

Feasibility Study of Applying Anaerobic Step-Feeding Mode for the Treatment of High-Strength Wastewater in Granular Sequencing Batch Reactors (GSBRs)

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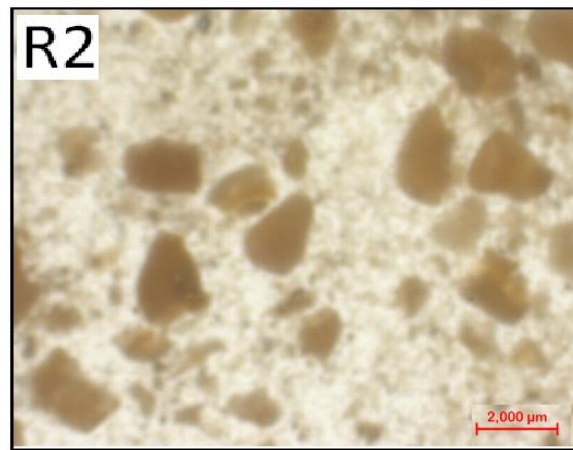
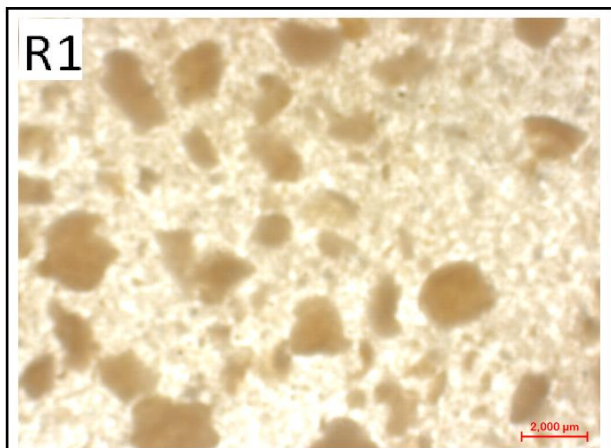
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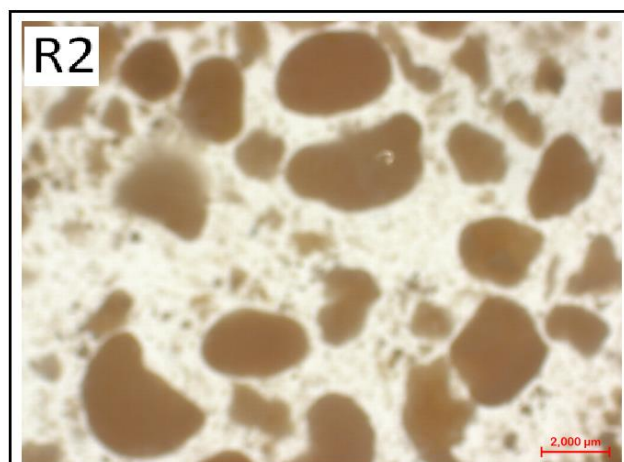
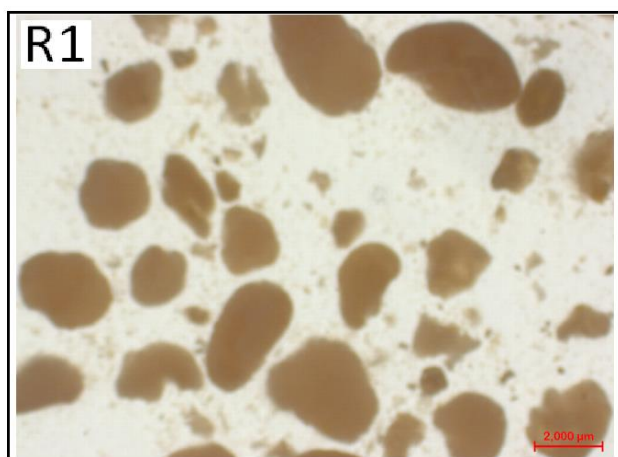
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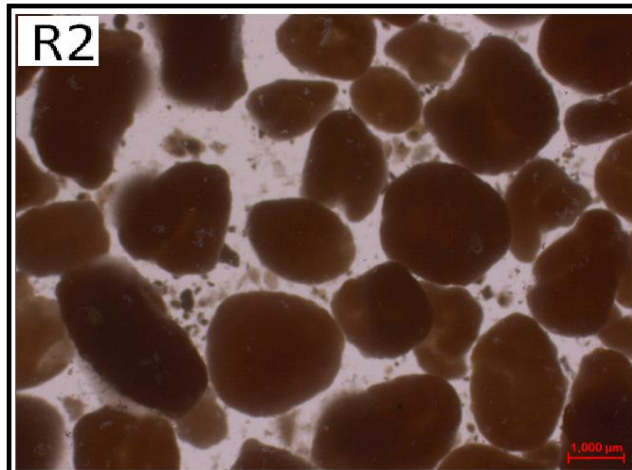
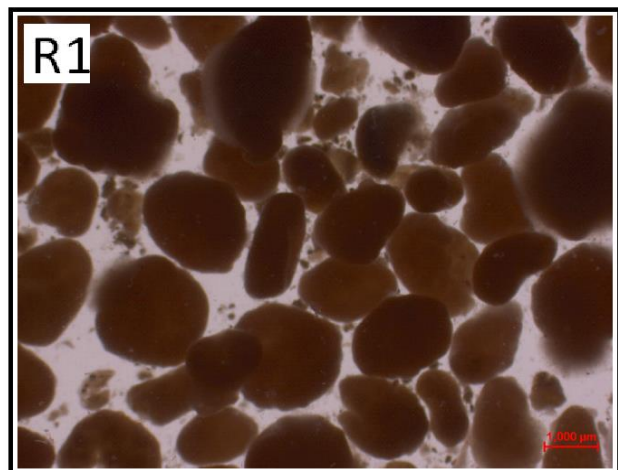
Figure S1. GSBRs (R1 and R2) in operation



