

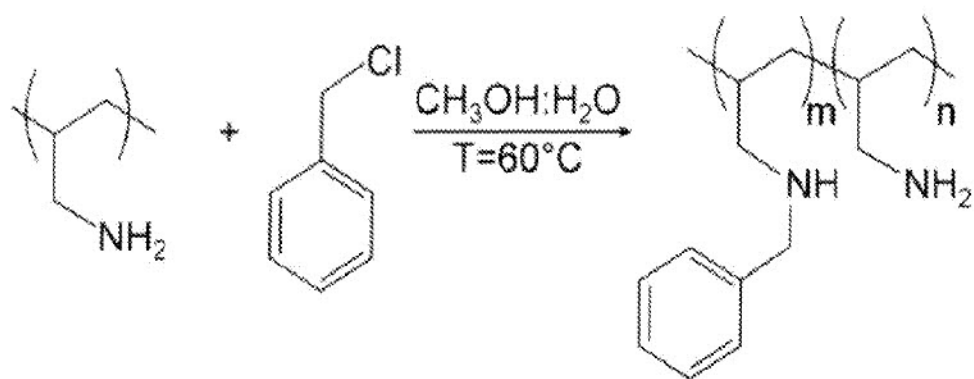


Figure 1

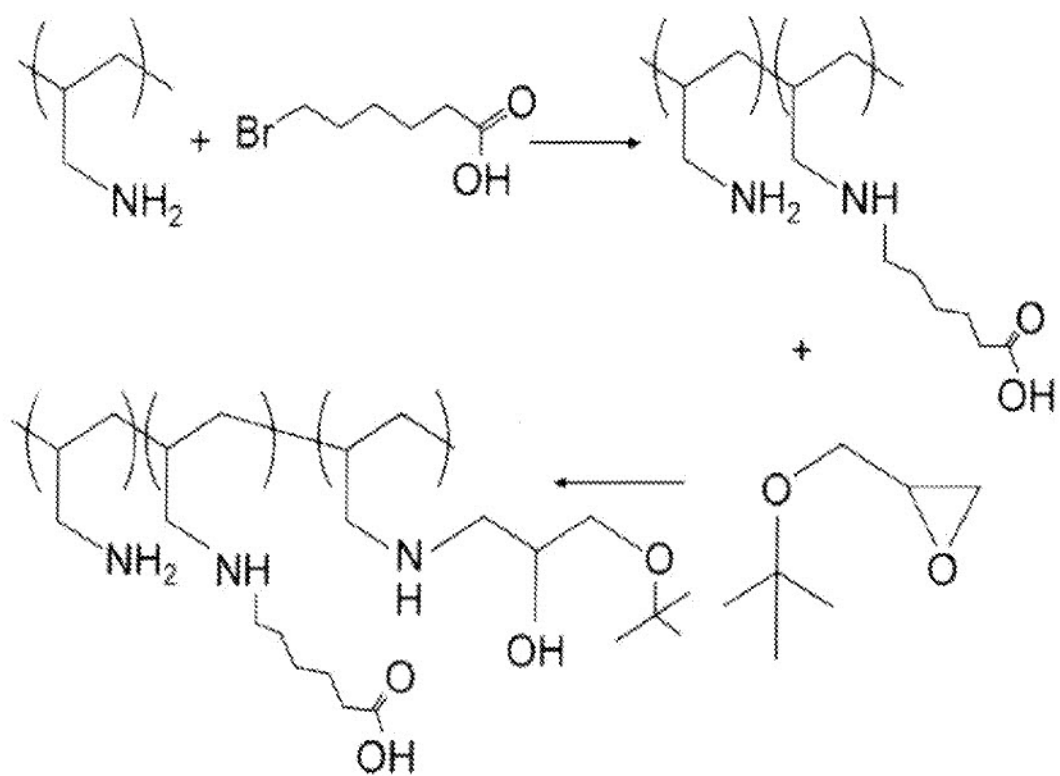
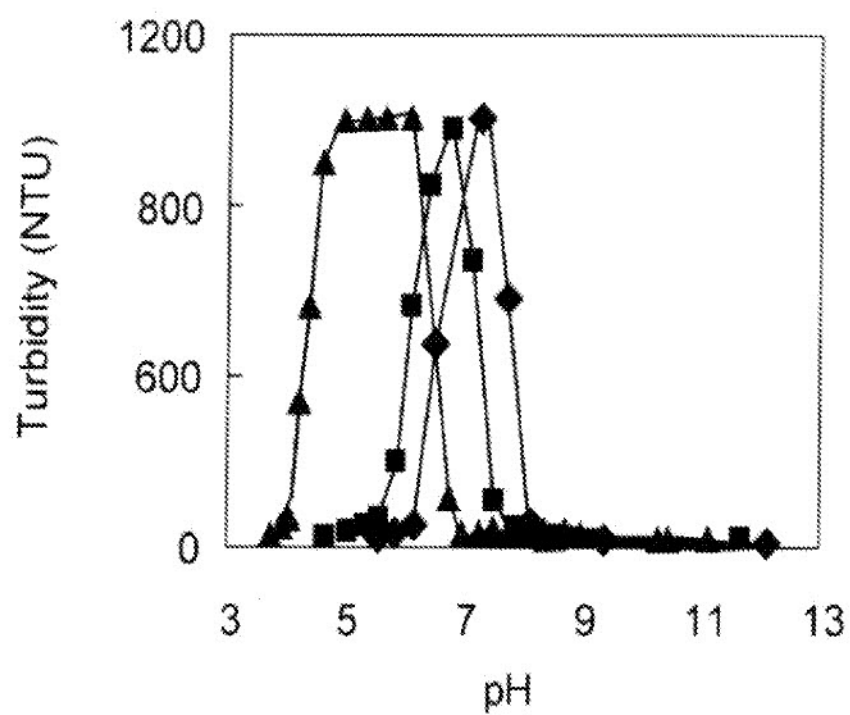


