



Photo from EBNet Bioelectrochemistry for Environmental Systems Workshop - 23/24 November 2023, Newcastle University

EBNet Newsletter - December 2023

New

EBNet Webinar: Organic Solid Waste Bio-treatment in China and UK: Research and Practice

10-11:00, Monday, 18 December 2023, online

Chaired by Dr Jane Gilbert, Carbon Clarity, we are joined by Dr Li Xie, College of Environmental Science and Engineering, Tongji University & Yingying He, Tongji University to explore the problem of organic wastes. Register here.

Congratulations to the winners of the EBNet-sponsored <u>Green Stories</u> competition. With over 160 entries from 37 countries these stories covered all genres, technologies and perspectives. Our thanks to the judges and entrants alike for their efforts. Find the winners here and our report here.



Now Open

EBNet funding opportunities for academia and industry are highlighted below.

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. Flyer.

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.



ISWA Reports

There is a new International Solid Waste Association report out - A Practitioner's Guide to Preventing and Managing Contaminants in Organic Waste Recycling. Find out more about the different types of contaminants that can enter organic waste streams intended for recycling, their impacts and how they can be prevented or removed here.

UKWIR Reports

There is a new UK Water Industry Research report out - Quantifying and reducing direct greenhouse gas emissions from wastewater treatment processes - Phase 2. Find out more about process emission of nitrous oxide and fugitive emissions of methane here.

IWA Special Issues

Last chance to submit your papers to IWA: Water Science & Technology for these special issues: Advanced Nanomaterials for Treatment of Wastewater. Deadline: 31 December 2023 (see here); and Carbon Neutrality of Sewage Treatment Plants. Deadline: 29

December 2023 (see here).

Congratulations

It is always nice to see the sector recognised. Congratulations to Bangor University, a winner in the 15th Round of The Queen's Anniversary Prizes for their work on Wastewater-based monitoring; and to Prof. Karen Johnson, winner of the Royal Society Rosalind Franklin Award for her achievements in environmental engineering.

Congratulation also go to Prof. Sebastian Farnaud and his team for their Innovate KTP award working with N2S on bioleaching for precious metal recovery.

Professional Societies and Associations

Did you know you can join many professional associations for free? The Royal Society of Chemistry, CIWM and CIWEM all have free student memberships available, and many others - The Biochemical Society, The Microbiology Society, SoBRA, IWA - offer much reduced rates.

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.

For more, go to: Events Roundup

<u>The 29th Molecular Microbial Ecology Group meeting</u> - 18-19 December 2023, Queen Mary University of London, London

KTN: Industrial Gases to Chemicals (IG2C) - Defossilising the chemicals sector - 11 January 2024

<u>Carbogenics: Anaerobic digestion: Principles and practice</u> - 15 January 2024, Lincoln <u>Cloud-SPAN: Genomics workshop</u> - 15-24 January 2024 (Scholarship deadline: 18 December 2023)

KTN: Mission Innovation: Integrated Biorefineries programme - 22 January 2024
Innovate UK Circular Economy Innovation Network: Redefining Sustainable
Innovations: the Circular Economy Exchange - 8 February 2024

KTN: Net Zero Innovations Unveiled in Norfolk's Agri-food Industry - 21 February 2024

IBiolC: 10th anniversary conference - 13-14 March 2024, Technology and Innovation Centre,

Glasgow

<u>The Letters in Applied Microbiology Early Career Scientist Research Symposium</u> - 15 May 2024, The University of the West of England, Bristol

RSC: Biocatalysis Faraday Discussion - 22-24 May 2024, London

11th International Conference on Sustainable Solid Waste Management - 19-22 June 2024, Rhodes Island, Greece. (Abstracts by: 31 December 2023)

19th IWA Leading Edge Conference on Water and Wastewater Technologies - 24-28

June, Essen, Germany (Abstracts by:15 December 2023)

World Biogas Expo 2024 - 10/11 July 2024, NEC, Birmingham

IWA: Nutrient Removal and Recovery Conference 2024 - 17-21 November 2024

FEMS2025: the 11th Congress of European Microbiologists - 13-16 July 2025, Milan, Italy

Funding

Funding opportunities for academia and industry are highlighted below.

