

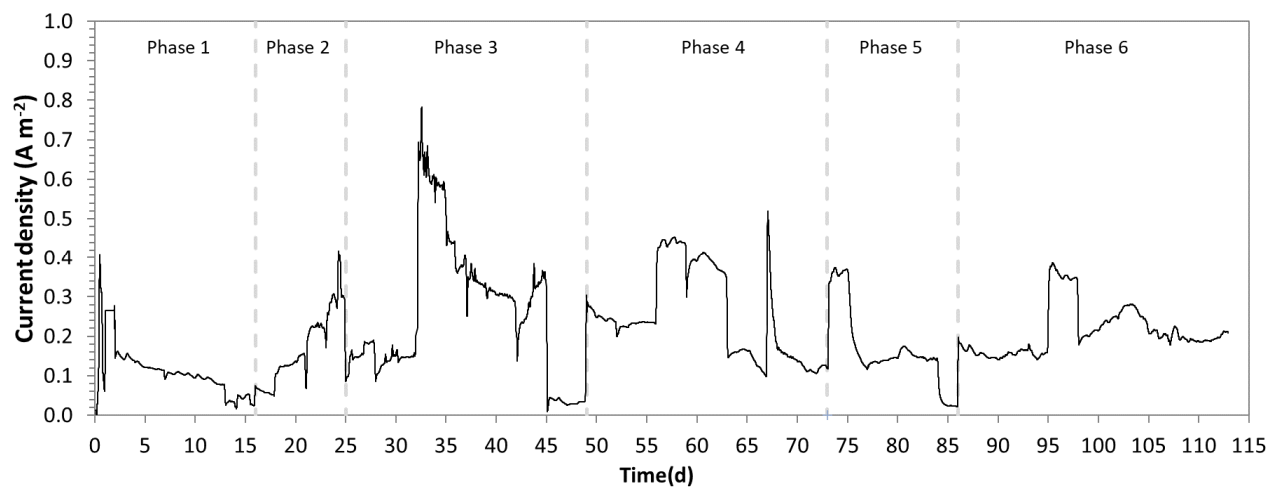
# **Ammonium and Phosphate Recovery in a Three Chambered Microbial Electrolysis Cell: Towards Obtaining Struvite from Livestock Manure**

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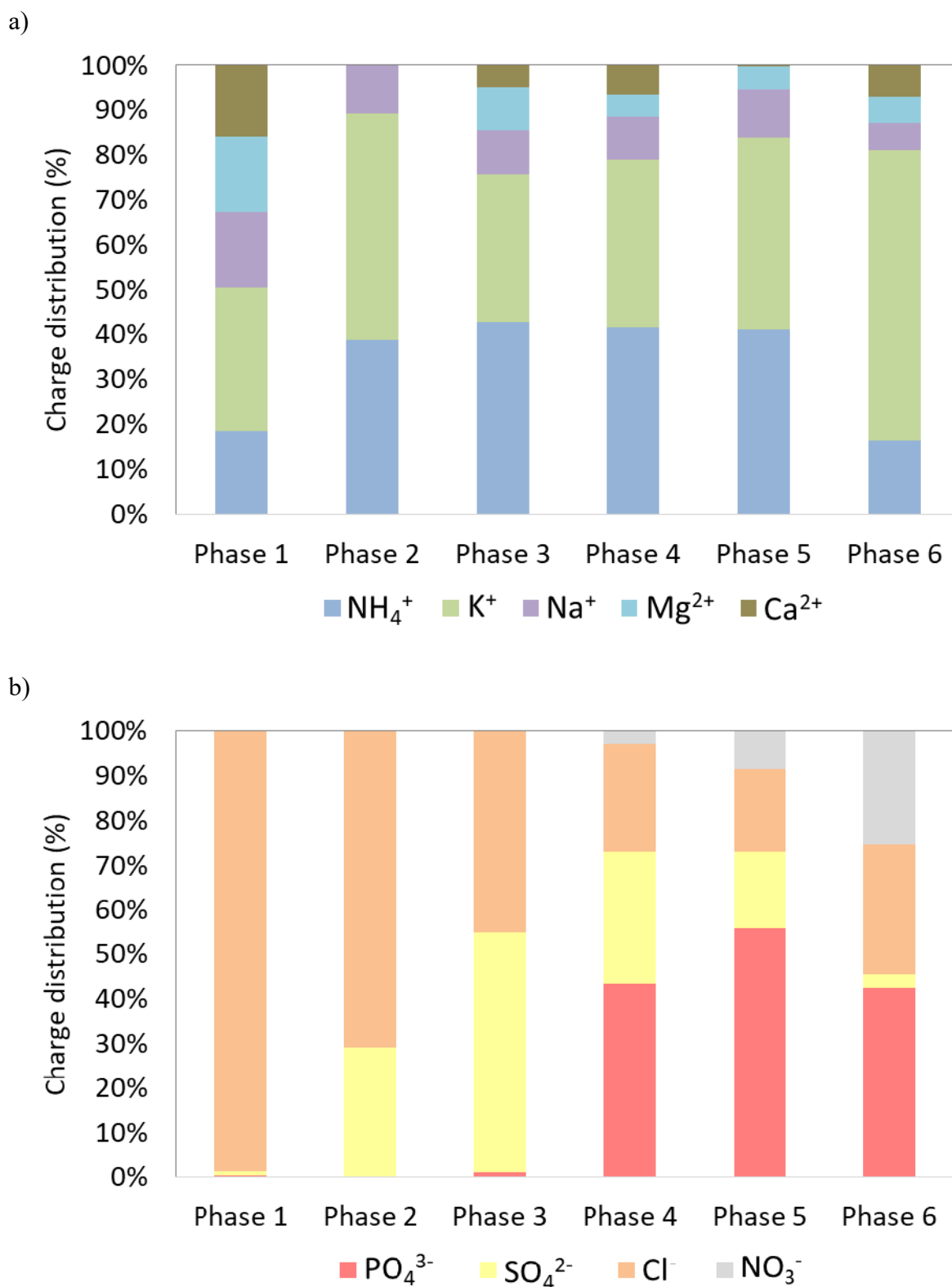
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## **Supporting Information**