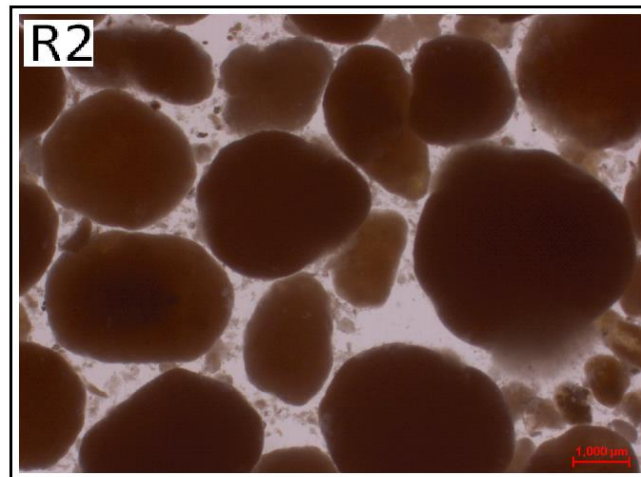
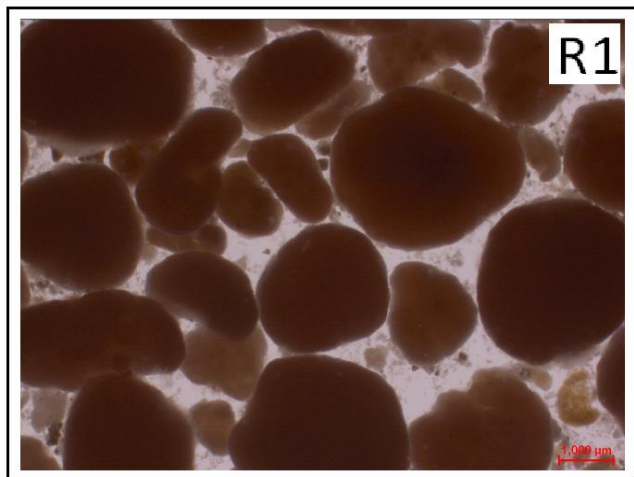
(a)



(b)



(c)



(d)

Figure S2. (a). Microscopic images of the formed granules in both reactors on day 50 (during of the cultivation stage) (b). Microscopic images of the formed granules in both reactors on day 120 (end of the cultivation stage). (c). Microscopic images of the formed granules in both reactors on day 210 (during the maturation stage) (d). Microscopic images of the formed granules in both reactors on day 300 (end of the maturation stage).

