



Biotechnology and  
Biological Sciences  
Research Council



Engineering and  
Physical Sciences  
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University of York laboratories photo courtesy of **Dr Matthew Reilly**

## EBNet Newsletter - January 2026

### New

Stay connected to keep current with the latest in Environmental Biotechnology. Help us by keeping your contact details and preferences up-to-date - see links at the end of this Newsletter to update details or unsubscribe.

#### EBNet - Our plans

EBNet's official UKRI funding ends on 31 Jan 2026, but many of our Working Groups and activities will continue – directly, and in conjunction with **EBIC**, **Better Water 4 All** and others.

We will publish and promote reports and papers; run webinars, and make content available on YouTube; keep updating the website, and add News items – though not quite as often as at present! The next Newsletter will go out in July 2026. Huge thanks to our funders BBSRC and EPSRC. Meanwhile watch the [News](#) pages for more updates!

### **EBNet Members Survey**

All EBNet Members are warmly encouraged to take part in a survey that aims to gather insights on your experiences with the Network, and your opinions on what are the key issues in Environmental Biotechnology.



You should already have received your invitation via email: if it has not arrived, please use the [Link](#) or QR code, or contact us on [ebnet@ebnet.ac.uk](mailto:ebnet@ebnet.ac.uk). The survey is easier to complete landscape format. We hope to receive your response by **28 Feb 2026**.

### **Joint DESNZ RBP Workshop**

The [Summary Report](#) on 'Feasibility of Residual Biogas Potential-type Testing for Quantification of Digestate Methane Emissions' is now available on the [Resources](#) page. This contributes to the ongoing programme of work by the Department of Energy Security and Net Zero ([DESNZ](#)) on [Methane Emissions from AD](#), which is gathering evidence on good practice and mitigation measures to reduce the carbon intensity of biomethane production. The EBNet-sponsored workshop was coordinated by [Dr Yadira Bajón Fernández](#) and [Dr Charalampos Michalakakis](#) of DESNZ, and included around 50 invited participants from academia, industry and regulators.

### **IEA Task 37 - some possible EBNet inputs?**

The current IEA Task 37 [work plan](#) has plenty to interest EBNet members, and several WGs are hoping to be involved. [Bioinformatics](#) and [AF](#) WG Leads are preparing materials for possible inclusion in a work package on how microbiome monitoring can improve digester performance. The [AD](#) and AF WGs hope to contribute to a work package on digestate utilisation. And some of the work on [CO2 biomethanation as a tool for industrial decarbonisation](#) and from last year's [New Biomethane](#) workshop could potentially be relevant to the E-Fuels & Biomethane work package. If any of these materials are included in future Task 37 reports, this will be a valuable piece of international dissemination - and a tribute to the quality of the work.

### **PFAS WG success and plans**

Good news for members of the [PFAS WG](#), whose proposal has been awarded funding under the Environmental Biotechnology Innovation Centre ([EBIC](#)) Flexible Fund scheme. This new project, which builds on earlier work including an [EBNet POC grant](#), will take the research further by combining AI-driven sequence reconstruction, molecular dynamics and enzyme immobilisation to engineer PFAS-degrading biocatalysts. Our ambition is to support wider innovation in bio-based and hybrid PFAS treatment workflows that complement broader regulatory and treatment efforts".

The PFAS WG will now continue its activities through the [Better Water 4 All Network+](#) and [EBIC](#).

Watch out for more developments on our sister and successor organisations! And see the Spotlight section for more on this fast-moving topic...

### Green Stories: Microbes to the Rescue

Our final recommendations from the audiobook and ebook are highlighted [here](#). The three stories are very different in tone, but all have something interesting to say about the power of Environmental Biotechnology. Let us know what you think!

### 'I am an Environmental Biotechnologist...'

We invited our **Early Career Researchers** to write a sentence on the theme "I am an Environmental Biotechnologist...". Some examples of their responses are shown here and in previous Newsletters. (NB EBNet has been running for almost 7 years - so some of our ECRs are now senior academics and industrialists!).

