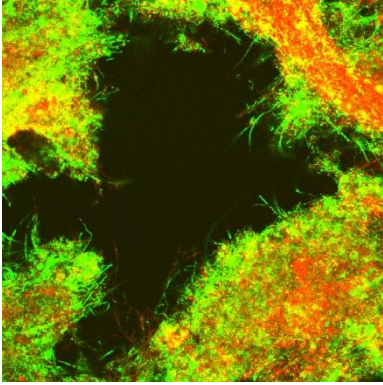


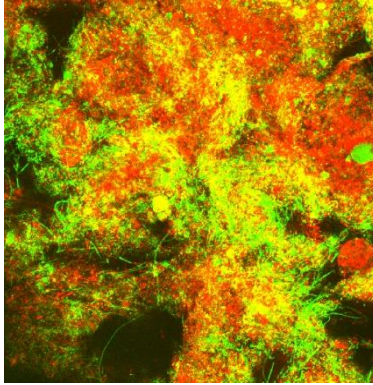
Supplementary Material

pH/Treatment	Holding Time	Temperature
5	2h, 12h, 24h	Ambient
5.5	2h, 12h, 24h	Ambient
6	2h, 12h, 24h	Ambient
9	2h, 12h, 24h	Ambient
9.5	2h, 12h, 24h	Ambient
10	2h, 12h, 24h	Ambient
11	2.5h, 24h	70 ^o C, Ambient

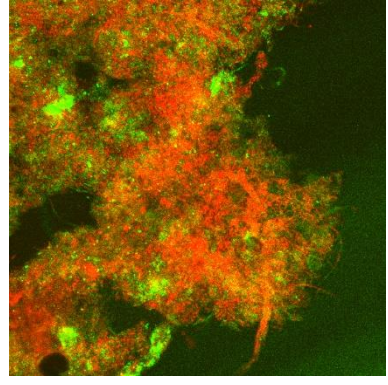
S 1 Holding times and temperature conditions for acid/alkali treatment using west point sludge



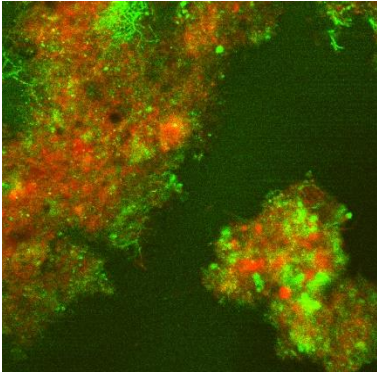
a.



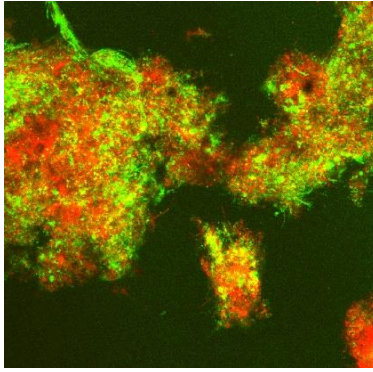
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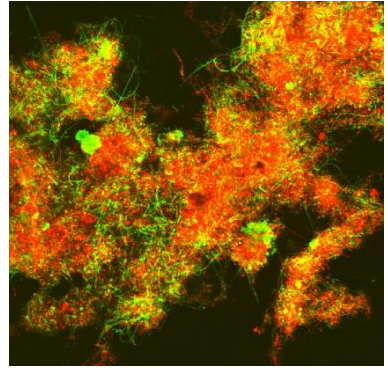
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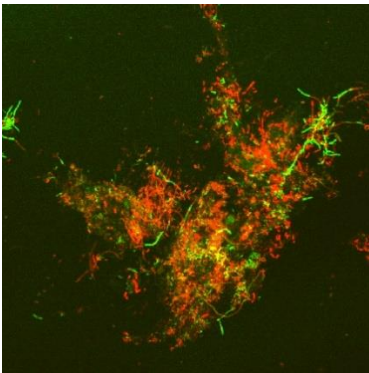
d.



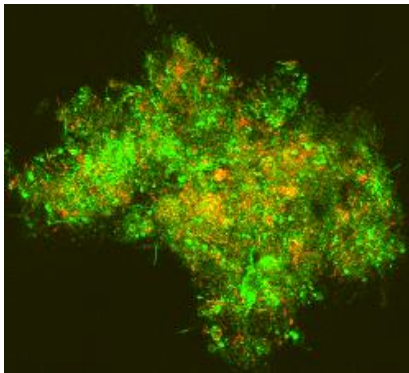
e.



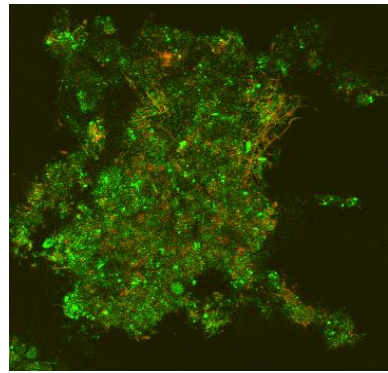
f.



g.



h.



