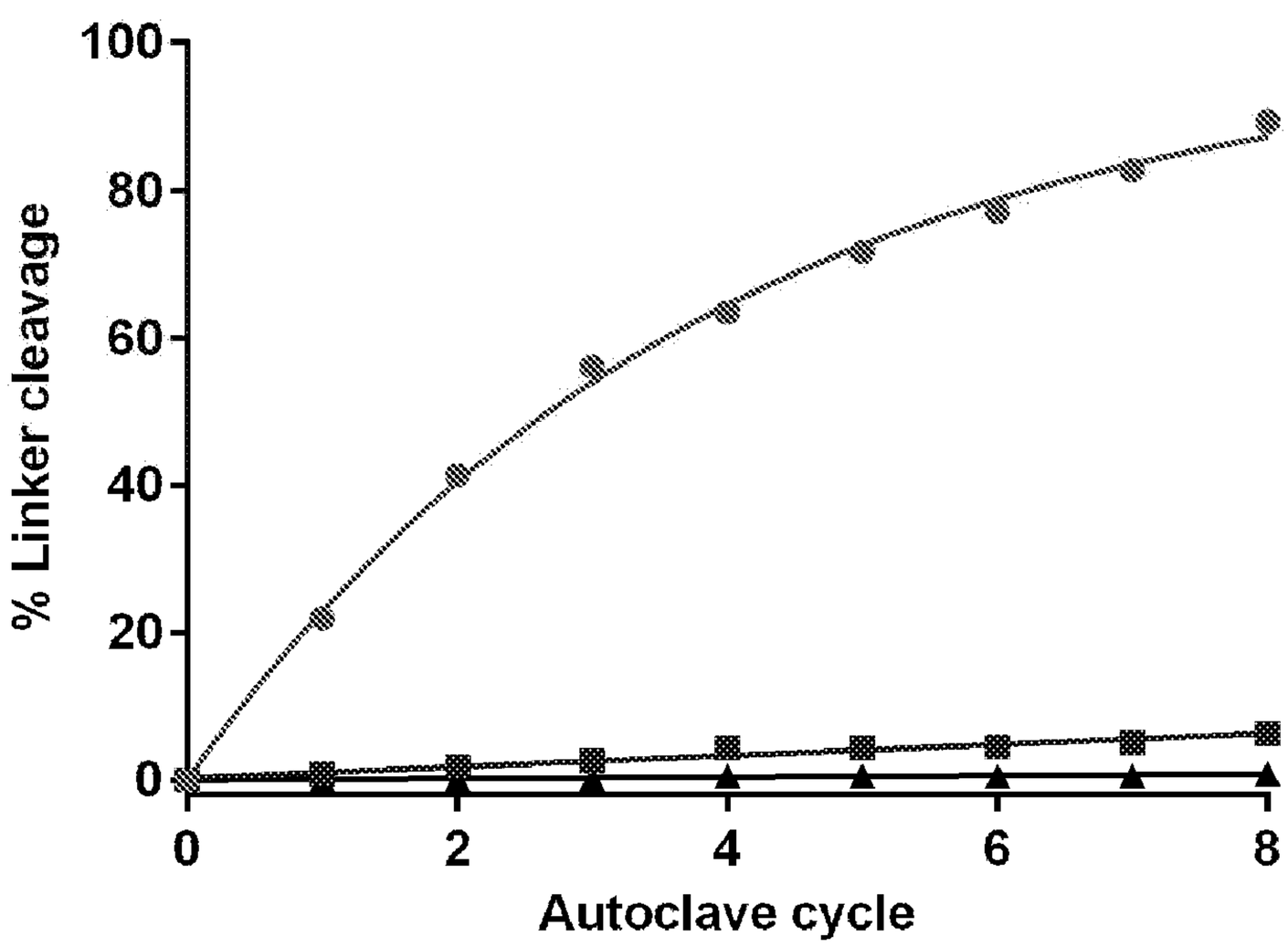
