

Bioelectric systems for next generation biofuels and chemicals

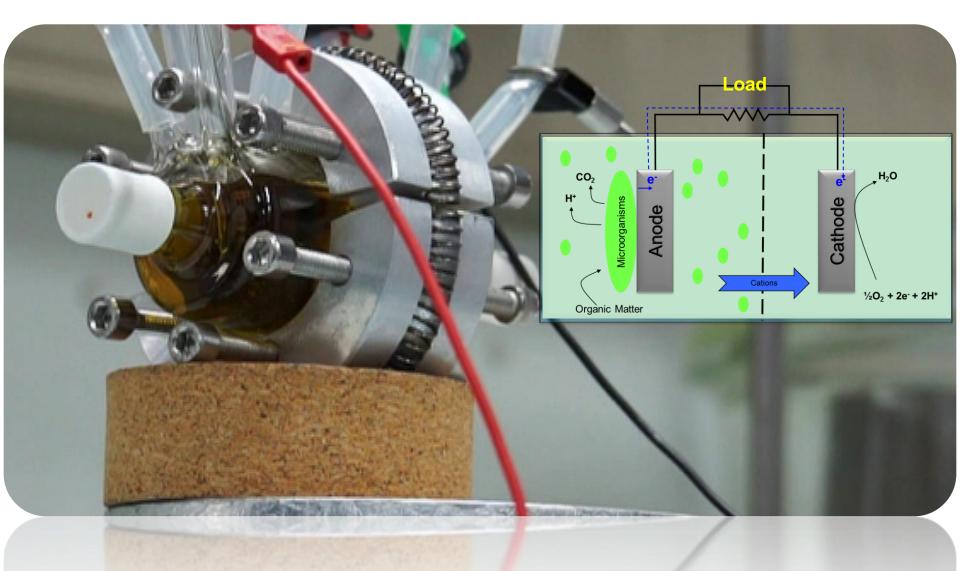
Successful R&I in Europe 2024 11th European Networking Event Düsseldorf, NRW February 15-16, 2024

Prof. Dr. Fabian Fischer University of Applied Sciences and Arts Western Switzerland Life Technologies Institute and Institute for Renewable Energy fabian.fischer@hevs.ch



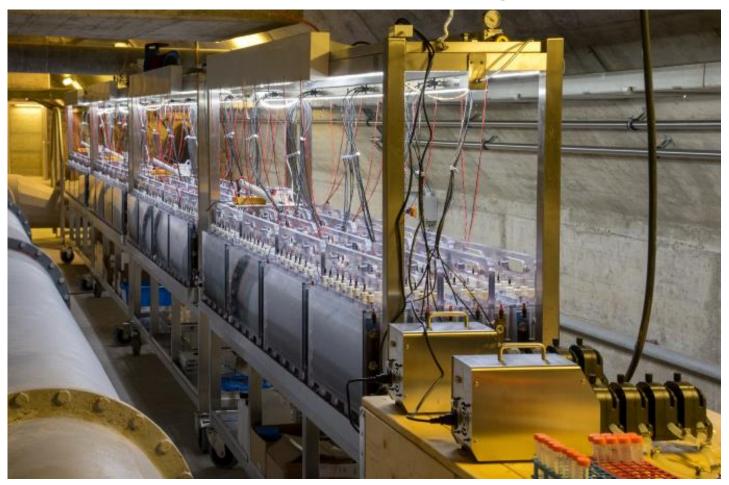
Institut Technologies du vivant

Small scale microbial fuel cell for basic research





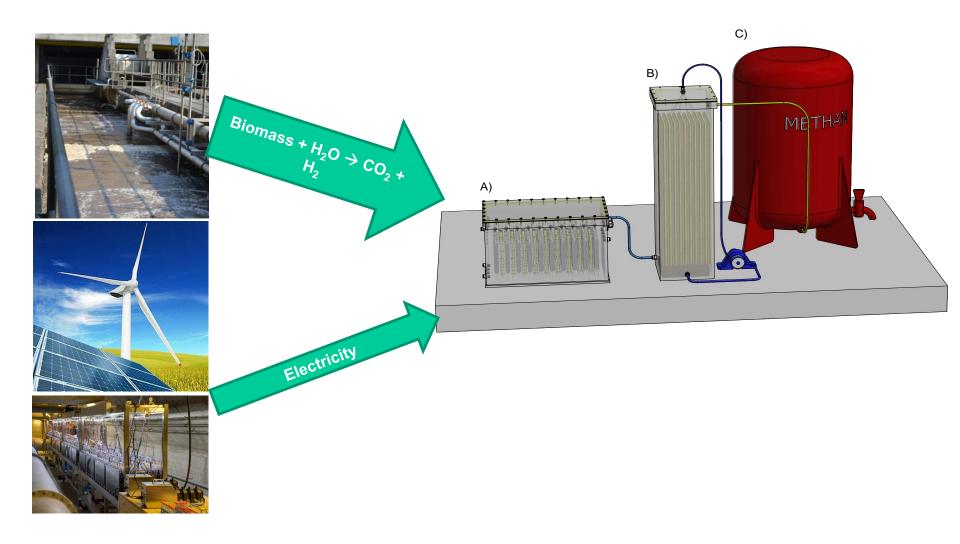
Microbial Fuel Cell 1000 Litre Setup



Safes and produces electricity from novel wastewater purification system. MFC scale up installation composed of 4 electrical independent carts for a total capacity of 1m³ distributed within 64 microbial fuel cell units.

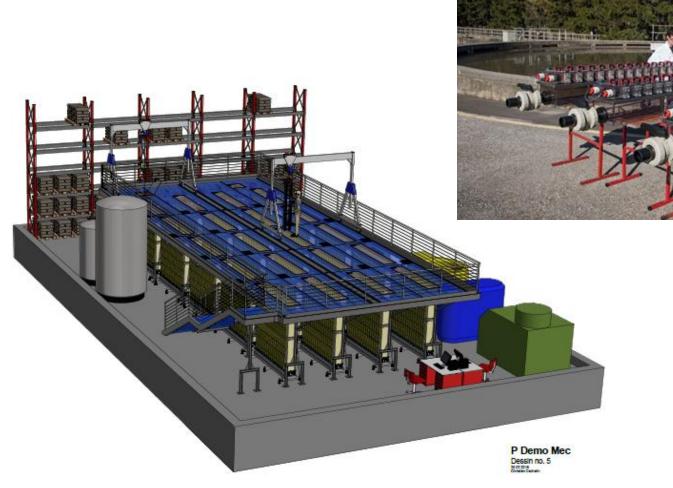


Power to Biomethane





Phosphate recovery project and urban mining of critical materials





Microbial fuel cells can be used for diverse ends

We seek partners/consortia who have a need or can help:

- To transform organic waste into electricity and biofuels
- To develop new biocompatible electrode materials
- To build electronic circuits to manage and understand large Microbial Fuel Cell Stacks
- To generate bio-hydrogene, bio-methane and other fuels
- To fabricate photo-electrodes and transparent solar cells
- To extract or accumulate critical materials



Thank you for your attention



saia-burgess

biolechnel





Lonza





SATOM







Schweizersche Hidgensssenschaft Confléctration tuisse Confléctrations Seizzers Confléctration swizze Dundes amit für Umwellt BAFU

Institut

the 🖊

...........





Stadt Zürich Entsorgung + Recycling



ARA WORBLENTAL

Hes.so Haute Ecole Spécialisée de Suísse occidentale Fachhochschule Westschweiz



LABOR SPIEZ

Duttwiler Energietechnik