link: https://docs.google.com/forms/d/e/1FAIpQLScQDsBbI8yf7mCxCGCBHvifFKmr9pAscvduTSJfPjeykKdL0 q/viewform?pli=1

Call for Papers

EPNOE2025, Sundsvall, Sweden



Preparations for the **9th International Polysaccharide Conference** (EPNOE2025), scheduled to take place in **Sundsvall**, Sweden, on **25-28 August 2025**, are in full swing. **EPNOE2025** offers unique opportunities for **networking** with excellent scientists and companies.

The **Call for Abstracts** is open and we look forward to your submissions! Please find the submission page here: https://www.epnoe2025.org/call-for-abstracts/.

3rd Symposium on Polysaccharide-based Materials



During the B-MRS Meeting 2025, EPNOE is participating with the organization of the <u>3rd Symposium on Polysaccharide-based</u> <u>Materials</u>.

Professor dr. Elisabete Frollini, professor dr. Pedro Fardim, dr. Carmen S.R. Freire, dr. Nicolas Le Moigne, professor dr. Karin Stana Kleinschek and professor dr. Sérgio Paulo Campana-Filho have set the scope of the 3rd Symposium on Polysaccharide-based Materials including films, composites, membranes, gels, biomedical materials, and sensors, all of which play a crucial role in advancing the circular bioeconomy.

Invited speakers a.o. are professor dr. Pedro Fardim (KU Leuven), professor dr. Pietro Matricardi (Università degli Studi di Roma) and to be confirmed professor dr. Gleb Yakubov (University of Nottingham), professor dr. Anna Roig (Institute of Materials Science of Barcelona (ICMAB-CSIC)) and professor dr. Magnus Norgren (Mid Sweden University, FSCN Research Centre).

Please find the Call for Abstracts here: https://www.sbpmat.org.br/23encontro/submission/

Special Issue polymers



Polymers, an Open Access Journal by MDPI will publish a Special Issue about 'Advances in Polymer Composites for Water Treatment Applications'.

This Special Issue focuses on recent advances in the **development**, **characterization**, **and application** of polymer composites for **water treatment technologies**.

The scope includes both **pure organic composites and organic/ inorganic hybrids** with an emphasis on novel synthetic routes, **the use of non-synthetic natural polymers**, and the innovative application of these materials to target emerging contaminants.

Submission deadline is 31st of March 2025, you can use the following link to **submit your abstract or paper**: https://www.mdpi.com/journal/polymers/special issues/2WLB5VWEJQ

Web-Togethers



Web-Togethers is an exclusive initiative led by the EPNOE Junior Group and chaired by Dr. Martin Gericke.

Open to all EPNOE Members and tailored for Junior Scientists, these free online events aim to nurture tomorrow's leaders through digital dialogues. They provide an opportunity to broader the EPNOE community and strengthen connections among fellow researchers.

Two types of events will be hosted alternately:

 Senior Scientist Presentations cover diverse topics and are meant to facilitate junior researchers' acquisition of new skills and strengthen existing ones. To suggest topics for the Senior Scientist Presentations, please submit this form.

 Junior Scientist Presentations provide a platform for young researchers to share their work with peers, and have firsthand experiences on how to showcase their own current research. To apply as a Junior Scientist Presenter, please submit your abstract by filling this template and send it via email at contact@epnoe.eu.

Education

Professor Riccardo Alessandri will be joining the SMaRT research division of the Department of Chemical Engineering - KU Leuven as an Assistant Professor starting in January 2025. His research group will focus on **computational design of soft materials with tailored properties**.

We are pleased to announce that **Francesco D'Acierno** has accepted a position as Assistant Professor at SMaRT (Soft Matter, Rheology and Technology KU Leuven, Department of Chemical Engineering), Campus Ghent. Please find more information about dr. Francesco D'Acierno tenure track here: https://cit.kuleuven.be/smart/people/00164491

Open Positions

The **Department of Food Science at Purdue University** has an open vacancy for a **Research Assistant Professor in Carbohydrate Chemistry (West Lafayette)**. This is a 9-month non-tenure track position with a focus on research. Screening of applicants will begin on February 1, 2025 and will continue until the position is filled. For additional information, contact Cory Brenner at cdbrenner@purdue.edu. A background check is required for employment in this position.

There is a <u>post-doctoral research position</u> available at the **Chemical Engineering Research Center of Toulouse**: 'Development of a bioprocess for the production and extraction of carotenoids from microbial biomass'. More info via the <u>link!</u>

EU Science, Research and Innovation are looking for researchers in various fields. Particularly, for EPNOE's community, these could be interesting job opportunities:

- FGIV Project Officer Scientific Detection of microplastics in complex matrices
- FGIV Project Officer Biomedical Science

Recent Scientific Publications of EPNOE Members

Dr. Yuanyuan Li published an article in **BIO Web of Conferences**:

Nero, M., Ali, H., Li, Y., Willhamar, T. (2024). Scanning electron diffraction reveals the nanoscale ordering of cellulose in a hierarchically structured hybrid material. BIO Web of Conferences 129(3):07027. DOI: https://doi.org/10.1051/bioconf/202412907027

Dr. Carmen Freire Barros of the University of Aveiro and the CICECO - Aveiro Insitute of Materials in Portugal has several new publications which she has co-authored. In December 2024, she published the following article in Bioprinting:

Lameirinhas, N., Carvalho, J. P F., do Céu Teixeira, M., Luis, J., Esmail, A., Pinto, R., Oliveira, H., Freitas, F., Oliveira, J.M., Vilela, C., Silvestre, A.J.D., Freire, C. S R. (2024). *Nanocomposite hydrogel-based bioinks* composed of a fucose-rich polysaccharide and nanocellulose fibers for 3D-bioprinting applications. Bioprinting 45, February 2025, e00382. DOI: https://doi.org/10.1016/j.bprint.2024.e00382

In January 2025, Dr. Freire published the following article in the Journal of Applied Microbiology:

Braz, M., Pereira, C., Freire, C. S R, Almeida, A. (2025). Evaluation of the potential of phage phSE-5 to fight Salmonella typhimurium in milk, liquid whole egg and eggshell. Journal of Applied Microbiology 10 January 2025. DOI: https://doi.org/10.1093/jambio/lxaf008

Dr. Pieter De Wever (KU Leuven), Asst. dr. Rupert Kargl (TU Graz), professor dr. Karin Stana Kleinschek and professor dr. Pedro Fardim co-authored an article that has been published in the International Journal of Biological Macromolecules:

De Wever, P., Van Ostaeyen, B., Kargl R., Stana Kleinschek, K., Fardim, P. (2025). Synthesis and characterization of dextran palmitate for extrusion 3D printing. Journal of Biological Macromolecules 494, January 2025, 139399. DOI: https://doi.org/10.1016/j.ijbiomac.2024.139399











For more information, please contact us at contact@epnoe.eu

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