

Image of weir in an Activated Sludge plant courtesy of Prof Charles Banks

EBNet Newsletter - June 2025

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 link at the end of this Newsletter to update details or unsubscribe.

SSF Workshop Outputs

Our Water Biofilms WG is keen to hear views on how slow sand filters (SSF) can keep pace with

tomorrow's drinking-water challenges. On 22 January 2025 the WG brought together researchers, utilities and regulators to discuss the role of SSF in resilient, low-energy water treatment. Their collective thinking is now available in a Position Statement, Summary of Research Priorities and full Workshop Report. For more information or to share your perspective please contact the WG Lead Dr Francis Hassard.

Biochar for bacteria

Results from an EBNet-funded Proof-of-Concept (POC) project using X-ray nanotomography to elucidate mechanisms of bacterial adsorption to biochar were presented at the Biochar IV Conference in Colombia. The presentation is here on our Youtube channel, and a summary of project outcomes is available here. A part-funded PhD studentship is also available to take the research forward. For more details on this work contact Dr Meredith Barr, our Biochar WG Lead and the POC team leader

Anaerobic Digestion webinars now available

The joint EBNet/ADBA webinar on 'Opportunities in Biogas - an IEA Task 37 perspective' aims to introduce Task 37's activities and the wide range of resources freely available from its website. It also presents results from a study on applications of AD in the food and beverage sector. A Task 37 webinar on Manure to Biogas: Global Lessons and Challenges is also now available - see here for details. This webinar is based on a recent Task 37 report, the UK section of which was compiled by EBNet's Angela Bywater.

Microbes Audiobook

This month's selections from **Green Stories: Microbes to the Rescue** audiobook and ebook are highlighted <u>here</u>, and feature some classic environmental biotechnologies: let us know your opinions!

'I am an Environmental Biotechnologist...'

I am an Environmental Biotechnologist because environmental problems require global biotechnical solutions.

Carlos Domingo-Felez, University of Glasgow I am developing new biosensors in support of strategies to control antibiotic resistance genes and protect human health.

Yiting Wang, Cranfield University My research area is water and energy. I am currently developing a bioelectrochemical system for water desalination.

Clement Nyadroh, University of Westminster

We asked EBNet Early Career Researchers to write a sentence on the theme 'I am an Environmental Biotechnologist...". See some of their responses here and in future Newsletters. (And remember, EBNet has been running for 6 years - so some of them are no longer ECRs but senior scientists now!).

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.



Sludge disposal

Shortly before we go to press, a former Chair of the Environment Agency has signed a letter calling on the Environment Minister to tackle the issue of emerging pollutants in wastewater sludges applied to land. Will this blow up into another huge public issue and what can be done? See here for more details.

EFRA Enquiries

Two inquiries by the UK Government's Environment, Food and Rural Affairs (EFRA) committee that may be relevant to EBNet members have deadlines soon: calls for evidence on *Preventing waste and enabling a circular economy* and on the proposed *Global Plastics Treaty* will close on 18 June. EFRA also has a long term enquiry on Reforming the water sector, for which interim results are now public while the full report is expected soon.

Sustainable Chemicals Innovation Network

The first event of this Innovate UK Network on <u>Re-imagining Carbon and Defossilising the UK Chemicals industry</u> takes place on 12 June in Teeside. The Network is also seeking speakers for a <u>Virtual Cafe series</u>. While the focus is on green chemical production, environmental biotech has a role to play as a feedstock provider and integral component of any sustainable manufacturing processes. Don't miss your chance to have an input!

Engineering Biology Innovation Network

Innovate UK's new **Engineering Biology Innovation Network** aims to connect innovators and researchers in Engineering Biology to end-users and investors, helping to develop supply chains and create a commercially focused community. The online launch event on 19 June will gather views on the Network's vision and ambitions and its key activities. Details and registration availabe <u>here</u>.

