



Biotechnology and
Biological Sciences
Research Council



Engineering and
Physical Sciences
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Image courtesy of **Prof James Chong**

EBNet Newsletter - August 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 links at the end of this Newsletter to update details or unsubscribe.

Bioelectrochemical Systems - next event

The next webinar from the [Bioelectrochemical Systems](#) WG is on 8 Sept 2025 12-13:00 UK. The

speaker is Dr Cristina Cordas of the NOVA School of Science and Technology, Lisbon, Portugal.

See [here](#) for joining instructions. For details of the first two webinars see the [WG](#) webpage.

The BES WG has also organised a Working Table at [Electrochem 2025](#) - see [here](#) for details, or contact WG Lead Dr Sharon Velasquez Orta.

GHG Emissions from Sanitation Systems

Outputs are available from the workshop on [Measurement of GHG from sanitation and their relationship to microbiological processes in sanitation systems](#), organised by the [N2O WG](#) in conjunction with Prof Barbara Evans and the University of Leeds. This international workshop highlighted the significant GHG contribution of on-site systems, and identified key research needs. Collaborative work on modelling of these systems is now ongoing. See [here](#) for the Workshop report and [here](#) for a 2-page summary. .

Process intensification in wastewater treatment

A long-embargoed EBNet [webinar](#) on intensification of conventional activated sludge systems through hybridisation with aerobic granular sludge is now available. The speaker is Dr Sudhir Murthy of NEWHub Corp, and the session on [Aerobic Granules in Continuous Operation, and its Commercialization](#) was chaired by Dr Yongqiang Liu who leads our [AGS WG](#). The process has the potential to increase capacity at existing WWTW with relatively low capital cost or space requirements. See also the WG's [Playlist](#) for other videos on this topic.

PFAS POC outputs

Watch this short [animation](#) introducing the use of molecular docking to unlock PFAS biodegradation. The animation is one output from the EBNet [POC project](#) led by Dr Tao Lyu, our [PFAS WG](#) Lead. A presentation by Dr Lyu at the European Wastewater Management event is also available, courtesy of the conference organisers. The item [Treatment wetlands as nature-based solutions in managing emerging micropollutants: PFAS and beyond](#) also refers to results from this POC project.

Escape Room - summer fun from WB WG

The [Water Biofilms](#) WG led by Dr Francis Hassard has produced an Escape Room game to entertain and inform. Play the [Contamination Crisis](#) game free online.

Microbes Audiobook

Our summer selections from **Green Stories: Microbes to the Rescue** audiobook and ebook are highlighted [here](#), with land and water bioremediation as a theme: let us know what you think!

'I am an Environmental Biotechnologist...'

My research background is in environmental microbiology and I am currently working on wastewater surveillance

Ying Guo,
Cranfield University

My focus is on understanding and optimisation of anaerobic biotechnology through metagenomic data

Tri Yulianti,
Imperial College

I am an Environmental Biotechnologist because I want to understand how the world works and make it a better place.

Beate Christgen,
Newcastle University

We asked EBN Net Early Career Researchers to write a sentence on the theme 'I am an Environmental Biotechnologist...'. A selection of their responses are shown here and in other Newsletters. (NB EBN Net has now been running for 6 years - so some of them are no longer ECRs, but senior academics and industrialists!).

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.



BBSRC's Forward Look refreshed

The outcome of BBSRC's update to its [Forward Look: the Power of Bioscience](#) is now available. See [here](#) for EBN Net's input to the community consultation.

ELEMENTAL Mission Hub showcase and BIV Call

A UKRI webinar showcasing the [ELEMENTAL](#) Mission Hub is now available [online](#). Meanwhile ELEMENTAL has announced its first call for Business Innovation Vouchers. For more details and information on how to apply see [here](#). For other Engineering Biology showcase videos, including [EBIC's](#), see the [UKRI Youtube](#) channel.

UKWIR Reports

Three recent reports from [UKWIR](#) cover issues of interest to EBN Net members. See items on [Sustainable and resilient alternatives to traditional water treatment](#), [technologies for treatment of hazardous chemicals at sewer entry](#), and [Fats, oils and Grease \(FOG\)](#) for more details, and comments from EBN Net's WG Leads and Co-Investigators Dr Francis Hassard, Prof Tony Gutierrez and Dr Luca Alibardi.

More on Nature-based solutions

The Environment Agency has published a [Position Statement](#) on Nature-Based Solutions. This is also the start-point for a new episode in the [Planet Possible](#) podcast series hosted by the Chartered Institution of Water and Environmental Management ([CIWEM](#)). Episode 2 in Season 2

of the podcast also features *Nature-based systems*, while Episode 4 of Season 3 covers '*Forever Chemicals*'.