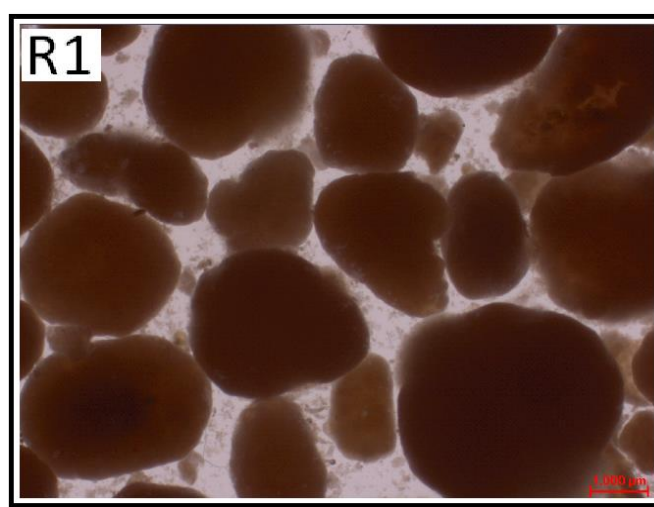
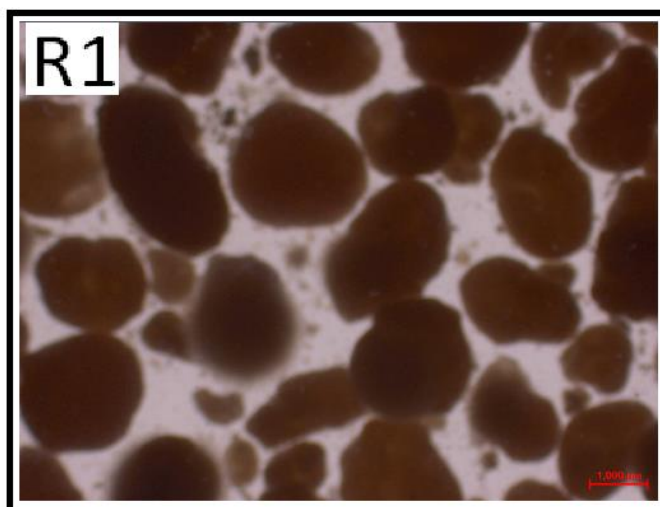


Figure S3. Microscopic images of the formed granules in R1 during stage III (day 301 until 360)

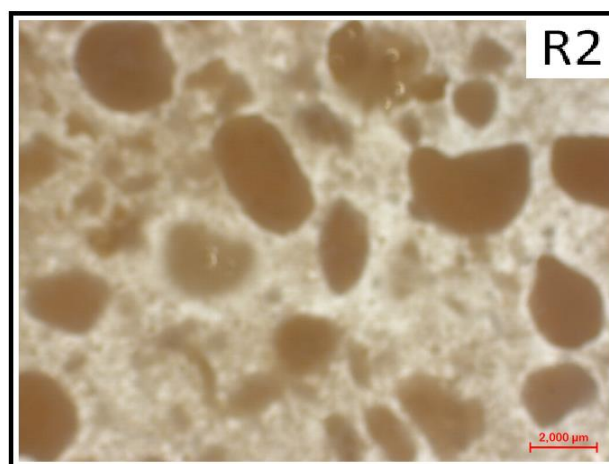
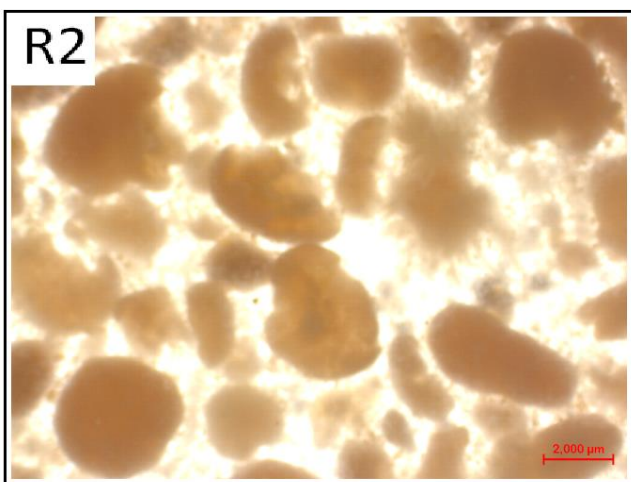
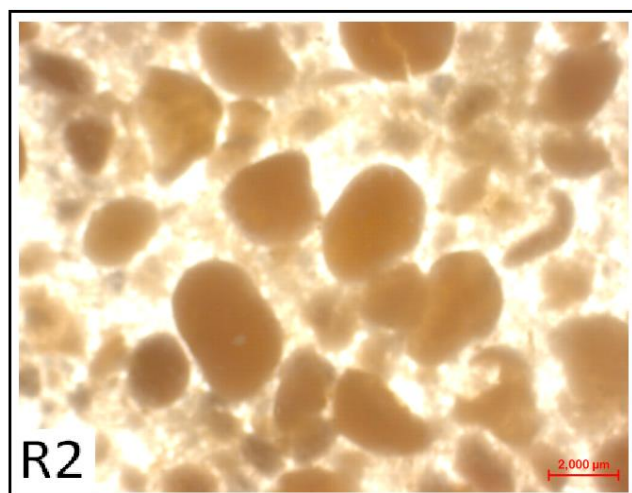
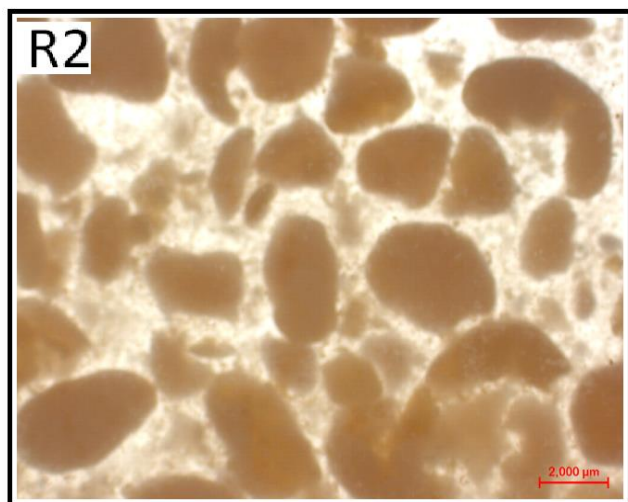