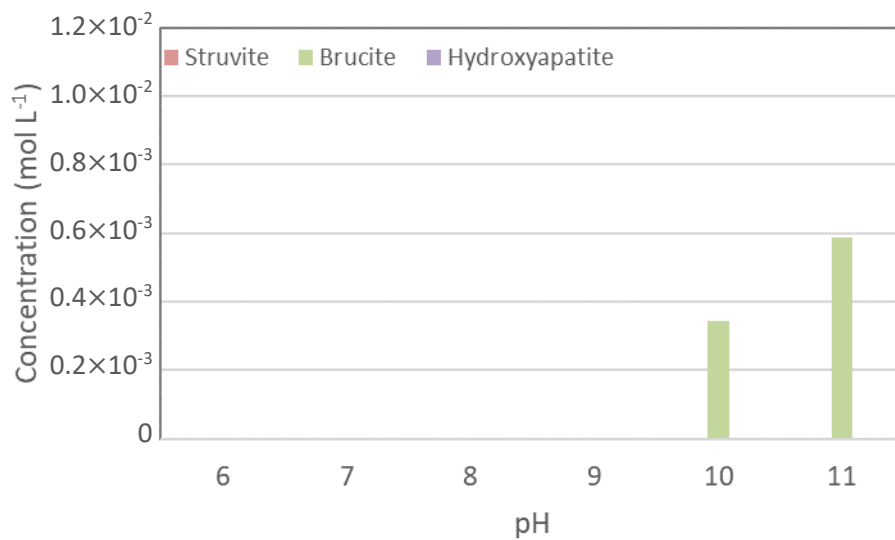


**Figure S1.** Current density produced in the MEC in the different phases of operation. Phase 1: not amended feeding was used; Phase 2: catholyte acidified to pH 6; Phase 3: catholyte acidified to pH 5; Phase 4: catholyte acidified to pH 5 and phosphate amended; Phase 5: phosphate amended catholyte; and Phase 6: phosphate amended anolyte.

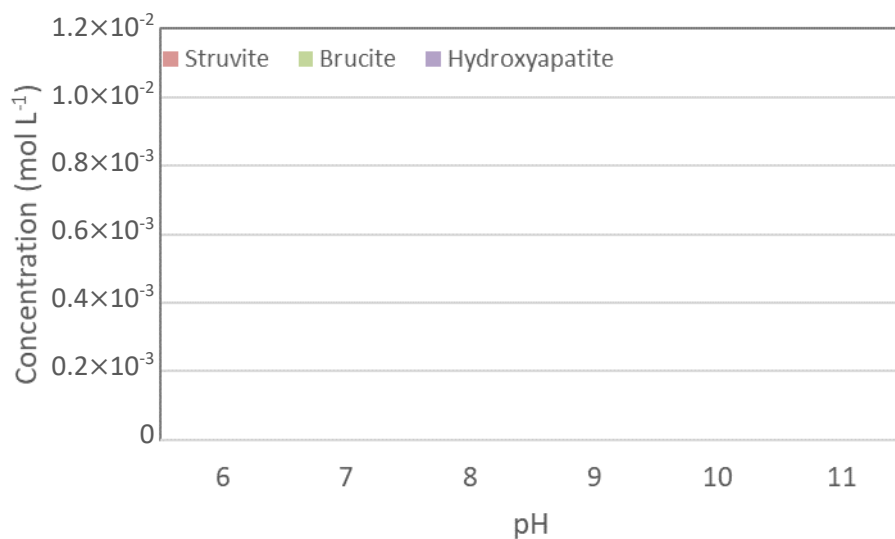


**Figure S2.** Charge distribution of the solutions recovered in each phase in the intermediate compartment a) cations and b) anions.