Figure 2



- ◆— 25mM Phosphate
- 25mM Phosphate+0.15 M NaCl
- ▲— 25mM Phosphate+0.5 M NaCl

Figure 3

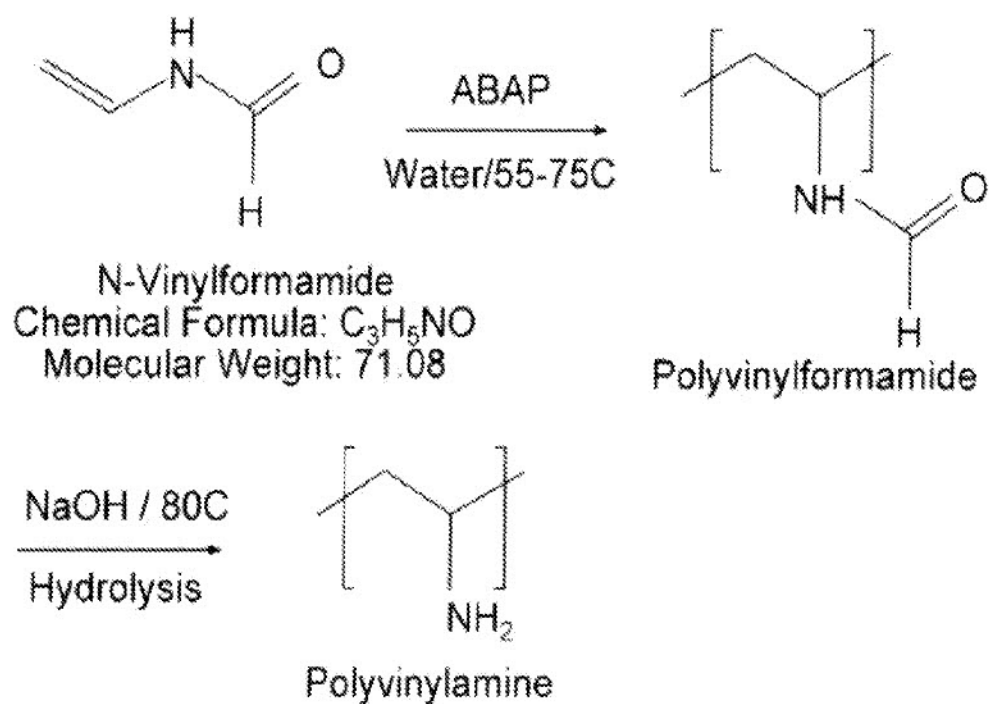


Figure 4

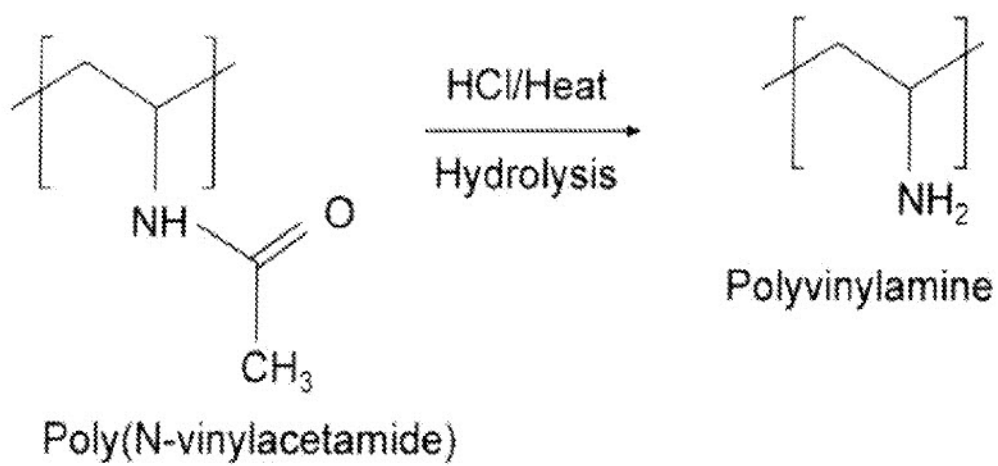


Figure 5

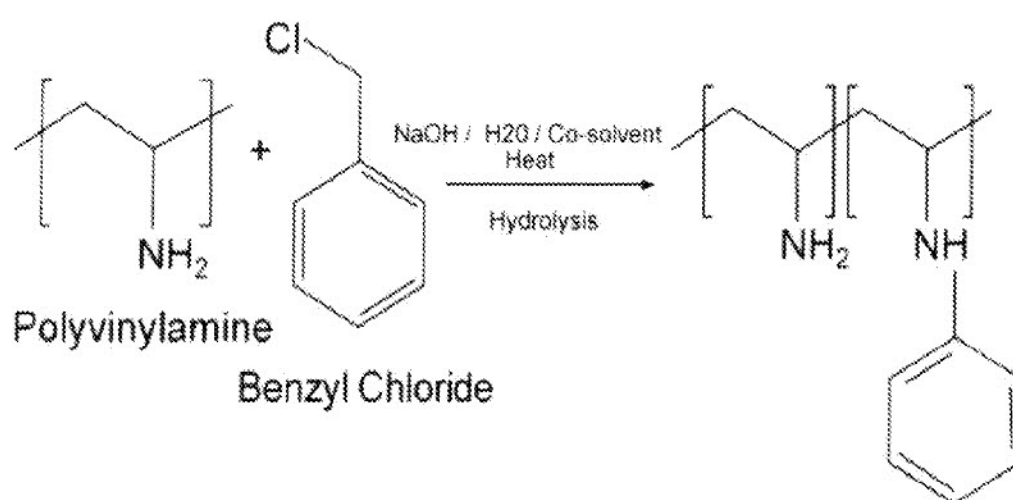
