Bachelor- /Master thesis position

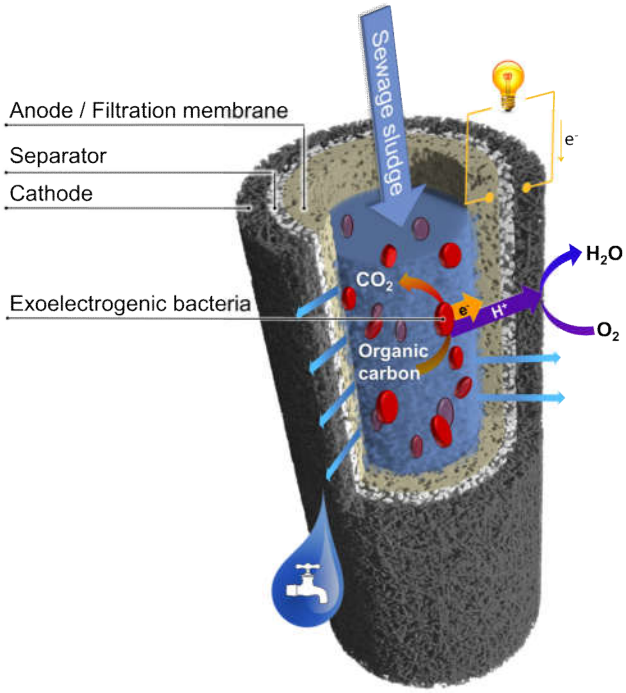
Fabrication and Characterization of Conductive Membranes for a Filtering Microbial Fuel Cell

The overall goal of the project is the development of a prototype filtering microbial fuel cell for the energy-efficient treatment of wastewater. Our new concept is based on simultaneously using the anode of the microbial fuel cell as a membrane filter (see figure).

Your profile

Potential candidates should be students of the following or related fields (preferably with previous lab experience):

Chemical & Environmental Engineering, **Material Science**, **Chemistry**, or **Physics**



Your tasks

The main tasks include the fabrication of conductive filter materials for micro- and ultrafiltration from sintered metal particles and the subsequent characterization of their electrochemical and filtration performances.

The position offers hands-on experience in both electrochemical methods as well as membrane filtration.

For further inquiries and application, please contact:

Said Abdu
Department of Microsystems Engineering
Laboratory for MEMS Applications
Room 103-03-029
Tel: 0761 / 203-73262
Email: said.abdu@imtek.de

Dr. Sven Kerzenmacher
Department of Microsystems Engineering
Laboratory for MEMS Applications
Room 103-03
Tel: 0761 / 203-73218
Email: kerzenma@imtek.de