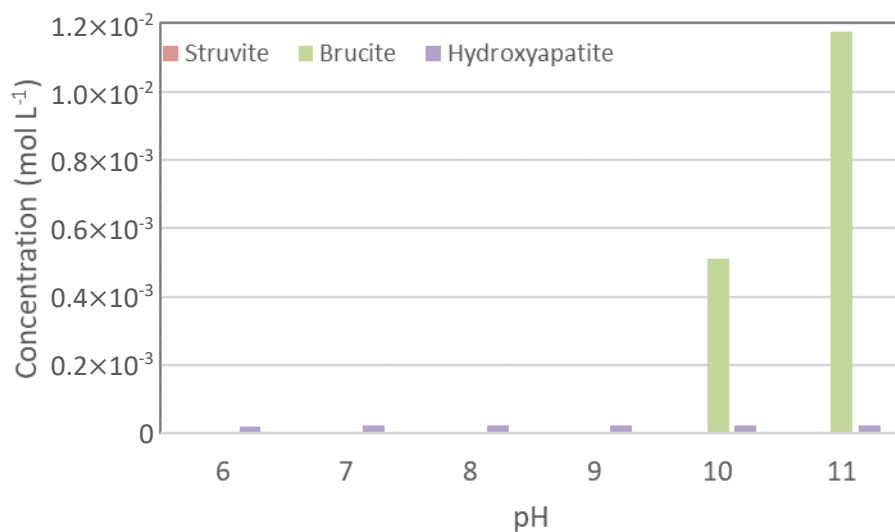
a)



b)

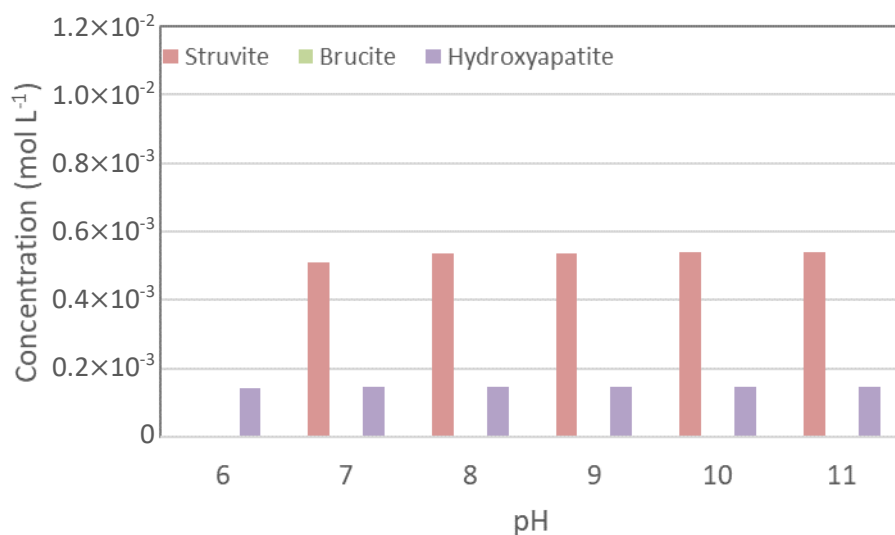


c)

