



Biotechnology and Biological Sciences Research Council 뚔

Engineering and Physical Sciences Research Council



Last years' EBNet ECR conference at Heriot-Watt University, Edinburgh

EBNet Newsletter - March 2024

New

6th annual EBNet ECR Conference

24-26 July 2024, Newcastle University

Calling all Early Career Researchers - from PhD students to new lecturer/young professionals. Join us again this year to contextualise your research, meet useful people and practice your communication skills. We have strictly limited place for the optional site visit, so we recommend you book early. Register now <u>HERE</u> for your free place. Full travel/accommodation bursary support available to UK-based ECRs. Are you a supervisor, or do you have new colleagues? Pass the word!

Lab Visit - Biochar research

The EBNet Working Group: <u>Biochars for Pollution Prevention</u>, led by Dr Meredith Barr, will be holding lab visit to Herriot-Watt University on 24 May 2024. If you are interested to join the group for an interesting tour of the facilities and want to meet others working with biochars do <u>get in touch</u> with Meredith now to secure a place.

Life Cycle Analysis (LCA) Working Group Workshop: TEA and Digital Modelling

30 April 2024, 9:30-1600, Chilworth Science Park, Southampton HOLD THE DATE! Registration opens soon. This workshop will cover AD system technoeconomic analysis, including process integration and digital modelling. At this meeting, the Environmental Biotechnology Network Life Cycle Analysis Working Group will also disseminate data/models and a TESARREC module for testing anaerobic digester systems. Insights from the workshop will also be used to form the basis of a policy white paper. Whether you are a novice or experienced in LCA, academics, policymakers and industry attendees are welcome to join us.

EBNet BIV Call

Open Call

Do you want to work with an industry partner? Can you complete a Business Interaction Voucher by December 2024? We have one BIV remaining and will allocate via an open Call. Get your <u>application</u> in now.



Now Open

EBNet funding opportunities for academia and industry are highlighted below.

Video Training for ECRs - book now!

~ 26 April 2024, online session – essential preparation. 9am-11am ~ 17 May 2024, workshop, Birmingham. All day. (Bring own phone/laptop.) Want to improve your video production skills? The online session covers aspects of preproduction; the in-person workshop covers aspects of production. Places are strictly limited for this free, <u>2-stage training</u> and we only have a few left! ECR travel bursaries available. Email: **EBNet@EBNet.ac.uk**, now.

EBNet Placement Call - Always open

These are worth up to £1,500 for UK-based placements and £3,000 for overseas placements.

ECR Conference Travel Bursary - Always open

Looking to present your work at a major conference and lack funding? Given the increased cost of international flights we have raised our support to **£2,000** (max.) for full oral presentations to our listed conferences in 2023/24. Send in your application as soon as you are notified - we have a number set aside for each conference!

EBNet: Share With A Peer (SWAP) Travel Bursary

Always open. Available to Early Career Researchers

Proud of the work going on in your lab? Fancy a visit to another lab tackling similar topics? We have just the thing for you, We can offer **up to £250*** towards accommodation, meals, and travel per person - just make a short video clip &/or pictures suitable for our website. <u>Flyer</u>.

Spotlight On...

Do you have any good news to share with other members? Email us details if you want a shoutout in the next newsletter.



UKRI Mission Hubs announced

Congratulations to all members associated with the new £100m <u>UKRI Mission Hubs and</u> <u>Awards</u>. This significant investment in engineering biology will accelerate the application of (rigorous) engineering principles to the design and fabrication of biological components and systems, from modifications of natural systems to new forms of artificial biology.

Environmental Biotechnology Innovation Centre awarded £13 million

Funded by UKRI's Technology Missions Fund, EBIC brings together scientists from ten leading UK institutions in a mission to advance the properties and functions of microorganisms, creating more effective ways to monitor the environment and remove pollutants. The five-year project will examine ways to develop micro-organisms to target and mitigate negative impacts from polluting substances like plastic waste, hydrocarbons, metals and oil. Micro-organisms will not only be used to clean up hazardous and toxic pollutants from the environment, but also to help regenerate or recycle waste. Led by Prof. Fred Coulon, Cranfield University, you can find out more <u>here</u>.

Calling all engineers: Nature wants to publish your research

Because papers in engineering are under-represented in the journal Nature they now encourage such submissions - whether as a proof of concept or at the implementation stage - to be considered by Nature's editors and reviewers. More <u>here</u>.

Ofwat Innovation fund winners announced

The 10 Discovery Challenge winners have been announced and include work such as coagulant free phosphorus removal, and generating green electricity at wastewater treatment sites. More <u>here</u>.

IEA TASK 37: Energy from Biogas

The 2022-2024 TASK 37 triennium, which focussed on: *co-benefits of AD, conditions for a better manure utilization, the role of biomethane in industry and transportation* and *costs and marginal abatement cost*, is coming to an end. EBNet will be feeding into the discussion of challenges for the next triennium. Want to influence the debate? Share your priorities with us. Email your thoughts right now to EBNet@EBNet.ac.uk. Or use the survey link <u>HERE</u> today!

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 <u>LinkedIn</u> and <u>Twitter</u>.



