Interfacial Bioelectrochemistry: Enzymatic NO and CO₂ Reduction and H₂ Evolution

Webinar Mon 8th September 12-13:00 UK time

This webinar presents electrochemical studies of key metalloenzymes relevant to environmental applications. We examine nitric oxide reductase (NOR) and formate dehydrogenase (FDH) for selective NO and CO₂ reduction, and [NiFe]-hydrogenase for H₂ evolution. By coupling enzymes to electrodes, we uncover mechanistic insights into electron transfer, catalytic onset, and mass-transport effects. These findings support the development of sustainable bioelectrocatalytic systems for NO abatement, CO₂ valorisation, and green hydrogen production.



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This webinar is brought to you by EBNet's working group on Bioelectrochemical Systems for Environmental Biotechnology (BES WG), led by Dr Sharon Velasquez-Orta of Newcastle University.

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