IEA does Bioenergy - and more

The International Energy Agency ([IEA](#)) has published its first [Outlook for Biogas and Biomethane: a global geospatial assessment](#) for the period to 2050. The report reviews current policies, business models, consumption patterns and supply trends. It highlights the importance of managing organic waste streams responsibly, and minimising associated GHG emissions. A focus on (bio)energy is no surprise, but in other outputs IEA looks at how energy intersects with the circular bioeconomy: a central topic for both EBNet and our sister Network [BBNet](#). See the item [Integration of biorefineries and green H2](#) for more information on a recent Task 42 report, with a comment from Dr Yue Zhang as co-Lead of EBNet's [Anaerobic Fermentation](#) WG.

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](#) or [X](#) (formerly Twitter)



Forthcoming Events

Find selected upcoming events below.

Find more at: [KTN events](#)

Online events

NEW EBNet [Bioelectrochemical Systems](#) webinar - 8 Sept 2025 12-13:00 UK

NEW [Bioplastics from Biomass: Innovative Pathways for Sustainable Conversion](#) - 8 Sept 2025 12-13:00 UK

In person events

NEW [Electrochem 2025](#) - 31 Aug - 2 Sept 2025, Newcastle (see also [BES session](#))

NEW [Bio-based Policy for People and the Planet](#) - 2 Sept 2025, Sheffield

NEW [Resource & Waste Management Expo 2025](#) - 17-18 Sept 2025, Birmingham

NEW [CIWEM Early Career Conference 2025](#) - 23 Sept 2025, London

[China-UK Young Scholars Summer School on Sustainability](#) - 17-26 Aug 2025, China

[Interpore UK 2025](#) - 1-2 Sept 2025, Loughborough

[UK Fluids Conference 2025](#) - 2-4 Sept 2025, Liverpool

[WasteEng 2025](#) - 3-5 Sept 2025, Funchal, Madeira

[IWA Agro2025](#) - 10-12 Sept 2025, Istanbul, Turkey

[Microbial Genomics of Eukaryotes](#) - 12 Sept 2025, Glasgow

[IWA Membrane Technology](#) - 13-18 Sept 2025, Daegu, South Korea

[GapSummit 2025](#) - 15-17 Sept 2025, University of Cambridge

[Contamination & Land Remediation Expo](#) - 17-18 Sept 2025, NEC Birmingham

[Euro-MIC Closing workshop](#) - 17-19 Sept, Horsens, Denmark and online.

[IWA 1st Photogranules](#) - 17-19 Sept 2025, Delft, Netherlands

[ADBA Northern Ireland Conference](#) - 23 Sept 2025, Belfast

[RETASTE](#) - 24-27 Sept, Athens, Greece

[4th BBNNet conference](#) - 15-17 Oct 2025, Sheffield

[IWA Sludge Management 19](#) - 21-24 Oct 2025, Kyoto, Japan

[ISWA 2025 Re-imagine Waste](#) - 27-29 Oct 2025, Buenos Aires, Argentina

[ICGEB Conference - Bacterial communication](#) - 28-30 Oct 2025, Trieste, Italy

[Ecomondo Green Technology](#) - 4-7 Nov 2025, Rimini, Italy

Funding

Selected funding opportunities for academia and industry are highlighted below.

Find more at: [UKRI funding](#)



- *NEW* [Supergen Bioenergy BIV call](#) - 1 Sept 2025
- *NEW* [JSPS/Royal Society Bilateral projects](#) - 25 Sept 2025
- *NEW* [Pushing the Frontiers of Environmental Research](#) - 21 Jan 2026

[Resource Efficiency Impacts Competition](#) Innovate UK/DESNZ - 27 August 2025

[IBiolC Feasibility Funding](#) - 1 Sept 2025

[Royal Society University Research Fellowship](#) - 10 Sept 2025

[Knowledge Transfer Partnership 2025-6](#) Round 3 - 17 Sept 2025

[CBE JU 2023 calls](#) - 18 Sept 2025

[BBSRC Standard research grant 2025 round 3](#) - 24 Sept 2025

[BBSRC New Investigator award 2025 round 3](#) - 24 Sept 2025

[Elemental Hub Business Interaction Vouchers](#) Round 1 - 30 Oct 2025 (or when all funding allocated)