Figure S4. Microscopic images of the formed granules in R2 after applying anaerobic step-feeding mode (during stage III; day 301 until 360)

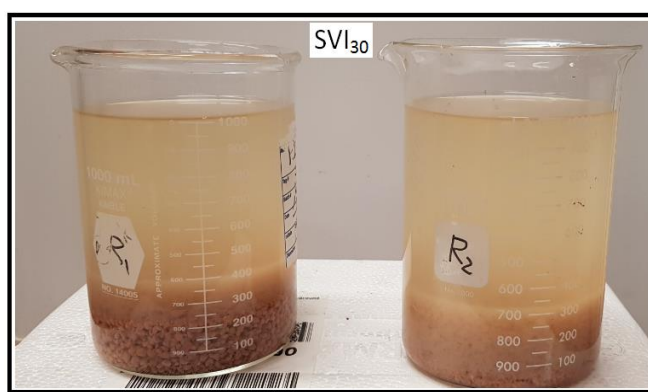


Figure S5. Measurements of SVI₅ and SVI₃₀ for both reactors in day 352 (deterioration of the AGS in R2 after applying anaerobic step-feeding strategy).

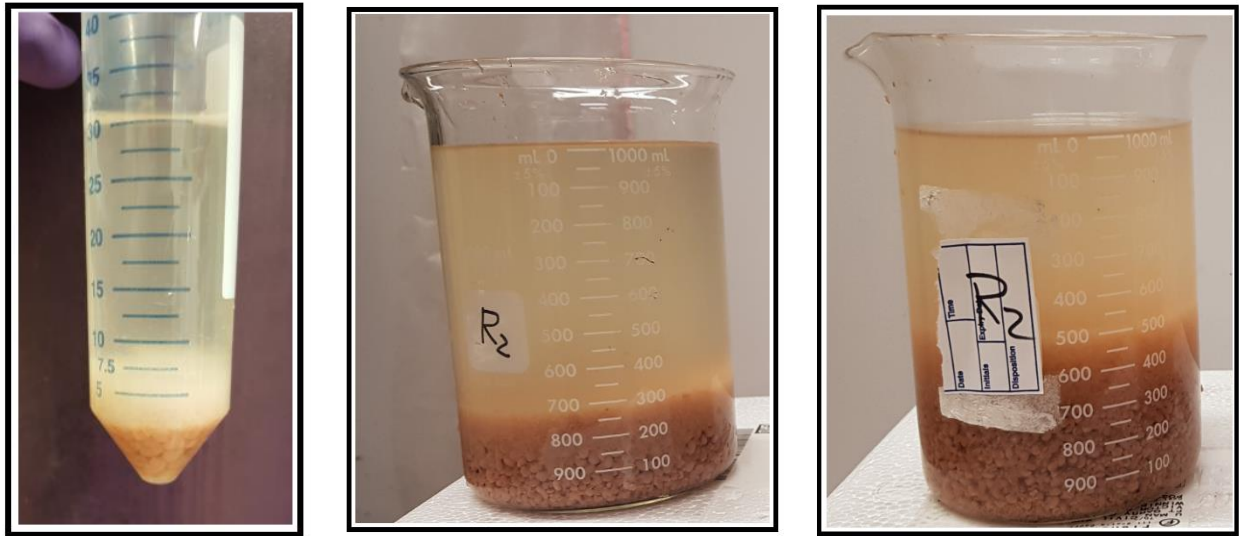


Figure S6. AGS in R2 rapidly lost its structural integrity, after changing the filling mode to anaerobic step-feeding, resulting in loose and fluffy aggregates

Figure S7. Biomass samples for both reactors in day 342 (stage III, after change feeding mode for R2) showing the disintegration of the AGS in R2 which caused higher content of TSS concentrations in its effluents compared to R1.