NBIC Photo and Art competition

This year's Photography and Art competition run by the National Biofilms Innovation Centre is now open for entries, with a deadline of 17 October 2025. The competition is part of NBIC's #BiofilmAware campaign, which aims to raise awareness of NBIC's activities and research, and the widespread societal and economic impacts of biofilms. The competition invites artists and photographers to explore biofilms in everyday environments, and is also a chance for scientists to

New publication on Respirometry

A new book by the Royal Society of Chemistry contains a chapter on <u>Respirometry of Organic Solid Wastes: Methods and relevance to understanding the composting process and end-product stability</u>. EBNet has done relatively little work to date on composting technologies, apart from one <u>webinar</u> with CIWM; but respirometry is a powerful technique which also has wider applications. Stability is an increasingly hot topic for all those dealing with residues from bioprocessing of organic wastes, whether aerobic or anaerobic. Should we do more on this issue and technique?

Are you getting the latest information from us?

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

Join us on LinkedIn.



Forthcoming Events

Find selected upcoming events below.
Find more at: KTN events

Webinars

NEW Engineering Biology Innovation Network Launch - 19 June 2025

In person events

NEW ESPP: Nutrients in Aquaculture and Fisheries - 10-12 June 2025, Bergan, Norway and online, HYBRID event

NEW Building resilient bio-based UK supply chains - 30 June 2025, York

NEW BB-REG-Net Summer Workshop - 1 July 2025, York

NEW Biofilms Alliance Forum - 1-2 July 2025, Manchester Metropolitan University

NEW IWA Membrane Technology - 13-18 September 2025, Daegu, South Korea

NEW Euro-MIC Closing workshop - 17-19 Sept, Horsens, Denmark and online. Abstracts 1

August 2025, Hybrid event

NEW RETASTE - 24-27 Sept, Athens, Greece. Abstracts 16 June.

NEW <u>ICGEB Conference - Bacterial communication</u> - 28-30 Oct, Trieste, Italy **Application for** assistance 18 June, Abstracts 13 July

NEW <u>IEcomondo Green Technology</u> - 4-7 Nov, Rimini, Italy, **Abstracts 30 June**

IWA WaterMicro 22 - 15-20 June, Amersfoot, Netherlands

AquaConSoil 2025 - 16-20 June 2025, Liege, Belgium

European Wastewater Management Conference & Exhibition, 17-18 June 2025, Telford

IWA ecoSTP2025 - 23-26 June, Stockholm, Sweden

EBIC Early Career Researcher Event 2025 - 8-9 July 2025

World Biogas Expo and Summit 2025 - 9-10 July, NEC, Birmingham

Microfluidics Symposium - 29-30 July 2025 supported by EBNet's ESWS WG

China-UK Young Scholars Summer School on Sustainability - 17-26 August 2025, China

UK Fluids Conference 2025 - 2-4 September 2025, Liverpool

WasteEng 2025 - 3-5 September 2025, Funchal, Madeira

IWA Agro2025 - 10-12 September 2025, Istanbul, Turkey.

GapSummit 2025 - 15-17 September 2025, University of Cambridge

IWA 1st Photogranules - 17-19 September 2025, Delft, Netherlands

4th BBNet conference - 15-17 October 2025, Sheffield

IWA Sludge Management 19 - 21-24 October 2025, Kyoto, Japan

Funding

Selected funding opportunities for academia and industry are highlighted below.

Find more at: **UKRI funding**



NEW Royal Society - Japan Collaboration Awards 2025 - 8 July 2025

BBSRC sLoLa Stage 1 - 20 May 2025

UKRI Proof-of-Concept 2025 - 29 May 2025

Innovate UK KTP 2025-6 - 11 June 2025

UKRI Future Leaders 2025 Round 10 - 18 June 2025

UKRI Transdisciplinary AMR - 18 June 2025 (notification stage)