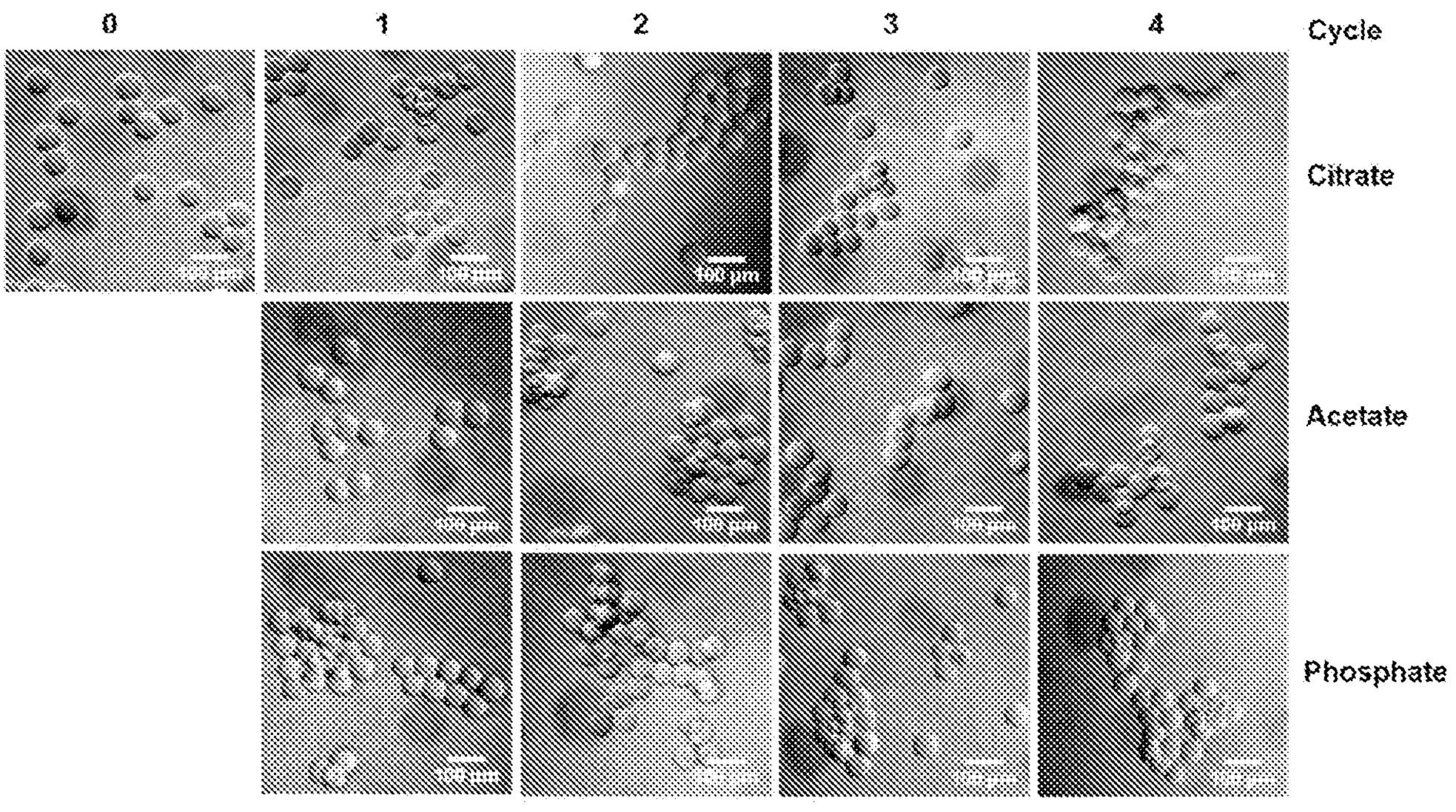
Figure 1