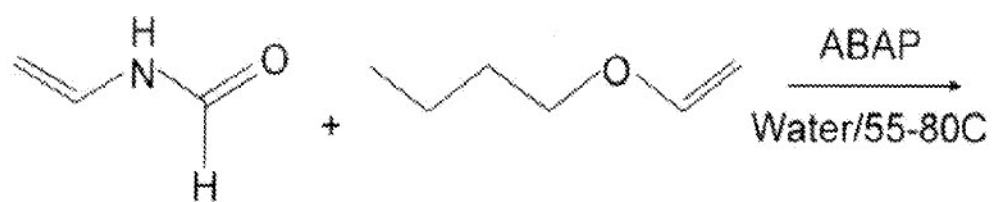
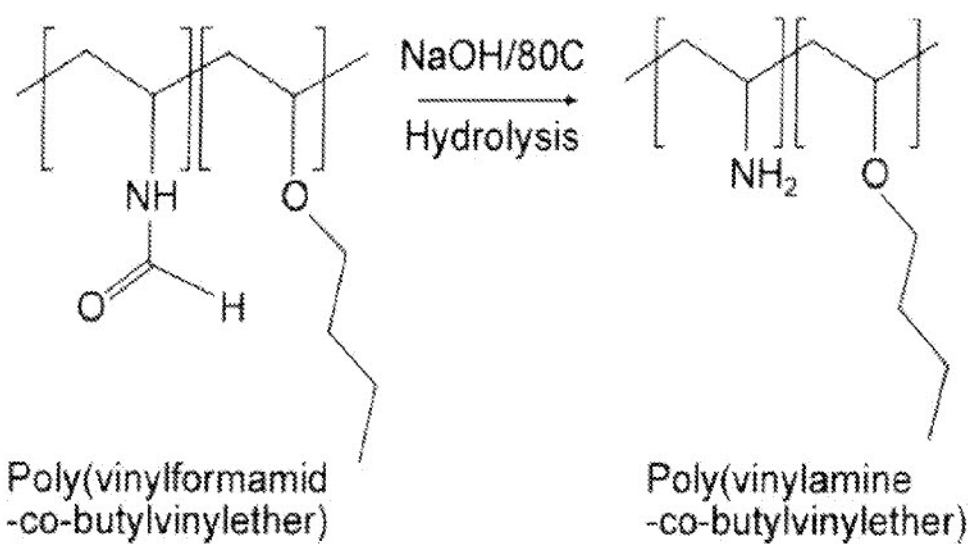


Figure 6



N-vinylformamide

vinylbutylether



Poly(vinylformamid
-co-butylvinylether)

Poly(vinylamine
-co-butylvinylether)

