

# Electronic Supplementary Information (ESI)

## Flotation using sodium dodecyl sulphate and sodium lauroyl isethionate for rapid dewatering of $\text{Mg}(\text{OH})_2$ radwaste suspensions

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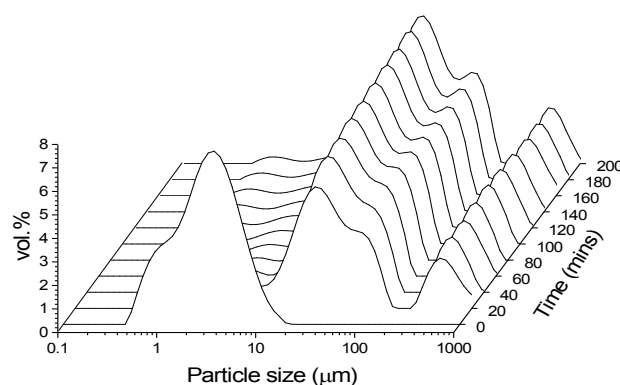


Figure S1: The change in the volume based (vol%) particle size distribution of  $\text{Mg}(\text{OH})_2$  agitated at 900 rpm and dosed with  $10^{-2}$  M  $\text{KNO}_3$  with time.

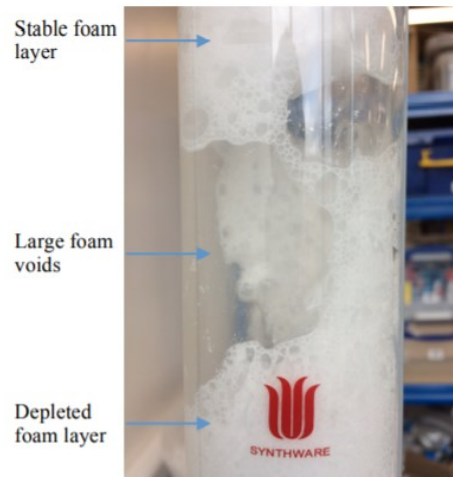


Figure S2: Photograph of Birkman column during foamability tests, showing stabilised collapsed foam layers preventing further foamability readings.

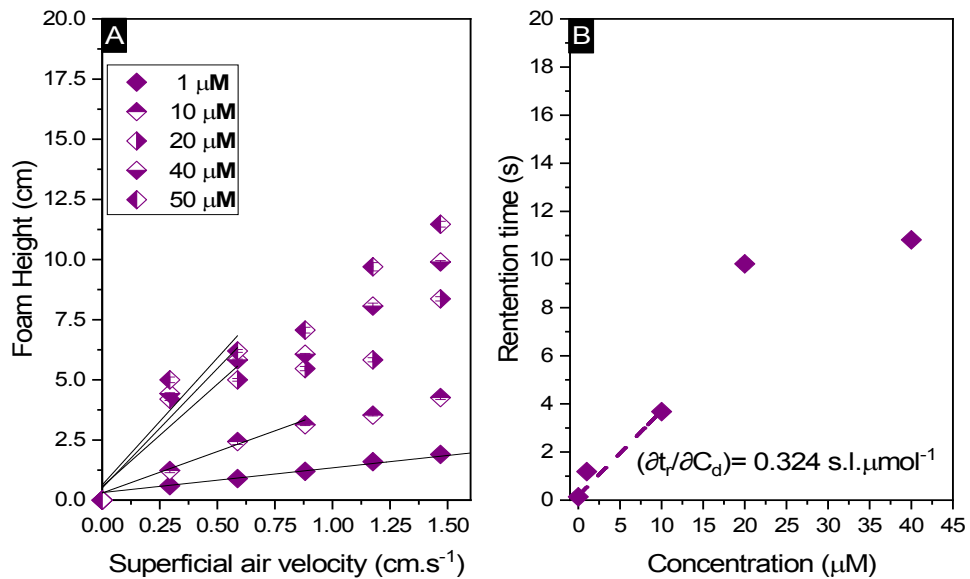


Figure S3: A) The change in foam height with superficial air velocity for sodium lauroyl isethionate without  $\text{Mg}(\text{OH})_2$  particles. B) The retention time variation (calculated using Eqn. 2) with collector/frother concentration.