For more, go to: Funding Roundup



Innovate UK: Analysis for Innovators (A4I) - 3 January 2024

British Council: Early Career Fellowships scheme - 8 January 2024

Innovate UK: Innovation loans future economy - 10 January 2024

BBSRC: Bioscience Big Ideas Pipeline - 12 January 2024

BBSRC: Standard research grant - 17 January 2024

BBSRC: Innovation to Commercialisation of University Research (ICURe) Discover -

30 January 2024

BBSRC: Future-proofing plants to a changing climate - 6 February 2024

Innovate UK: Farming innovation programme: research starter round 4 - 14 February

2024

NERC: Large grant outlines - 7 March 2024

Innovate UK: Eureka collaborative R&D: Eurostars 3 Call 6 - 14 March 2024

EPSRC: Place Based Impact Acceleration Account: Round 2 - 21 March 2024

EPSRC: Network grant - open

EPSRC: New investigator award - open

EPSRC overseas travel grant - open

Pre-announcement: Future Leaders Fellowships: round 9

- tbc



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)

<u>Lecturer/Senior Lecturer in Molecular Biology and Biotechnology</u> - 17 December 2023, Newcastle University

Postdoctoral Research Associate/Fellow - 19 December 2023, University of Exeter

Research Technician - 2 January 2024, Newcastle University

Assistant or Associate Professor in Ecology and Evolution - 3 January 2024, University of Warwick

Senior Research Technician - 4 January 2024, University of Exeter

DEFRA: Research and Development Fellowships - 8 January 2024

<u>Open Rank Senior Lecturer to Professor in Living Systems</u> - 29 February 2024, University of Exeter

Training

Rhodes 2024 Summer School (6th PhD Summer School): Executive Training on waste management & circular economy - 17/18 June 2024. Rhodes, Greece

Awards and Competitions

Royal Society: Rosalind Franklin Award and Lecture - nominations open
RAEng: The MacRobert Award - nominations open until: 31 January, 2024

PhDs (see FindaPhD)

Characterising hydrocarbon degradation pathways for post oil spill monitoring
using bacterial hydrocarbon biodegradation genes - 10 January 2024, University of Essex
BEST N2: Managing the Nitrogen Cycle and Tackling Fixed Nitrogen Pollution Using
BEST ANAMMOX for Enhanced N2 Production - 10 January 2024, Loughborough University
Close the Loop: Biotechnology-based Recycling Methods for Synthetic Textiles - 12

Publications

New Frontiers in Anaerobic Digestion (AD) Processes

By: Sonia Heaven, Sigrid Kusch-Brandt and Charles Banks (Eds). Published: June 2023. ISBN 978-3-0365-7999-3 (hardback); ISBN 978-3-0365-7998-6 (PDF).

This book is a reprint of the Special Issue New Frontiers in Anaerobic Digestion (AD) Processes, published in Processes.

<u>Does pre-enrichment of anodes with acetate to select for Geobacter spp. enhance</u> <u>performance of microbial fuel cells when switched to more complex substrates?</u>

By: Beate Christgen et al. In: Front. Microbiol. Sec. Microbiological Chemistry and Geomicrobiology. Volume 14 - 2023.

An integrated approach for water quality assessment in African catchments based on physico-chemical and biological indicators

By: Bitew K. Dessie et al. In: Science of The Total Environment. Volume 908, 15 January 2024, 168326

Sustainability Assessment of Dihydroxyacetone (DHA) Production from Glycerol: A

Comparative Study between Biological and Catalytic Oxidation Routes

By: Piyawan Thanahiranya et al. In: ACS Sustainable Chem. Eng. 2023, 11, 49, 17425–17439

Still here?

Naughty or nice?

As Xmas approaches, the idea of positive reinforcement comes to mind, exemplified by Santa; why risk coal in your stocking when it could be presents? The idea is rooted in the work of B. F. Skinner, a behaviourist psychologist working in the 1930s & 1940s. Embedding desirable sustainable practices takes work, so why not practice your skills with a few *in situ* experiments this year on:

Excess presents - reward deliveries with the provision of mince pies and carrots (a positive reinforcement)

Over consumption - remove discomfort with indigestion tablets (negative reinforcement)

Avoid food waste - commit to making strange soup from any left-overs (a positive punishment)

Remember the bin! - a service taken for granted, until an unsightly mess lingers after a missed collection (a negative punishment)

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