Nutrients recovery by forward osmosis forward osmosis for concentration of anaerobic digester centrate



Recent development in the membrane technology indicates that forward osmosis (FO) has a high potential for wastewater treatment, concentrating nutrients and producing high quality water. This study investigated the feasibility of applying forward osmosis (FO) dewatering process for nutrient recovery from anaerobic digestate as part of **MEMENTO** (http://www.memento.env.dtu.dk/) project in collaboration with **Aquaporin A/S**. The main focus of the experimental study is to evaluate FO performance based on flux, recoverable flux (flux after cleaning) and nutrient rejection (ammonium and phosphate) and to estimate the FO cost. Further the membrane fouling study will be conducted in connection with the biomimetic group activity.

Project type

Topic is suitable for MSc project

Pre-requisite

Experience with separation processes

Group size

1-2 students

Department of supervisors

Main supervisor: DTU Environment/Aquaporin A/S

Co-supervisor: DTU Environment

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