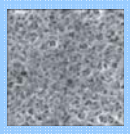
EUROMBRA

SIXTH FRAMEWORK PROGRAMME

eawag aquatic research

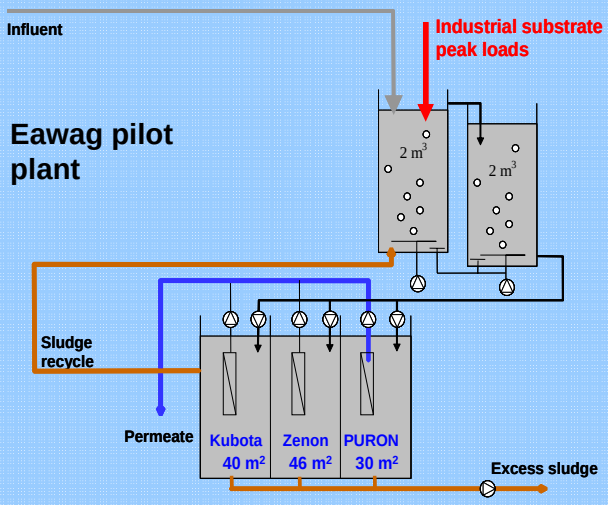


EUROMBRA is a research project supported by the EUROPIAN UNION (Priority "Global Change and Ecosystems").

In the consortium 18 institutions in the domain of research, industry and waste water disposal co-operate. Central task and objective of this research project are to optimise and to advance the membrane bio-reactor technology (MBR).

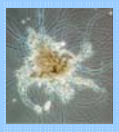
Mitsubishi hollow fibre membrane

Eawag pilot plant



Eawag is focusing on the following goals:

- **comparative performance of various state of the art full scale membrane modules for municipal wastewater treatment, operated in parallel but sharing the same sludge (biology)**
- **impact of peak loads on membrane performance and effluent quality**



- **impact of reactor geometry onto permeability**
- **correlation of long term permeability behaviour with contact time between wastewater and sludge, prior to entering the membrane**
- **analysing the fouling processes and correlating the fouling and clogging tendency with sludge and matrix properties**
- **understanding the long term permeability behaviour with the help of analysing particle size and chemical analysis of particulate matter**
- **recommendations for reactor configuration, design and process control**

Empty reactor with HUBER membrane

Reactor with sludge (aerated)

KUBOTA flat sheet membrane

Eawag: Swiss Federal Institute of Aquatic Science and Technology