Cleavage of a β-eliminative linker with a $(CH_3)_2SO_2$-N- modulator at pH 4.0, 5.0, or 7.4 at 25 °C or pH 6.2 (-●-), 5.0 (-■-) and 4.0 (-▲-) at 121 °C for eight consecutive autoclave cycles. The buffers, pH at 25 °C and ΔpH/ΔT values used for estimating pH at 121 °C used were: HEPES, pH 7.4, -0.014; acetate, pH 5, -0.0002, and citrate, -0.0024.

Figure 2



Optical microscopy of amino-hydrogel microspheres after 0, 1, 2, 3, or 4 autoclave cycles.

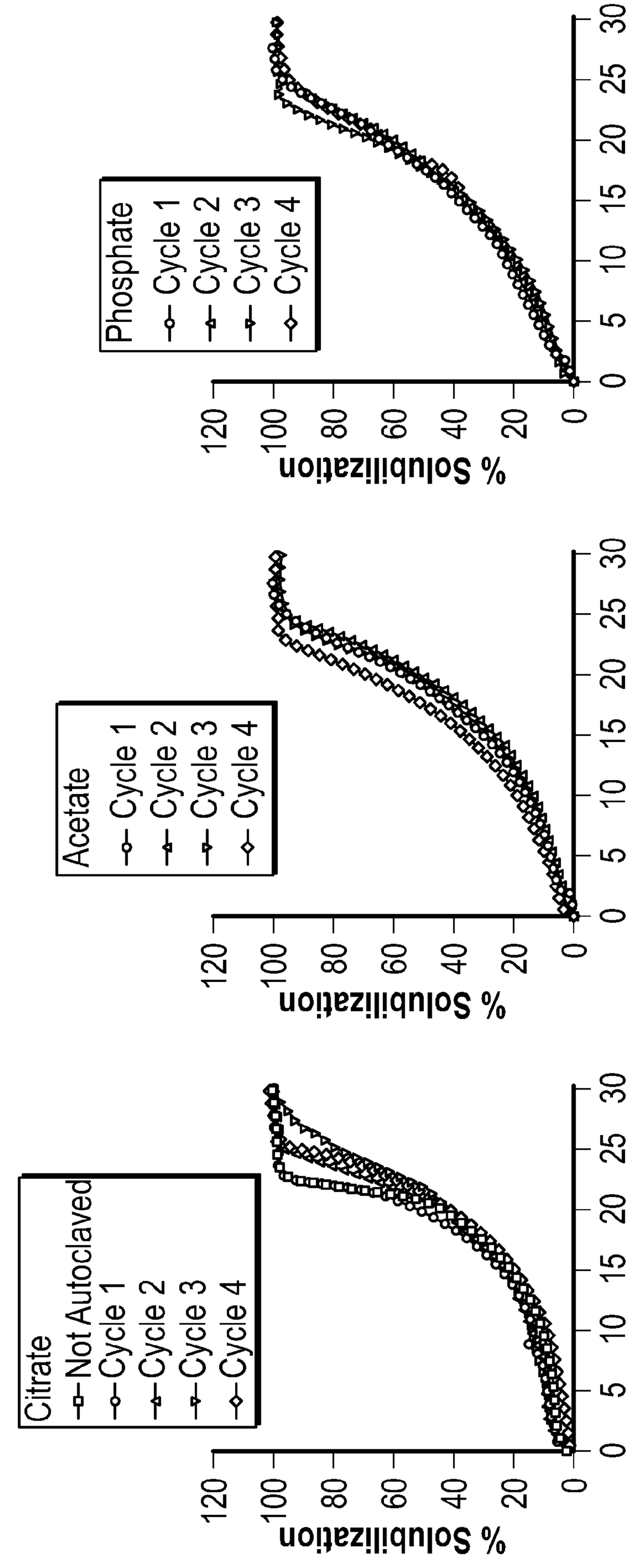


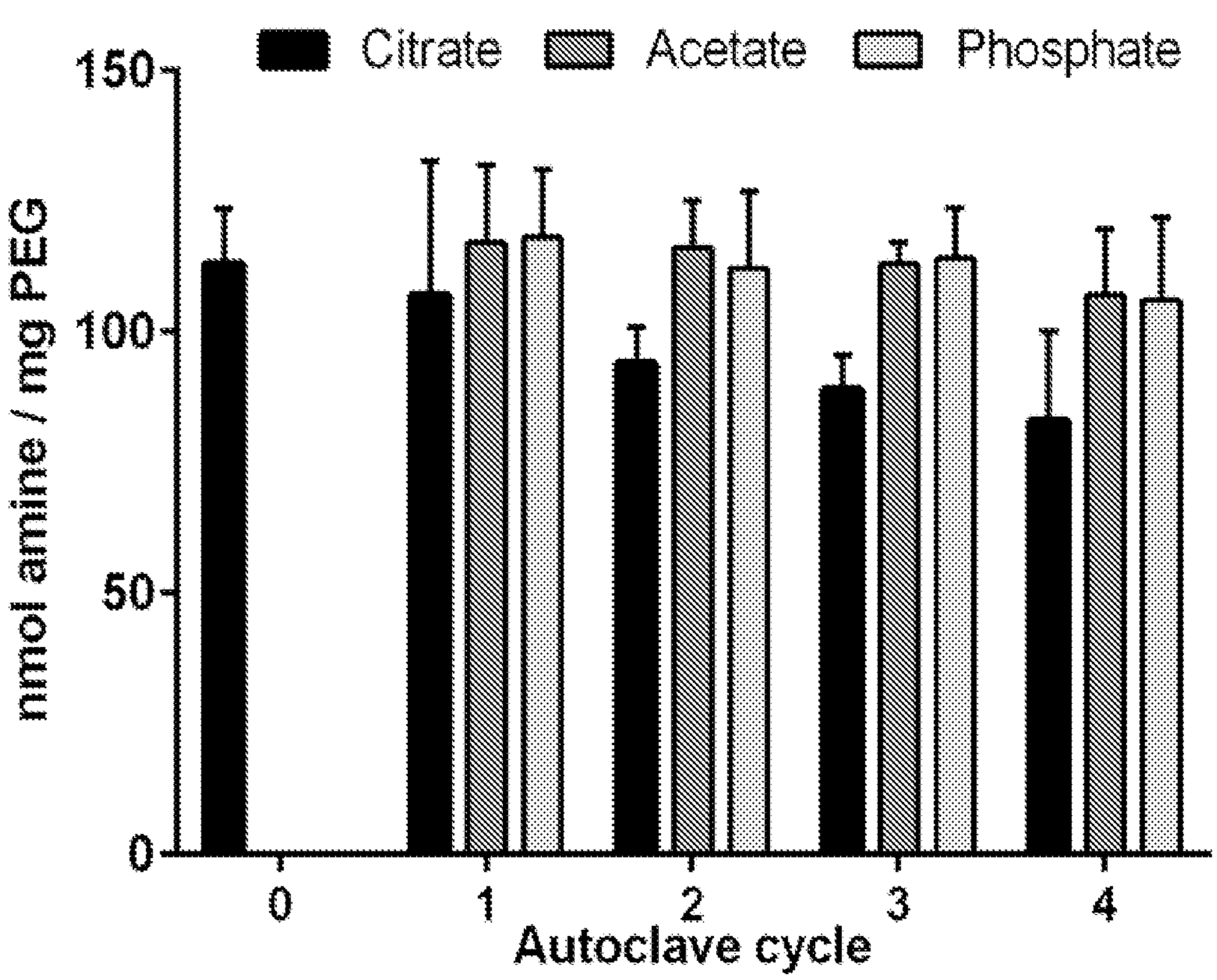
Figure 3C

Figure 3B

Figure 3A

Dissolution curves for amine-MSs with a β-eliminative linker. tRG values are reported in **Table 2**. Amino-hydrogel microspheres autoclaved in A) pH 4.0 citrate B) pH 4.0 acetate, and C) pH 4.0 phosphate compared to non-autoclaved particles.