[BBNet Collaborate and Innovate](#) - open

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

[EPSRC Network Grant](#) - open

[Daphne Jackson Fellowship](#) - open

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

Travel and related awards

[JSPS Invitational Fellowships 2026](#) - 29 Aug 2025

[BBSRC International Travel Award](#) - 30 Sept 2025

[ECR Travel Award - Processes](#) - 31 Oct 2024

[EPSRC Overseas Travel Grant](#) - open

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



Jobs, Training, Awards & PhDs

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

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

New [TERC Network Senior Manager](#) - 18 Aug 2025, University of Surrey

New [TERC Network Manager](#) - 18 Aug 2025, University of Surrey

New [Research Fellow \(Biological Systems Modelling\)](#) - 19 Aug 2025, University of Warwick

New [Research Fellow in Water Resources and Schistosomiasis Control](#) - 19 Aug 2025, Cranfield University

New [Associate/Assistant Prof in sustainable Production and Supply Chains](#) - 20 Aug 2025, Technical University of Denmark

New [Knowledge Transfer Manager - Chemistry & Industrial Biotech](#) - 24 Aug 2025, Innovate UK

New [Research Associate \(Highly Selective Membrane Manufacturing for Resource Recovery\)](#) - 31 Aug 2025, University of Bath

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

New [Revealing the microbial drivers of nitrous oxide sources and sinks in Scottish Waste Water Treatment Plants](#) - 18 Aug 2025, University of Glasgow

New [Enhancing Water Treatment using robotic tools for filter maintenance](#) - 3 Sept 2025, Cranfield University

[Removal of Emerging Micropollutants From Wastewater in Biofilm Reactors](#) - 31 Aug 2025, University of Southampton

[Enhancing the Efficiency of Biological Waste Treatment with Nanobubbles](#) - 31 Aug 2025, University of Southampton

[Resource at source: Bio-based platforms for transitioning to a Net Zero Chemical Industry](#) - 18 Dec, University of Manchester

Training

NEW [Wastewater treatment](#) - 9 Sept 2025, Aquaenviro online

NEW [Optimising AS Plants](#) - 16 Sept 2025, Aquaenviro online

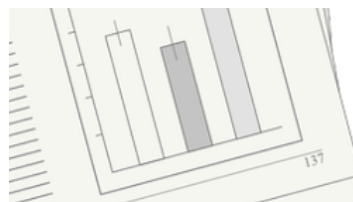
NEW [Optimising AD of sewage sludge](#) - 24 Sept 2025, Aquaenviro online

[Green Fuels Summer School - biomethanation and electromethanogenesis](#) - 27-29 Aug,

Hersonissos, Crete

Publications

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



[Characterisation and anaerobic digestion of fat, oil and grease \(FOG\) waste from wastewater treatment plants](#). Alibardi, L., Strazzabosco, A. and Cossu, R., 2025. *Journal of Environmental Management*, 375, p.124193. [See also UKWIR item above].

[Electroenzymatic CO₂ Reduction using Formate Dehydrogenase Direct and Mediated](#)

[Catalysis](#). Paul, N., Moura, I., Maia, L.B., Cordas, C.M. and Moura, J.J.,

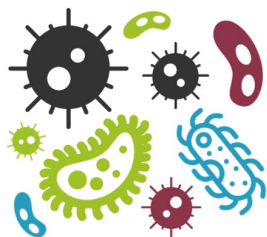
2025. *ChemElectroChem*, p.2500100. [Our speaker for webinar on 8 Sept]

[Minisyncoccus archaeiphilus gen. nov., sp. nov., a mesophilic, obligate parasitic bacterium and proposal of Minisyncoccaceae fam. nov., Minisyncoccales ord. nov., Minisyncoccia class. nov. and Minisyncoccota phyl. nov. formerly referred to as Candidatus](#)

[Patescibacteria or candidate phyla radiation](#). Nakajima, M., Nakai, R., Hirakata, Y., Kubota, K., Satoh, H., Nobu, M.K., Narihiro, T. and Kuroda, K., 2025. *International Journal of Systematic and Evolutionary Microbiology*, 75(2), p.006668. [See below for more on this exciting discovery!](#)

Still here?

[A Parasitic First](#)



The [first-ever report](#) of a bacterial species parasitising an archaeon appeared earlier this year. The host is *Methanospirillum hungatei*, a hydrogenotrophic methanogen that is an old friend to those working on anaerobic digestion and related environmental biotechnologies; its parasite a wholly new candidate species.

As well as the pure fascination of the discovery, it represents a very practical reminder: we now have tools to identify the astounding range of organisms in the microbial world, but are only just

beginning to investigate the complex microbial ecologies they exist within. And some of these discoveries will doubtless offer new insights on system performance in environmental biotechnologies, or hold the key to entirely new processes and treatment systems. Our congratulations to the authors Nakajima et al. (2025) for this exciting and painstaking work.

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](#)., and for two more Mission Hubs with an environmental theme see [Elemental](#) and [P3EB](#).



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