

# Electrified Microbiology – Bacteria full of Potential!

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Bacteria that can conduct produce, consume and electrons? This is not just a fancy idea, but it is the basis for novel microbial electrochemical technologies. The last decade has seen tremendous progress in the development of these technologies: Microbial fuel cells produce electricity from wastewater, microbial electrosynthesis may provide access to the reduction of carbon dioxide. A central role play electrochemically active microbial biofilms, in which extracellular electron transfer wires the microbial metabolism to electrodes.

How does microbial extracellular electron transfer work? And what is needed to bring the idea of microbial electrochemical technologies to application? This lecture gives an overview about new insights and developments in the field of microbial electrochemistry, highlights recent trends and discusses future needs.