*I am an Environmental Biotechnologist because I want to understand how we can use microbes to degrade microplastics in the ocean.*

Jennifer Scott,  
Heriot-Watt University

*I apply technological advances and innovative solutions to develop sustainable bio-based products, thereby contributing to a circular economy.*

Omulu Fagbiele,  
Heriot-Watt University

*As an Environmental Biotechnologist, my goal is to prevent ecological harm from getting worse while preserving a healthy level of biodiversity.*

Merin Thyagu Pereira,  
University of Westminster

### Still to come...

Planned outputs for the next few months include feedback from the fascinating *Microenvironments* workshop led by [Dr Joe Weaver](#), then of Newcastle, now at Durham University. Journal papers on [implications of emerging biotech for bioreactor materials](#), and from the joint BBNet/EBNet workshop on [Integration of Thermal, Thermochemical, and Biological Conversion Technologies](#), are in preparation or review. We are also looking forward to reports and papers from small studies on [Aerobic Granulation Processes](#) and [Anaerobic Fermentations](#). And watch out for a much-anticipated [White Paper](#) on Environmental Biotechnology! Dr Sharon Velazquez-Orta, our Bioelectrochemical Systems WG Lead, is giving the [PhycoFridays](#) talk on 30 Jan. More webinars from BES and other working groups are in the pipeline - look out for further announcements by email and on the [News](#) and [WG](#) pages.

## Spotlight On...

*Do you have news to share with other members?  
Email us details if you want a shout-out in next  
month's newsletter. We can also post News items  
on the website.*



### Not out of a job yet...

Last month the Environment Agency (EA) [reported](#) that serious pollution incidents from waste management increased by 57% over the previous year. The waste industry accounted for almost a quarter of all serious incidents, more than any other sector. News also continues to emerge on the scale of illegal dumping across the country. The latest [BBC investigation](#) notes that 700 such sites were closed down last year, but over 500 remain active, with 10s of 1000s of tonnes deposited in some cases. Meanwhile the EA's one-off [Pollution Incident Report](#) on the water sector for 2016-2024 makes grim reading to add to the statistics in the Agency's annual report. EBNet acknowledges that there are positive things to say about these sectors, and many good initiatives. But without changes in enforcement and regulation, and a fundamental shift to viewing wastes as a valuable resource, it looks as if the many EBNet members working on technologies for bioremediation of pollution will not be out of a job in the near future....

### New PFAS limits and requirements

This month, the EU introduced [mandatory monitoring requirements](#) for PFAS in drinking water, aimed at promoting compliance with new limit values of 0.5 µg/L for total PFAS and 0.1 µg/L for the sum of 20 specific PFAS in the revised [EU Drinking Water Directive](#) (2024/2184). If limits are exceeded, action must be taken to reduce concentrations while also informing the public. Measures may include restricting the use of water supplies, closing contaminated sources, and adding treatment steps to remove PFAS. Meanwhile the Environment Agency's Chief Scientist's group has published a report on [developing thresholds for managing PFAS in the water environment](#). The report suggests threshold values and a possible Hazard Index approach, with the associated discussion providing a snapshot of the complexity of this area.

### Energy Catalyst Round 11

Innovate UK has announced Round 11 of the Energy Catalyst programme, open until 25 March 2026. Up to £7 million is available for projects focused on energy access in ODA-eligible countries in sub-Saharan Africa, South Asia, the Indo-Pacific region and Latin America. Project costs can be up to £300k for early stage, £1.5m for mid stage and £5m for late stage applications. Of all the NIBBs, EBNet has perhaps the strongest involvement in energy, both through biogas and biomethane production from anaerobic digestion, and alternative biofuels from anaerobic fermentation. We are pleased to see this successful programme continuing.

### UKRI Doctoral Training for Environmental Biotech

UKRI has announced two flagship doctoral training initiatives in bioscience, biotechnology, artificial intelligence (AI), data science and engineering biology. Successful applications include an Industrial Doctoral Landscape Award (IDLA) for [BIO-BOOST: Harnessing the Biological and Biotechnological Potential of Wastewater Treatment](#), led by the University of York and Newcastle University in partnership with UK Water Industry Research (UKWIR) and others; and a Doctoral Focal Award (DFA) on [Engineering Biology for Environmental Applications](#) ([EngBio4Env](#)) led by Cranfield University. Both initiatives are strongly linked to EBNet's goals, and are a great step in addressing some of the critical shortages in the field of Environmental Biotechnology.

### [UK Fermentation and D/S Processing Capacity - Survey open](#)

The Bio-based and Biodegradable Industries Association ([BBIA](#)), Biorenewables Development Centre ([BDC](#)) and [Pioneer Group](#) are inviting UK organisations to contribute to a survey mapping existing fermentation and downstream processing infrastructure for non-health applications. The results will help to identify strengths, gaps and opportunities in national infrastructure, and inform future initiatives to support research, commercialisation and manufacturing growth. The survey closes at the end of January 2026. For more information and to participate see [here](#).

