

Dear network member,

Hello and welcome to the first edition of the BBNet autumn term newsletter. This month we're launching our final course - an exciting opportunity for existing members to develop their knowledge of scaling up in biorefining. As well as this you'll find reminders of how to share your opinions to help us evidence our impact, and shape and influence the sector in the future.

BBNet

Events

IB scale-up course: From concept to kilos; scaling-up in biorefining - expressions of interest now open

Course dates: 9am on 20 November, to 5pm on 21 November

Venue: The Radisson Hotel York (day one) & the Biorenewables

Development Centre, Dunnington, York (day two)

Expressions of interest are now being accepted for a course aimed at researchers and early stage innovators, focusing on the stages involved in taking a concept from laboratory scale research to commercial, marketable product or process.

Designed to transform participants from having a primarily lab-based understanding of biotechnology process to possessing a more comprehensive and practical understanding of the challenges and opportunities associated with industrial scale-up and commercialisation in biorefining, the course will include a tour of one of the Biorenewables Development Centre, one of the UK's open access scale up centres on the second day.

Participants will cover;

- Industrial scale-up: Learn the full journey from lab to industrial production, including scale-dependent challenges and realistic yields.
- Unit operations: Gain expertise in core processes such as pretreatment, fermentation, and separation, along with their economic implications.
- Manufacturing and supply chain: Understand pilot plants, manufacturing strategies, product stability, and supply chain complexities.
- **Economic and business acumen:** Gain an understanding of the importance of techno-economic analysis, intellectual property strategy, and funding.

Expressions of interest are being taken until 21 September 2025.

Further information and how to apply can be found here.

News

We need your input - BBNet evaluation

As detailed in last month's newsletter, we are currently undertaking a **comprehensive network-wide evaluation.** This work will not only showcase the

brilliant science taking place within the network but will serve as evidence of the need for such vital government-funded initiatives.

If you have felt the benefit from our network, then please take the time to tell us about it. You can find out more <u>on our website here</u>. If you have received funding or attended an event with us you should receive an email to your inbox with a survey to complete by **16 September 2025.**

Shape the future of biorefining in the UK - share your insights

As per our email sent yesterday, BBSRC funding for the network draws to a close in January 2026; with this in mind we want to leave a legacy that will support decision making and investment in biorefining, to drive growth and enable advancements in the bio-based sector in the near future.

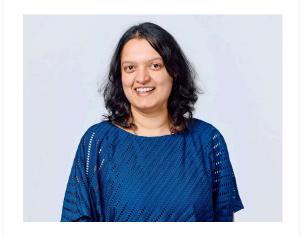
BBNet has commissioned Alder Bioinsights, working with Frey and Prospective Economics, to produce a biorefining landscape report reflecting on advancements in the last decade and suggesting future priorities to ensure economic success.

With your help, this report aims to strengthen the evidence of the role biorefining can play and make recommendations to support future strategy.

<u>This short survey</u> (approx. 15-20 mins) will gather insights from across industry, research, policy, and the investment communities. Please complete by no later than **17 September 2025** to ensure your voice is heard.

Member Spotlight: Dr. Parimala Shivaprasad

Dr. Parimala Shivaprasad, Assistant
Professor at the University of
Nottingham, develops decentralised
biorefinery technologies to transform
horticultural waste—particularly flower
biomass—into terpene-based
chemicals for consumer goods.
Supported by BBNet's Proof of Concept
award, she collaborates with Unilever
and Bridge Farm to advance enzymatic
processing. Parimala welcomes
collaboration in sustainable



bioprocessing, enzyme technology, and the circular bioeconomy. Read more.

Sector news and opportunities

Opportunities

Efficient recovery of CO2 using microbubbles – seeking survey responses

A team from the University of Sheffield is seeking feedback and information from the Anaerobic Digestion sector on three potential applications for microbubbles in recovery of CO2. Read more.

Africa-UK physics partnership collaborative projects 2025

Share of £3M funding for collaborative physics projects addressing the challenges of climate change, energy, and capacity building, across African economies. Closing date: 23 October 2025, Read more.