Figure 7

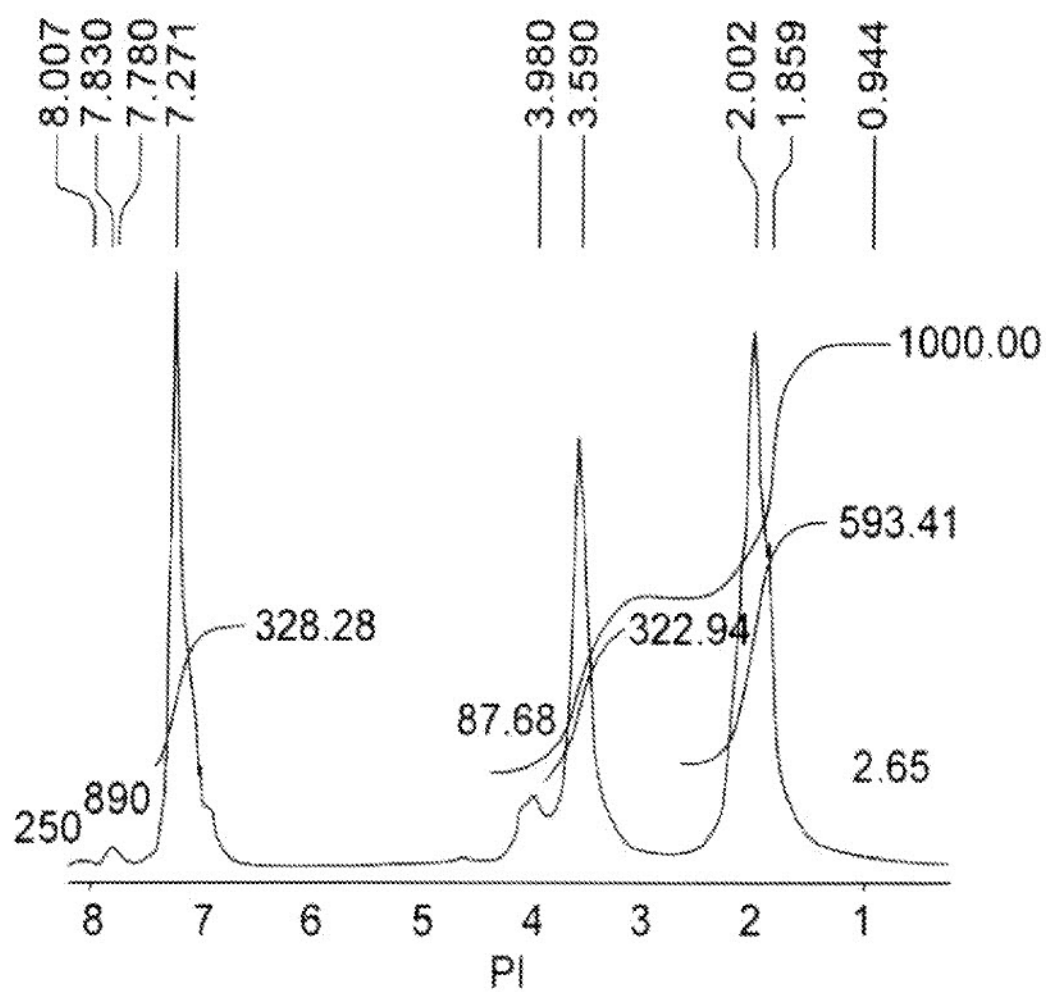


Figure 8

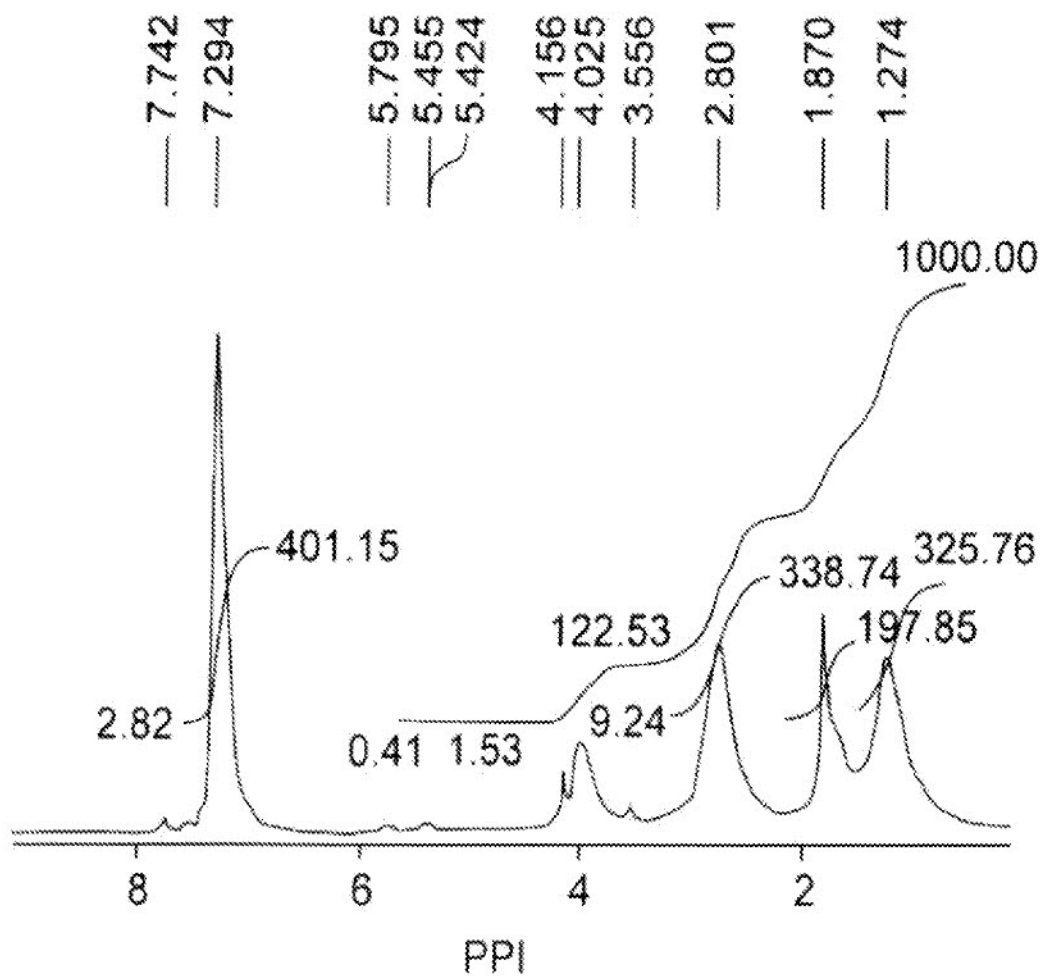


Figure 9

CHO Cell Culture Flocculation,