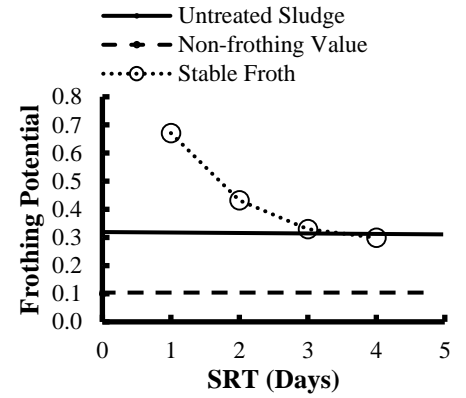
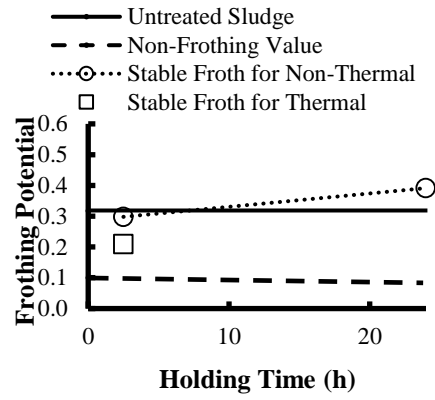
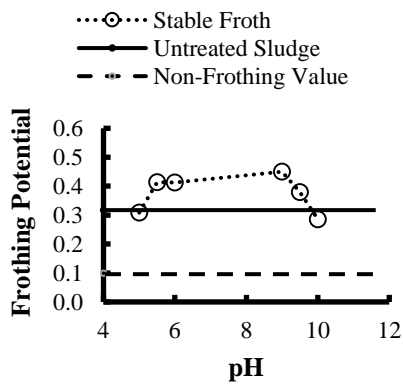
i.

S 2 Microscopic images of live/dead stained cells

a) Acid-Phase 1-Day SRT **b)** Acid Phase 2-Day SRT **c)** Acid-Phase 3-day SRT **d)** pH 6-at24h holding time **e)** pH 9- 24h **f)** pH 9.5 at 24h holding time **g)** pH 11 at 2.5h holding time without thermal treatment **h)** Sonication treatment **i)** FeCl₃ treatment at concentration of 260 g/L

pH	Treatment Conditions	% Decrease in Unstable Foaming Index	% Decrease in Stable Foaming Index
10	24h Holding Time/ 48h Aeration	75	77
9.5	24h Holding Time/ 48h Aeration	71	78
6	24h Holding Time/ 48h Aeration	70	84
5.5	24h Holding Time/ 48h Aeration	68	79
5	24h Holding Time/ 48 h Aeration	68	79
9	24h Holding Time/ 48h Aeration	66	78
10	24h Holding Time/ 0h Aeration	56	55
9	24h Holding Time/ 0h Aeration	48	74
9.5	24h Holding Time/ 0h Aeration	40	69
5	24h Holding Time/ 0h Aeration	13	47
5.5	24h Holding Time/ 0h Aeration	12	47
6	24h Holding Time/ 0h Aeration	11	66

S 3 Effect of pH, aeration and holding times on percentage decrease on stable foaming index and unstable foaming index for Olympia LOTT waste activated sludge



a.

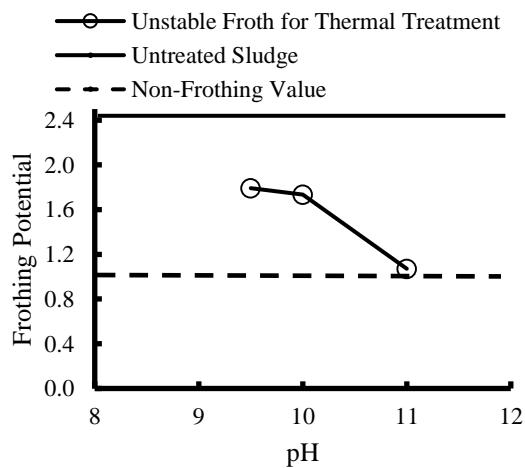
b.

c.

S 4 Effect of pH Treatment and Acid-Phase Fermentation on Stable Foaming Potential a) Effect of pH Treatment and 24h holding time b) pH 11-with and without Thermal c) acid-phase fermentation batch tests

pH	Holding Time (h)	% Decrease in Unstable Foaming Potential
5	2	-10.88
5	12	21.50
5	24	34.95
5.5	2	-5.11
5.5	12	22.29
5.5	24	34.29
6	2	-10.17
6	12	1.16
6	24	22.13
9	2	-15.40
9	12	22.21
9	24	29.51
9.5	2	-6.85
9.5	12	25.36
9.5	24	36.53
10	2	18.18
10	12	42.76
10	24	36.45

S 5 Effect of holding times and pH change on percentage decrease in unstable foaming index for West Point Sludge



S 6 Effect of pH on percentage decrease in unstable foaming index for thermal treatment at 2.5h holding time