Unlocking the full potential of nature-based engineering

Apply for up to £480k in funding to conduct research in nature-based engineering, defined in EPSRC's Tomorrow's Engineering Research Challenges report as developing systems and technologies inspired by nature. Closing date: 23 October 2025. Read more.

Full ADOPT grant: round three

Farming, growing or forestry businesses based in England can apply for a share of up to £3 million. This funding supports on-farm trial and demonstration projects to improve adoption of new ideas or solutions in the agricultural sector. Closing date: 15 October 2025. Read more.

BBSRC Engineering Biology (EngBio) ICURe Discover

Apply for up to £3,700 in funding to explore the potential market of your engineering biology-based idea, increase market awareness and gain deeper understanding of your technology's potential applications. Closing date: 23 September 2025. Read more.

BBSRC-STFC Biotechnology Business Incubation Centre (Bio BIC) 2025

The BBSRC-STFC Bio BIC is an incubator programme for early-stage biotechnology start-ups, providing access to certain UK Research and Innovation (UKRI) campuses. Maximum award of £50k, closing date: 7 September 2025. Read more.

Sovereign artificial intelligence (AI) series one

UK-registered businesses can apply for a share of up to £1.6 million for the development of Proof of Concept demonstrators of AI technologies with state-of-the-art performance. Closing date: 10 September 2025. Read more.

Consolidator Grant 2026 (Pre-announcement)

European Research Council (ERC) Consolidator Grants support researchers who want to establish (or have recently created a research team) and have demonstrated research independence and a track record of early achievements appropriate to their research field and career stage. Up to £2M over up to 5 years. Closing date: 13 Jan 2026. Read more.

Royal Society Short Industry Fellowships

This funding enables scientists and their postdoctoral researcher to have shorter, more dynamic engagements between academia and industry, working on a mutually beneficial and collaborative project. Projects should be in the field of natural sciences, including biological research, chemistry, engineering, mathematics and physics, but excluding clinical medicine. Size of award varies - closing date 23 October 2025. Read more.

Sector news

Why Biomethanol Matters More Than Ever

BioFuelsDigest explores why they think Biomethanol is quietly emerging as one of the most compelling levers in the decarbonization of both renewable chemicals and marine propulsion. Read more.

Can you build a seaweed factory for less than 100 million dollars?

Phyconomy explores a series of recent case studies around seaweed valorisation, their business models, successes and failures. Read more.

Challenge and opportunity of developing a lignin supply chain

BioFibreLoop's partners came together to share progress, including a major technical achievement: the German Institutes for Textile and Fibre Research (DITF) successfully spun fibres from lignin, blended with cellulose. Read more.

Rise of Bio-based Chemicals: Hype or Game-Changer?

Dr. Sangeeta Srivastava, Executive Director, Godavari Biorefineries comments on the latest BioE3 policy, which builds the framework for high-performance biomanufacturing to propel development and production. Read more.

Potter Clarkson's Comprehensive SynBio Patent Report

Potter Clarkson recently released an analysis of the synthetic biology (SynBio) patent landscape, offering unprecedented insights into one of the fastest-growing innovation sectors. The report examines 20 years of European Patent Office data (2004–2023) using cutting-edge Al-driven topic modelling combined with expert human analysis. Read more.

Reimagining the future of water through science and circular innovation

In this interview, Annelie du Plessis (IBioIC) speaks with Tamsyn Kennedy (Scottish Water) about how biology and chemistry are driving change in the way we treat, reuse, and value water. Read more.

Unlocking the Future of Biomethane

Following the launch of the Green Gas Task Force, Lucy Hopwood, Principal Consultant and Director at Alder Biolnsights, explores the potential for biomethane growth in the UK, evaluates current and future policy support, and considers key feedstock challenges and opportunities. Read more.

What consumers really think of biomaterials

Consumer appetite for sustainable products is rising. Understanding shopper preferences and what shapes them is key to unlocking new markets. World Bio Markets reviews research insights into consumer behaviour around biomaterials, including when and why people buy bio. Read more.

The latest in biomaterials research

The science of biomaterials is advancing rapidly. New renewable materials are being developed all the time that could replace carbon-intensive materials in industry. This review explores seven exciting studies that have come out of the biomaterials space over the past year. Read more.