Dosing Effect on Centrate Turbidity;
MMW Chitosan vs. Benzyl Modified Polyallylamine
with Stimulus

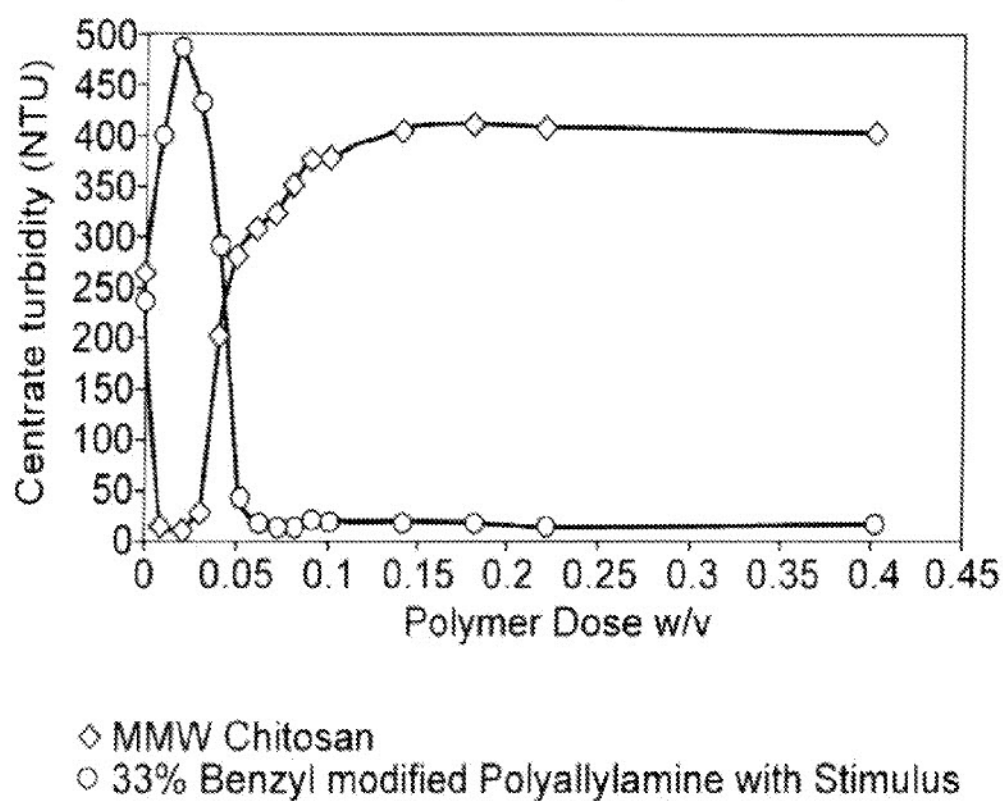
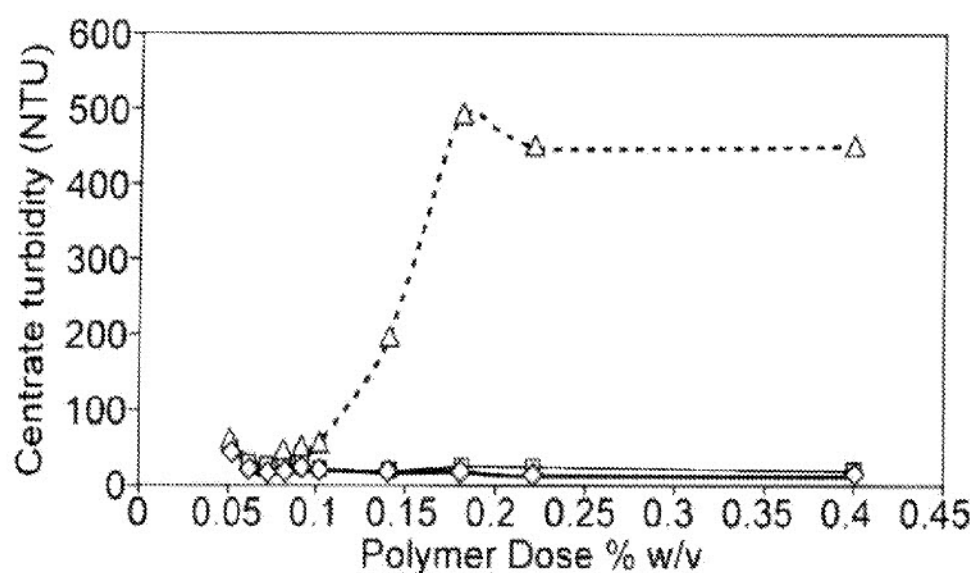