Supergen Energy Networks Flexible Fund - 20 June 2025

Farming Futures R&D: low emissions - 25 June 2025

UKRI Cross-Council Pilot - 3 July 2025

Pushing the frontiers of environmental research - 15 July 2025

CBE JU 2023 calls - 18 September 2025

BBSRC Standard research grant 2025 round 3 - 24 September 2025

BBSRC New Investigator award 2025 round 3 - 24 September 2025

BBNet Collaborate and Innovate - open

EPSRC Programme grant full proposal - open

EPSRC Network Grant - open

Travel and related awards

NEW JSPS Invitational Fellowships 2026 - 29 August 2025

NBIC ICURe Engage programme - 19 May 2025

JSPS Pre/Postdoctoral Fellowships (Short Term) - 26 May 2025

Royal Society Short Industry Fellowship - 28 May 2025

BBSRC International Travel Award - 30 September 2025

EPSRC Overseas Travel Grant - open

NBIC Flexible Talent Mobility Account - until 2027



Jobs, Training, Awards & PhDs

We still have funding available for Share-with-apeer (SWAP) exchanges - for details see EBNet website

Jobs (see also FindAPostDoc & Jobs.ac.uk)

New Research Associate in Algae-based wastewater treatment - 23 June 2025,

Loughborough University

New Research Fellow - Biofilm engineering for pollutant removal from wastewater - 2 July 2025, University of Southampton, **EBIC funded**

PhDs (see FindaPhD)

NEW Application of metagenomic methods to profile public health threats in wastewater and freshwater - 31 July, University of Birmingham

Removal of Emerging Micropollutants From Wastewater in Biofilm Reactors - 31 August 2025, University of Southampton

<u>Enhancing the Efficiency of Biological Waste Treatment with Nanobubbles</u> - 31 August 2025, University of Southampton

Rejuvenate Soil: Living biogenic hydrogels to stop soil - open, Freiberg University of Mining and Technology

Training

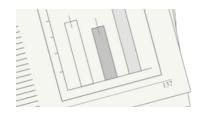
NEW AquaEnviro: Optimising Sewage Sludge AD - 8 July, online

NEW <u>Green Fuels Summer School - biomethanation and electromethanogenesis</u> - 27-29 August, Hersonissos, Crete

RENEWGAS Summer School - 11-17 June, Albi, France

Publications

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



Evaluating the impact of underwater skimming on slow sand filter performance and operation Elemo, T., Chipps, M., Graham, N., Turner, A., Bretagne, S., Jefferson, B. and Hassard, F., 2025. Water Research, p.123234.

<u>Understanding the risk of enhanced particle penetration into slow sand filter beds when using underwater skimming techniques</u>

Elemo, T., Chipps, M., Graham, N., Turner, A., Jefferson, B. and Hassard, F., 2025. Journal of Environmental Management, 386, p.125845.

<u>Isolation</u> and characterisation of a native cyanobacteria for a microalgal consortium producing PHAs in agrifood residues

Serrano-Blanco, S., Cimon, M.A., Pham, T.T.H., Harvey, A.P., Barnabé, S. and Velasquez-Orta, S.B., 2025.. Algal Research, 89, p.104030.

Reminder - Special Issue

Submission deadline: 30 June 2025

Guest editors for this call in CIWEM Water and Environment Journal: Environmental Biotechnology are Dr Tao Lyu, Cranfield University and Dr Anjali Jayakumar, Newcastle University who lead our PFAS and ECR Working Groups, respectively. This special issue is open for the whole Environmental Biotechnology

Still here?

Sensitive souls

Scientists at the University of Sheffield have found that, contrary to decades of established scientific belief, bacteria can directly measure differences in chemical concentration across the length of their cell bodies. This opens up new possibilities for understanding complex community behaviour and responses to environmental stimuli: see here for more details.

Green Stories Project

Green Stories has announced a new 'Flash Fiction' competition on the theme of Epiphanies - moments where a person's attitude or behaviour changes. For more details see here.

Where else to look?

There is a growing range of UK Networks and Hubs related to Environmental Biotechnology Our sister-NIBB, BBNet, runs to January 2026. NBIC continues to support

research into biofilms. The 6 Engineering Biology Mission Hubs include the Environmental Biotechnology Innovation Centre, which builds on and expands some of the themes in EBNet. Sign up for EBIC's Newsletter here. For two more Mission Hubs with an environmental theme see Elemental and P3EB, and for new Innovation Networks see the Spotlight on... section above



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