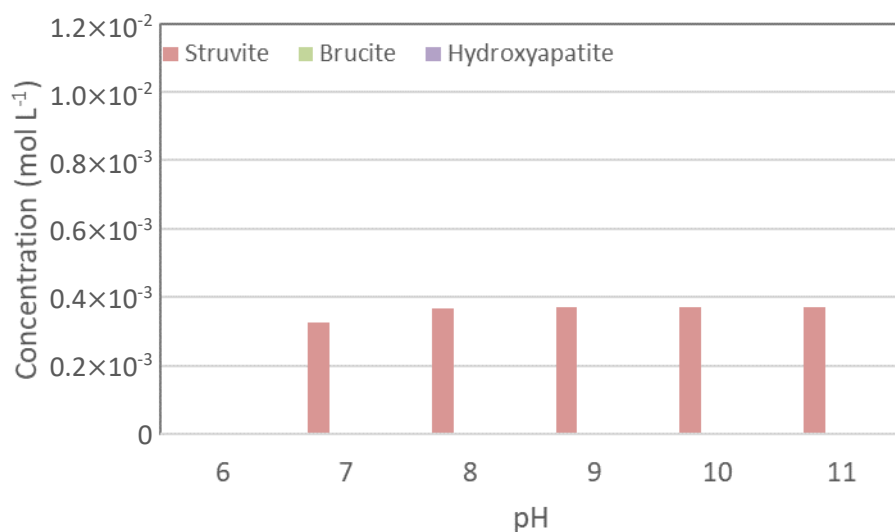


**Figure S3.** Visual Minteq output for the mathematical calculation of struvite and other salts precipitation when increasing pH from value 6 to 11 with each recovery solution obtained in the different operation phases. a) Phase 1: not amended feeding was used; b) Phase 2: catholyte acidified to pH 6; c) Phase 3: catholyte acidified to pH 5.

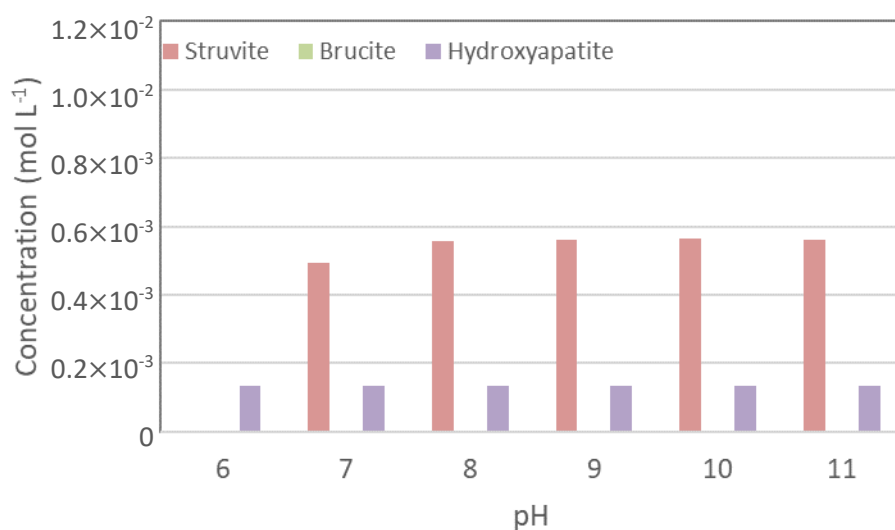
d)



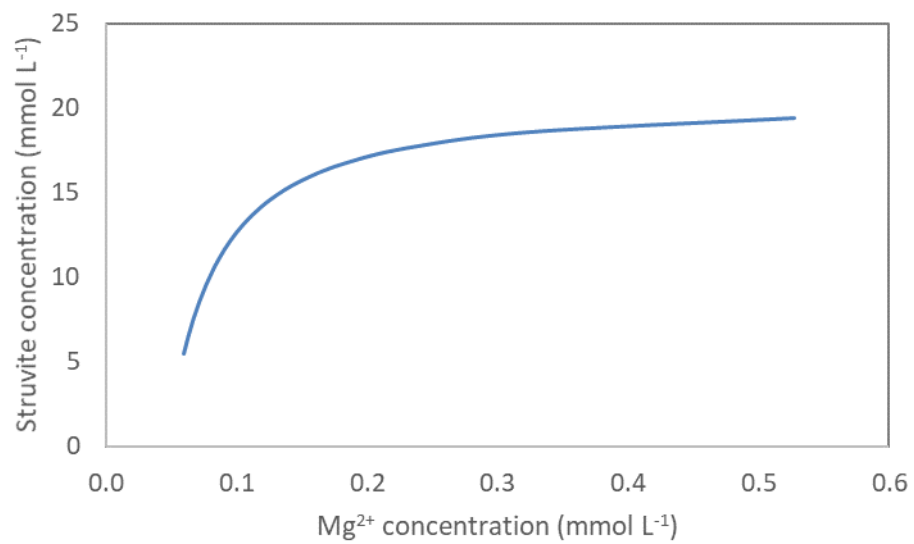
e)



f)



**Figure S3 cont.** Visual Minteq output for the mathematical calculation of struvite and other salts precipitation when increasing pH from value 6 to 11 with each recovery solution obtained in the different operation phases. d) Phase 4: catholyte acidified to pH 5 and phosphate amended; e) Phase 5: phosphate amended catholyte; and f) Phase 6: phosphate amended anolyte.



**Figure S4.** Visual Minteq output for the mathematical calculation of struvite obtained at pH 8 with the recovery solution of Phase 6 amended with increasing concentrations of magnesium.