Forthcoming Events

Find selected upcoming events below. Find more at: <u>KTN events</u>

Sedimentology of plastics: state of the art and future directions - 18/19 March 2024, Conference Aston Specialist in Land Condition (SiLC) Annual Forum 2024 - 20 March 2024 KTN: Global Insights: Antimicrobial Resistance, Challenges & Opportunities in India - 25 March 2024 Innovate UK: Resource-efficient or bio-based materials and manufacturing webinar -26 March 2024 European Biogas Association: Dig Deep! Understanding Digestate: Nutrient Cycle, Soil Quality, Energy Resilience - 27 March 2024 3rd BBNet Conference: Biorefining - Clean Growth - Net Zero - 10-12 April 2024, Sheffield Biofuels Expo 2024 - 11/12 April 2024, Rome, Italy KTN: Plant Microbiome Webinar - 11 April 2024 The Carbon Recycling Network: Stakeholder Engagement - Guidance Manual on the Responsible and Safe Use of C1 Gases - 24 April 2024 BBSRC: Sparking Innovation Conference - 1/2 May 2024, Edinburgh ADBA: Scottish Conference - 23 May 2024, Aberdeen CIWM webinar: Food Waste: For businesses and local authorities - 12 June 2024 EUBCE 2024 - 24-27 June, Marseille 1st International Conference on Novel Photorefineries for Resource Recovery - 9-11 September 2024 (Abstract deadline extended: 15 March 2024)

Funding

Funding opportunities for academia and industry are highlighted below. Find more at: <u>UKRI funding</u>



The British Academy/Royal Society: Newton International Fellowship programme - 19
March 2024
The Royal Society: Wolfson Fellowships - 20 March 2024
The National Lottery: Climate Action Fund - open from 27 March 2024
Innovate UK: Knowledge transfer partnerships - 10 April 2024
Royal Society: Industry Fellowships - 10 April 2024
UKRI: Accelerating the Green Economy Centres - 17 April 2024
BBSRC: Responsive mode - 24 April 2024
BBSRC: New investigator award - 24 April 2024
NERC: Environmental sciences: Global Partnerships Seedcorn Fund 2024 - 25 April
2024
CTRF: Call for proposals - 26 April 2024
BBSRC: Business and academia prosperity partnership - 8 May 2024
UKRI: Future Leaders Fellowships: round 9 - 18 June 2024

The Royal Society: Faraday Discovery Fellowships - 2 October 2024



Jobs, Training, Awards & PhDs

Did you know we have funds available to help members access placements in industry or academia?

Jobs (also see FindAPostDoc & Jobs.ac.uk) Research Associate in Engineering Biology</u> - 24 March 2024, Imperial College London Research Associate - 25 March 2024, University of Strathclyde Research Assistant/Associate in Environmental Assessment - 28 March 2024, University

of Cambridge

Lecturer - 22 April 2024, Cardiff University PDRA Developing Sustainability Prediction Tools - 29 March 2024, University of York

Training

Cloud-SPAN: Core R - 25 April 2024 Aqua Enviro - various incl: Waste water treatment: 27 March 2024 & 16 April 2024 & 2 May 2024 Optimising Activated Sludge Plants: 18 April 2024 & 21 May 2024 Optimising Anaerobic Digesters: 30 April 2024 & 23 May 2024 IChemE: Sustainable process engineering courses - various

Awards and Competitions

REA: British Renewable Energy Awards - 15 March 2024 Royal Society Trivedi Science Book Prize - 22 March 2024

PhDs (see FindaPhD)

Artificial intelligence for the discovery and engineering of microbial biosynthetic gene clusters - 31 March 2024, The University of Manchester

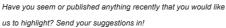
Microbial Induced Electrochemistry at the Local Site and Single Cell Level - 30 April 2024. University of Liverpool

Fouling Control of Water Treatment Membranes through Optimal and Sustainable Cleaning Strategies - 19 June 2024, University of Edinburgh

Bioaugmentation to enhance biological phosphorus removal from wastewater - 31 August 2024, University of Southampton

Research and development of a technological solution for the tracking of organic waste at the micro/small scale of the agricultural sector - University of Barcelona/ProCycla

Publications





Publications

Editorial: Microbial communities for bioenergy recovery from wastes and waste streams

By: Razieh Rafieenia et al. In: Front. Energy Res., 27 February 2024. Sec. Bioenergy and Biofuels. Volume 12 - 2024

Effects of calcium peroxide pretreatment on the substrate, microenvironment, and microbial community in an anaerobic digestion system of waste sludge

By: Yi Wang, Jia-Ni Yin, Xia Li & Yong-Qiang Liu. In: Journal of Water Process Engineering. Volume 59, March 2024, 104985

Modern Management Options for Solid Waste and By-Products: Sustainable **Treatment and Environmental Benefits**

By: Valerio Funari et al. In: Front. Environ. Sci. Sec. Toxicology, Pollution and the Environment. Volume 12 - 2024

Bread waste valorization: a review of sustainability aspects and challenges

By: Rendra Hakim Hafyan et al. In: Front. Sustain. Food Syst. Sec. Waste Management in Agroecosystems Volume 8 - 2024

Still here?

Extracellular Comics. The next big thing?

A recent Science News article introduced the phrase 'extracellular comics' to explain how microbes communicate - based on a paper on vesicle formation in haloarchaea. The headline captures the essence of the idea, memorably, in only two words. A quick scan immediately brought up other headline examples like 'scientists develop artificial 'worm gut' to break down plastics' or bat 'night clubs' may be the key to solving the next pandemic'. These verbal 'shortcuts' may be non-literal, but they are certainly catchy. So, what terms are trending in your sector of EB?

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