### [Hub and Network initiatives](#)

The [ELEMENTAL](#) Hub has launched a Blog site with posts from across the partnership. The first is on [Researching the biology of bacterial biofilms to boost bioremediation](#), by [Dr Heather Felgate](#) of the Quadram Institute. [Better Water 4 All](#) Network+ is hosting its second podcast, on [Antimicrobial resistance: the silent pandemic in water](#), with Guest Speaker [Prof Will Gaze](#) of the University of Exeter on the environmental dimension of AMR evolution and transmission. The third episode in [EBIC](#)'s Engbio Tech podcast series, in which [Dr Boyd McKew](#) and [Hannah Adams](#) from the University of Essex discuss topics from current oil-spill clean-up strategies to engineered microbes that could potentially break down hydrocarbons more efficiently, is now available [here](#).

More people are turning to EBNet for speedy access to events, reports, jobs, PhD/Postdoc positions etc.

Join us on [LinkedIn](#) or [X](#) (formerly Twitter)



### [Forthcoming Events](#)

*Find selected upcoming events below.*

*Find more at: [KTN events](#)*

#### **Online events**

\*NEW\* [PhycoFriday: From Wastewater to Wealth](#) - 30 Jan 2026, 10:30 UK

\*NEW\* [Water Innovation Cross-Sector Challenge](#) - 3 Feb, 5 Mar, 2 Apr 2026, 13:00 UK

\*NEW\* [From Good to Great: How Methane Emission Reduction Makes Biogas a Climate](#)

[Champion](#) - 19 Feb 2026, 13-14:30 UK

### In person events

- \*NEW\* [ADBA Scottish Conference 2026](#) - 4 March 2026, Edinburgh
- \*NEW\* [ECR Net Zero Conference](#) - 9-10 March 2026, Birmingham
- \*NEW\* [European Sustainable Nutrient Initiative/NERM](#) - 28-29 April 2026, Brussels, Belgium. **Hybrid event**
- \*NEW\* [19th IWA Wetland Systems for Water Pollution Control](#) - 13-17 Sept 2026, Chania, Greece

[Towards a Biobased Chemical Future](#) - 26 Feb 2026, RSC London

[IBioIC26: Biosolutions for Tomorrow's World](#) - 10 Mar 2026, Glasgow. **Early bird 30 Jan**

[IWA 11th Sewer Processes & Networks](#) - 19-21 May 2026, Trondheim, Norway

[EUBCE 2026](#) - 19-22 May 2026, The Hague, Netherlands. **Abstracts 24 April 2026**

[Amazing Science: Unlocking Methane Removal](#) - 24-27 May 2026 Bologna, Italy

[IWA 14th Micropoll & EcoHazard](#) - 31 May to 4 June 2026, Toronto, Canada

[European Wastewater Management](#) - 16-17 June 2026. **Abstracts 30 Jan 2026**

[IWA 19th World Conference on AD](#) - 9-13 June 2026, Valencia, Spain

[Water in Industry 2026](#) - 27 June to 3 July 2026, Delft, Netherlands

[WasteEng 2026](#) - 7-10 July 2026, A Coruña, Spain

[IWA Non-sewered Sanitation Systems](#) - 12 July 2026, Johannesburg, South Africa

[Photorefineries 2026](#) - 2-4 Sept 2026, Novi Sad, Serbia. **Abstracts deadline 20 April 2026**

## Funding

*Selected funding opportunities for academia and industry are highlighted below.*

*Find more at: [UKRI funding](#)*



\*New\* [BBSRC ICURe Explore 2026](#) - 6 Feb 2026

\*New\* [RAE Enterprise Fellowships](#) - 16 Feb 2026

\*New\* [Royal Society Newton International Fellowships](#) - 15 March 2026

\*New\* [Energy Catalyst Round 11](#) - 15 March 2026

\*New\* [ERC Plus Grants](#) - 15 March 2026

[Quintin Hogg Trust PhD Scholarships](#) - 6 Feb 2026

[BBSRC Transformative Research Technologies \(25TRT\)](#) - 11 Feb 2026

[Faraday Discovery Fellowships - Accelerated International](#) - 25 Feb 2026

[NERC Large grant outlines](#) - 26 Feb 2026

[Leverhulme Trust Research Grants - Outline Stage](#) - 27 Feb 2026

[Leverhulme Trust Visiting Professorships](#) - 1 May 2026

[EPSRC Programme grant full proposal](#) - open

[EPSRC Network Grant](#) - open

[Daphne Jackson Fellowship](#) - open

[BBSRC Brazil pump-priming](#) - open

*Travel and related awards*

[EPSRC Overseas Travel Grant](#) - open

[NBIC Flexible Talent Mobility Account](#) - until 2027



**Jobs, Training, Awards & PhDs**

## **Jobs** (see also [FindAPostDoc](#) & [Jobs.ac.uk](#))

\*NEW\* [Research Fellow in Sensing Wastewater](#) - 3 Feb 2026, Cranfield University