Figure 10

CHO Cell Culture Flocculation,
Dosing and Stimulus Effect on Centrate Turbidity;
Benzyl Modified Polyallylamine
with Phosphate Stimulus vs. Citrate Stimulus vs. No
Stimulus



* No polymer control centrate turbidity was 237 (NTU)

- ◇ 33% Benzyl modified Polyallylamine with phosphate stimulus
- 33% Benzyl modified Polyallylamine with citrate stimulus
- △ 33% Benzyl Modified Polyallylamine with no stimulus

Figure 11

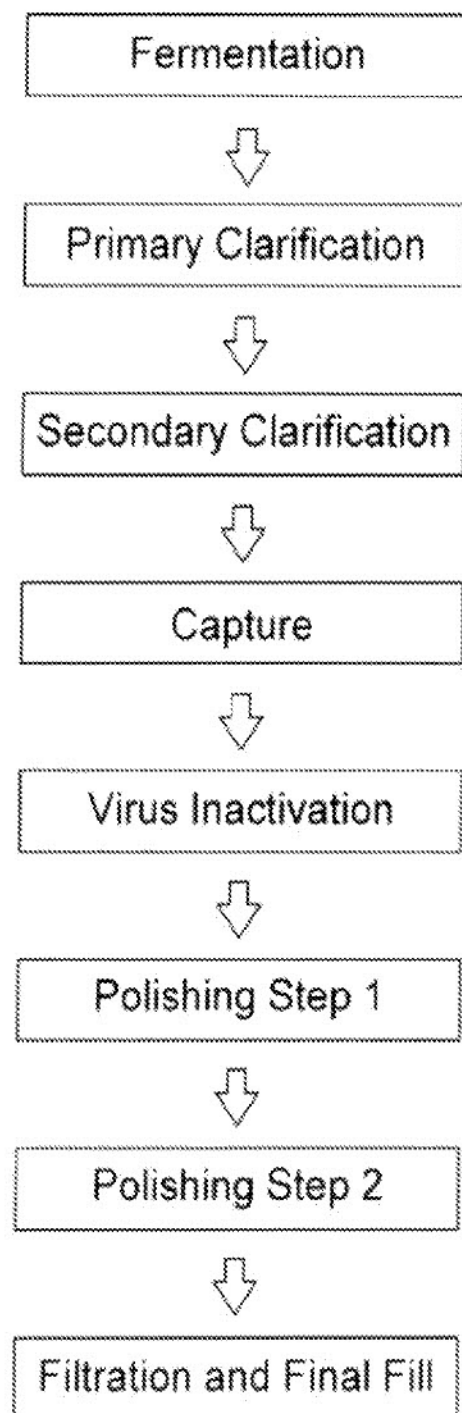


Figure 12

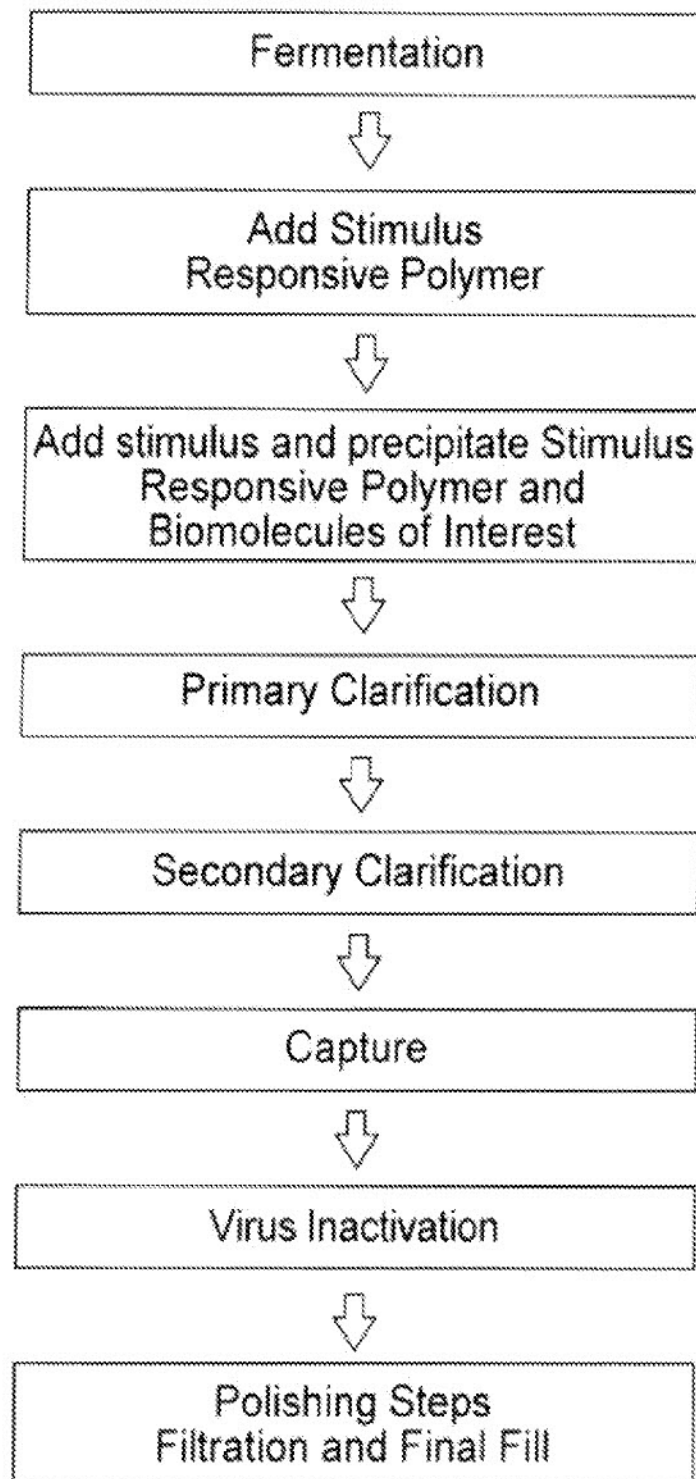


Figure 13

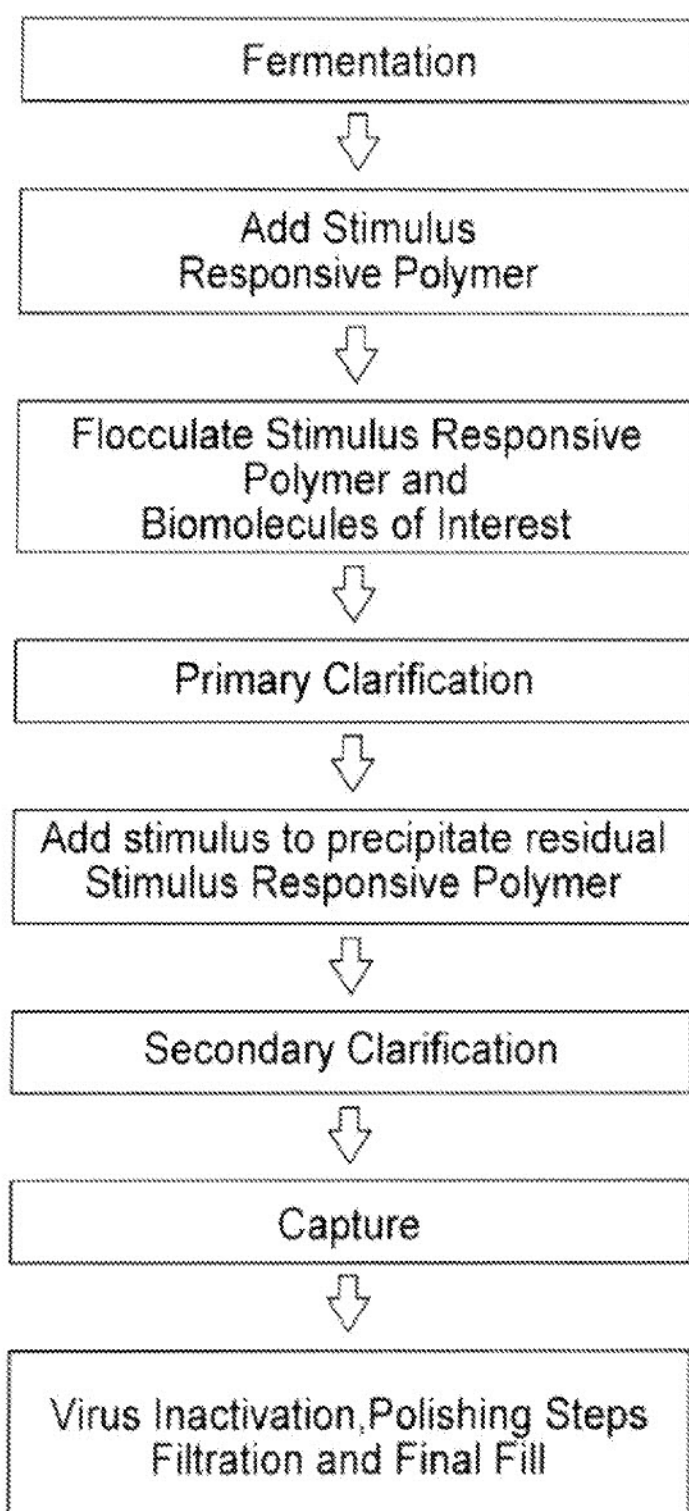


Figure 14

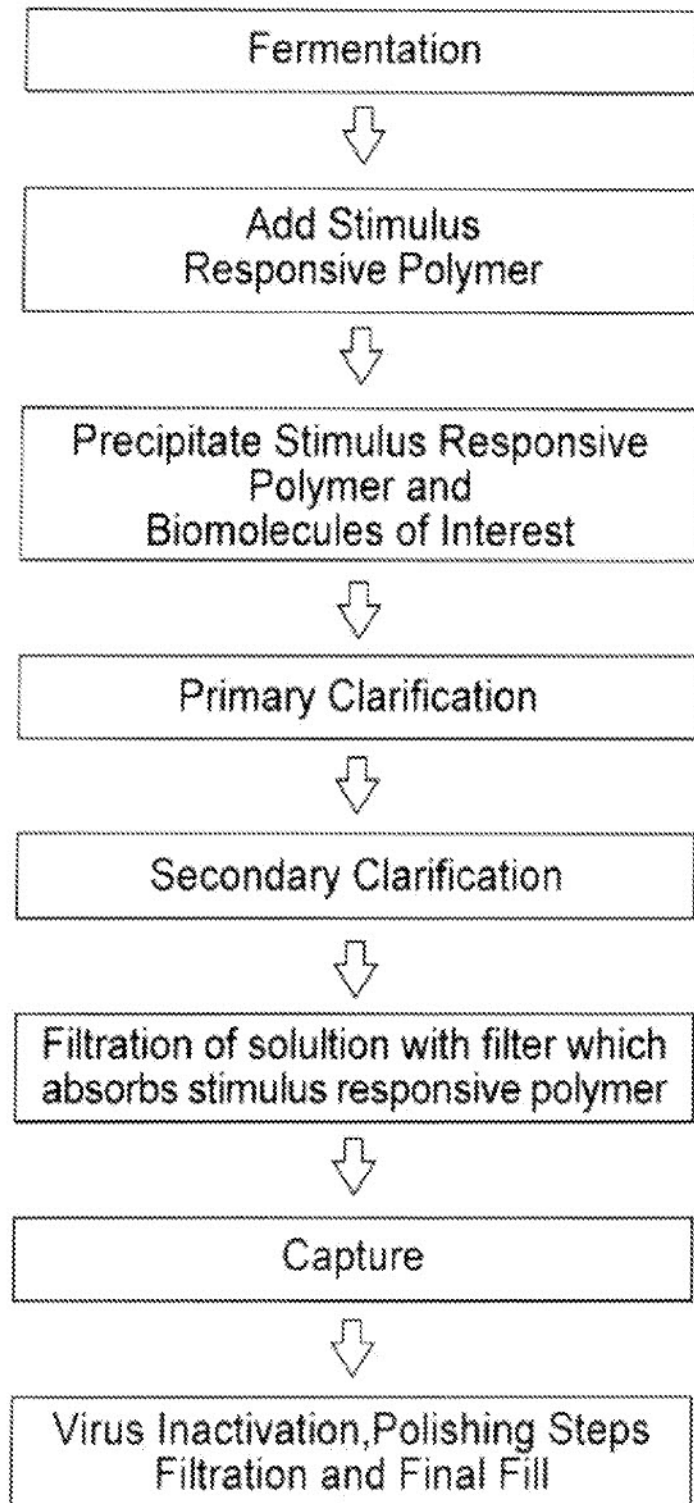


Figure 15