

20-11 Steam and Condensate Quality Water Process Technology



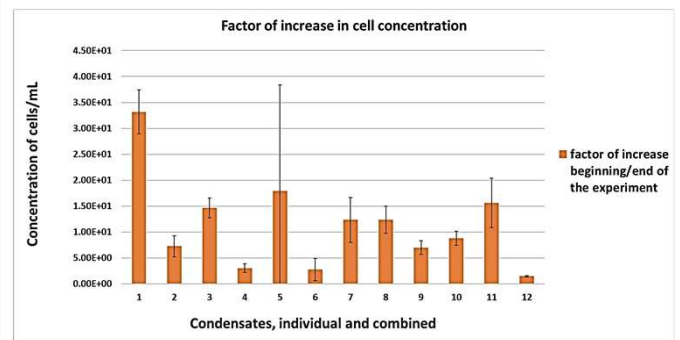
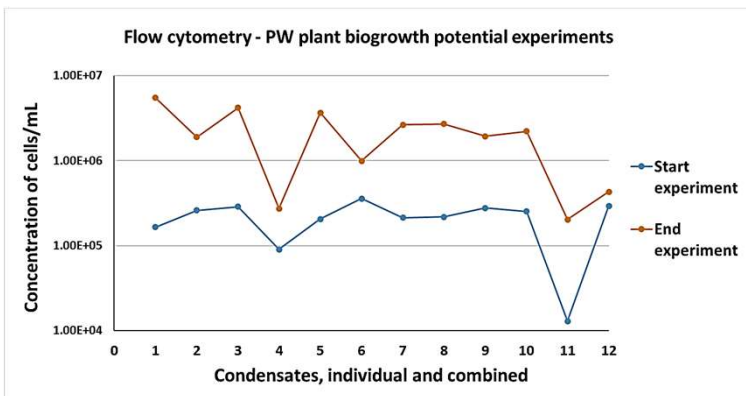
Partners: Dow Benelux B.V., Ghent University, Evides Industriewater, Sitech Services, KWR, Kurita Europe GmbH

WP2 – Development of technologies for treatment and reuse of petro(chemical) condensates

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WP2a: technologies for pretreatment of mildly polluted condensates

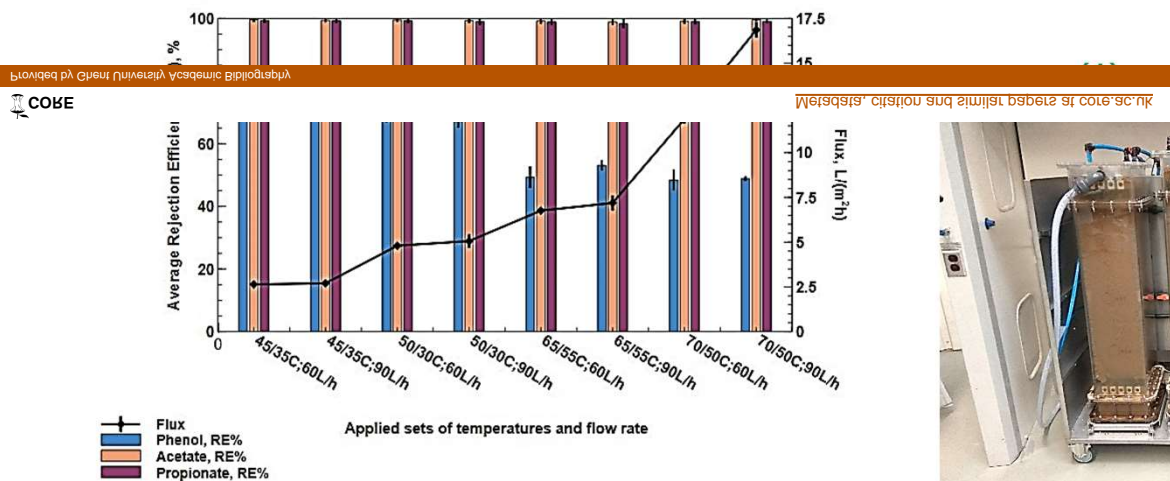
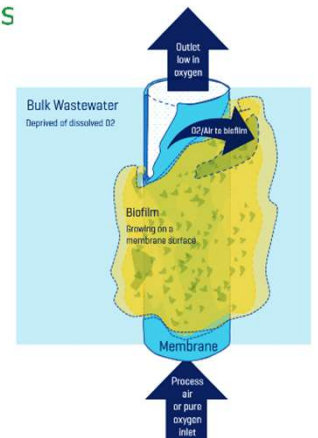
- Causing biogrowth on polishing Ion Exchange resins (IEX) → loss of pressure in IEX units
- Problematic streams → to be defined robust pretreatment



WP2b: technologies for treatment of heavily polluted condensates

- Discharged at the WWTP → excessive load and loss of process heat
- Individual treatment →
- ✓ Reuse of water – OxyMem/MABR (1)
- ✓ Recovery of heat energy – Membrane Distillation (MD) (2)
- ✓ Combination of both in different scenarios

(2)



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