\*NEW\* [Research Fellow in Environmental Sensors](#) - 3 Feb 2026, Cranfield University

\*NEW\* [Research Fellow in Global Methane Politics \(Solid Waste\)](#) - 15 Feb 2026, University of Leeds

\*NEW\* [Research Fellow in Global Methane Politics \(Livestock\)](#) - 15 Feb 2026, University of Leeds

## **PhDs** (see also [FindaPhD](#) and similar sites)

\*NEW\* [BBSRC iDLA in Harnessing the Biological and Biotechnological Potential of Wastewater Treatment \(Bio-Boost\)](#) - 11 Feb 2026, University of York and Newcastle University

\*NEW\* [Food Waste to Sewer: Evidence, Infrastructure Resilience, Circular Economy and Policy Implications](#) - 26 Feb 2026, University of Sheffield

\*NEW\* [Low-cost sustainable materials to mitigate the impact of algal blooms](#) - 27 Feb 2026, Ulster University

\*NEW\* [Musical microalgae in microfluidics](#) - 31 March 2026, Heriot-Watt University

\*NEW\* [Tackling Membrane BioFouling](#) - 10 Oct 2026, University of Edinburgh

[CDT in Resilient Chemistry - 4 themes](#) - start 2026, Universities for Nottingham

[PFAS sources, Fate & Transport focusing on River Thames](#) - start Oct 2026, University of Portsmouth

[Scale-up of low-carbon Hydrogen from photoelectrocatalysis/cavitation](#) - start Oct 2026, University of Bath

## **Training**

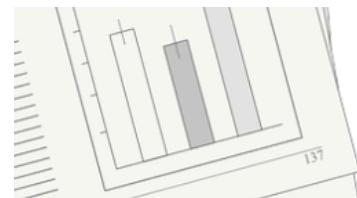
[CIWEM Training inc UK Water Industry, Water & Wastewater modules](#) - Spring 2026, Online

[CIWM Training inc Waste Crime, Behaviour change, AI & Data, Haz Wastes](#) - Spring 2026, Online

[Aquaenviro Wastewater Treatment, Activated Sludge, AD of Sewage Sludge](#) - Spring 2026, Online

## **Publications**

*Have you seen anything, or published something recently, that you would like us to highlight?*



[Breaking barriers to modelling biotechnologies with machine learning.](#) Fisher, O.J.,

Short, M., Zhang, D., Guo, M. and Gomes, R.L., 2025. Resources, Conservation and Recycling, 215, p.108071.

[A machine learning model guided by physical principles for biofilter performance prediction.](#) Uzma, Cholet, F., Quinn, D., Smith, C.J., You, S. and Sloan, W.T., 2025. *Scientific Reports*, 15(1), p.34664.

[A machine learning model guided by physical principles for biofilter performance prediction.](#) Uzma, Cholet, F., Quinn, D., Smith, C.J., You, S. and Sloan, W.T., 2025. *Scientific Reports*, 15(1), p.34664.

## Still here?

### Amoebae Alert!



*Naegleria fowleri* (often referred to in the popular press as the 'brain-eating amoeba') sounds like something that belongs in a [Coccus Pocus](#) story, or an example to keep students awake in a public health lecture. But a recent paper by Zheng et al. (2025) draws attention to the potential growing risks from free-living amoeba. These arise from several factors, including their ability to survive

conditions that kill many other microbes, their role sheltering other pathogens in a Trojan horse effect, and the prospect of increasingly wide distribution due to climate change. Their presence in natural water bodies and in systems such as water distribution networks makes control challenging, while there is also a strong likelihood of misdiagnosis and underreporting in a medical context. The authors emphasize the need for more surveillance, better detection methods, enhanced water treatment technologies and targeted interventions to tackle risks before they grow. We can only concur, and commend their calls for an integrated One Health approach.

### Where else to look?

There is a growing range of UK Networks and Hubs relevant to Environmental Biotechnology. The [Better Water for All](#) Network+ has now launched. [NBIC](#) continues to support research into biofilms. The six [Engineering Biology Mission Hubs](#) include the [Environmental Biotechnology Innovation Centre](#), which builds on and expands some of EBNet's themes. Two other Mission Hubs, [Elemental](#) and [P3EB](#), also have an environmental focus. Sign up for EBIC's Newsletter [here](#).