Figure 4



Ratio of free amine groups to PEG for amino-hydrogel microspheres (R^1 = (N,N-dimethylamino)sulfonyl)) at pH 9.4, after 0-4 autoclave cycles in different buffers

Figure 5

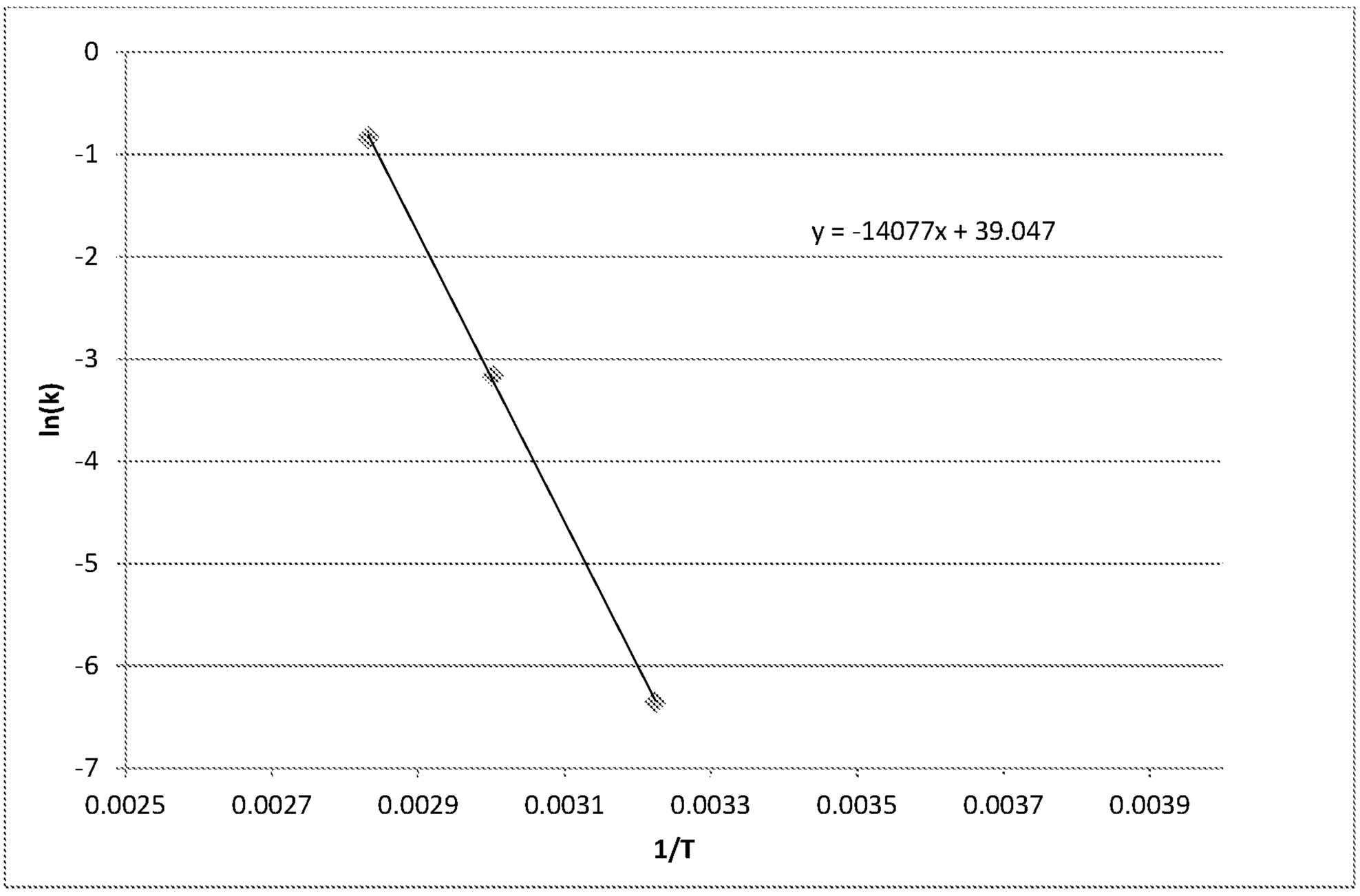

0
-1
-2
-3
-4
-5
-6
-7
ln(k)
y = -14077x + 39.047
0.0025
0.0027
0.0029
0.0031
0.0033
0.0035
0.0037
0.0039
1/T

Figure 6