Biomaterials on demand with 3D-printing

Manufacturers are increasingly seeking high-performance renewable materials to replace carbon-intensive inputs in energy, pharmaceuticals, biotech, and packaging. Read more.

Recent publications

Pérez-Aguilar, H., Serrano-Martínez, V.M., Carbonell-Blasco, M.P., García-García, A. and Orgilés-Calpena, E. (2025), **Sustainable extraction of lignin from rice straw: utilizing fractionated lignin for antimicrobial functionalization of polymeric materials.**Biofuels, Bioprod. Bioref.. https://doi.org/10.1002/bbb.70030

Morales, S.H.S., Moreno, J.A.J., Contieri, L.S., Rostagno, M.A. and Forster-Carneiro, T. (2025), **Cocoa waste valorization: a review and sustainability analysis of green technologies.** Biofuels, Bioprod. Bioref.. https://doi.org/10.1002/bbb.70029

Bunga, G.E., Sempiira, J.E., Rorke, D.C.S., van Rensburg, E. and Görgens, J.F. (2025), **Minimizing the enzyme dosage for ethanol production from cellulose-rich bagasse residues after furfural production.** Biofuels, Bioprod. Bioref.. https://doi.org/10.1002/bbb.70038

Adepitan, O.L., Alabi, O.O., Gbadeyan, O.J. and Deenadayalu, N. (2025), **Bioelectrochemical systems for waste treatment and valorization: a review of applications and benefits.** Biofuels, Bioprod. Bioref.. https://doi.org/10.1002/bbb.70035

Córdoba-Pachón, J. R., Paucar-Caceres, A., Burrowes-Cromwell, T., Bywater, A., Shah, R., Walker, M., & Behzadian, K. (2025). A critical systems thinking methodology to explore circularity of food waste in a university campus. Journal of the Operational Research Society, 1–20. https://doi.org/10.1080/01605682.2025.2543445

Conferences and meetings

2nd Bio-Gentle Training Event relevant to

Biomolecules

This event takes place in Lancaster and focuses on Biomolecules (production, properties, separation technologies, applications); 30th of September to 3rd of October 2025. Read more.

EBNet Webinar: Interfacial Bioelectrochemistry

Join the EBNet online to hear Dr Cristina Cordas discuss enzymatic NO and CO₂ reduction and H₂ evolution, and their role in sustainable bioelectrocatalysis. Monday 8 September 2025, 12:00–13:00 U - Free to attend. Read more.

BBIA Three-Part Training Series on Life Cycle Assessment (LCA)

BBIA is offering a comprehensive three-part online training series with sessions focusing on: Introduction to Life Cycle Assessment for Bio-based Materials; From Principles to Practice: LCA Standards and Methods for Bio-based Materials; and, Applying LCA to Compare Fossil and Bio-Based Materials. Taking place in October and November. Read more.

BBSRC community webinar 2025

Presentations will cover current activities plus ambitions and priorities, including BBSRC's refreshed Forward Look for UK Bioscience. There will be opportunities to share your insights and participate in a Q&A session, 9 October 2025, Register here.

Renewable Materials Conference 2025

There are less than three weeks left to register for the world's largest event on innovative and renewable chemicals and materials, fossil-free plastics, and related policies, which will take place from 22–24 September 2025 in Siegburg/Cologne, Germany. Read more.

Biofilm Alliance Conference

The Biofilm Alliance Conference 2025 will explore the interface between cutting-edge biofilm research and regulatory science - 21 October in Birmingham. Read more.

Job opportunities

Do you have a role to advertise?

BBNet members can use our self-service system on the <u>website here</u> to upload and advertise relevant, jobs and we'll feature them in the newsletter too.

BBNet membership

Contacts

Email <u>bbnet-manager@york.ac.uk</u> for any queries relating to BBNet funding, events and membership.

Let us know if you would like to advertise details of a vacancy or other opportunity on our website by completing the Opportunities form and emailing it to bbnet-manager@york.ac.uk.

Terms and conditions

You've received this email because you previously registered as a member of the Biomass Biorefinery Network. Please see <u>BBNet Membership Terms and Conditions</u> for details. To terminate your membership, contact <u>bbnet-manager@york.ac.uk</u>. To <u>unsubscribe from emails please click here</u>.