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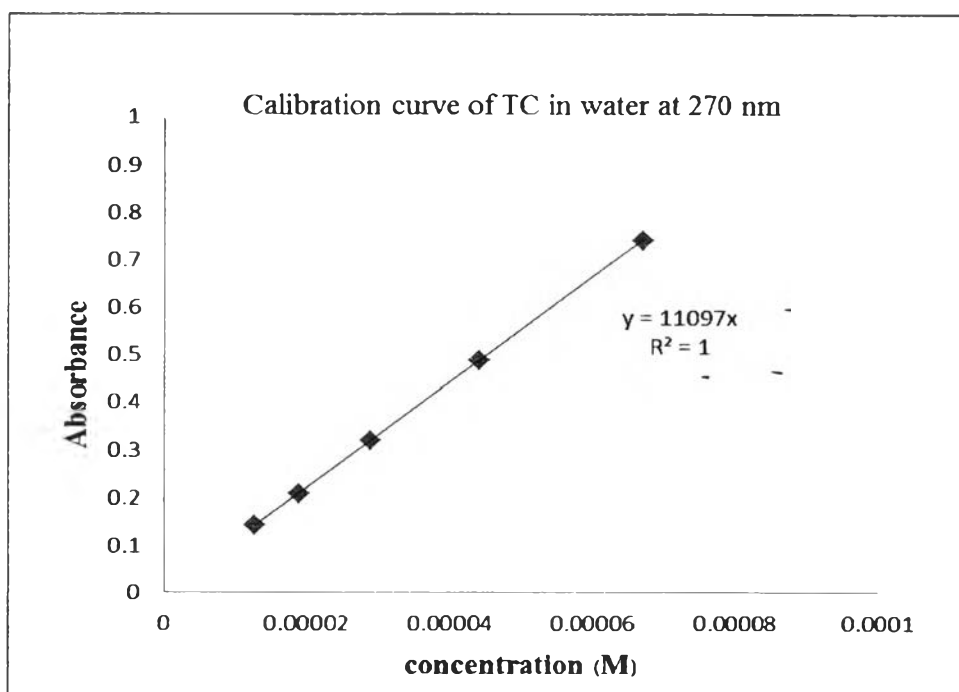
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APPENDICES

APPENDIX A Calibration Curve of Tetracycline in Water, PBS Buffer (pH 7.4) and Acetate Buffer (pH 5.5)

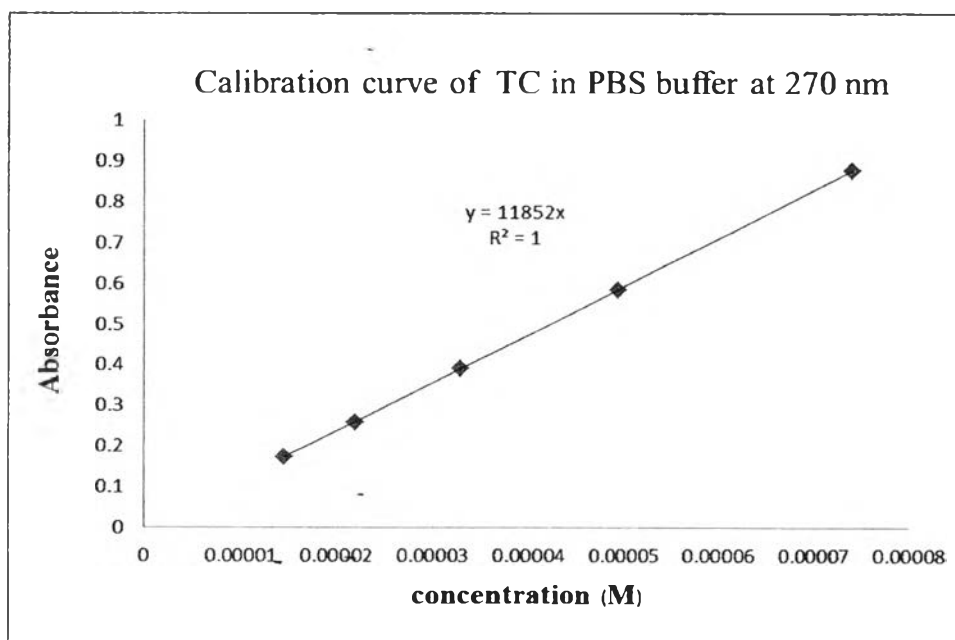
1. Calibration curve of tetracycline in water at wavelength 270 nm

No.	Absorbance	Concentration of TC (10^{-5} M)
1	0.743	6.7
2	0.489	4.4
3	0.322	2.9
4	0.21	1.9
5	0.145	1.3



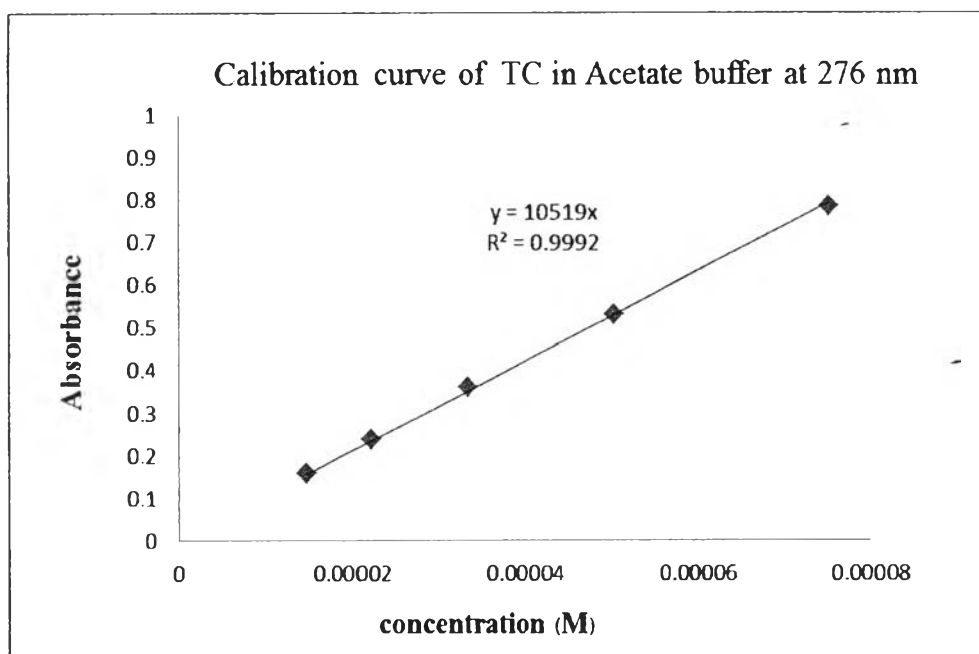
2. Calibration curve of tetracycline in PBS buffer at wavelength 270 nm

No.	Absorbance	Concentration of TC (10^{-5} M)
1	0.878	7.41
2	0.585	4.94
3	0.391	3.29
4	0.259	2.19
5	0.174	1.46



3. Calibration curve of tetracycline in Acetate buffer at wavelength 276 nm

No.	Absorbance	Concentration of TC (10^{-5} M)
1	0.783	7.52
2	0.53	5.02
3	0.361	3.34
4	0.24	2.23
5	0.161	1.49



APPENDIX B NMR graph, DQ (%) and Zeta Potential of Quaternized Chitosan (QCh)

Table B1: shows DQ and zeta potential of QCh

No. of QCh	DQ (%)	Zeta potential (mV)
QCh_1	76.1	28.5 ⁻
QCh_2	62.6	22.5
QCh_3	69.9	24.0

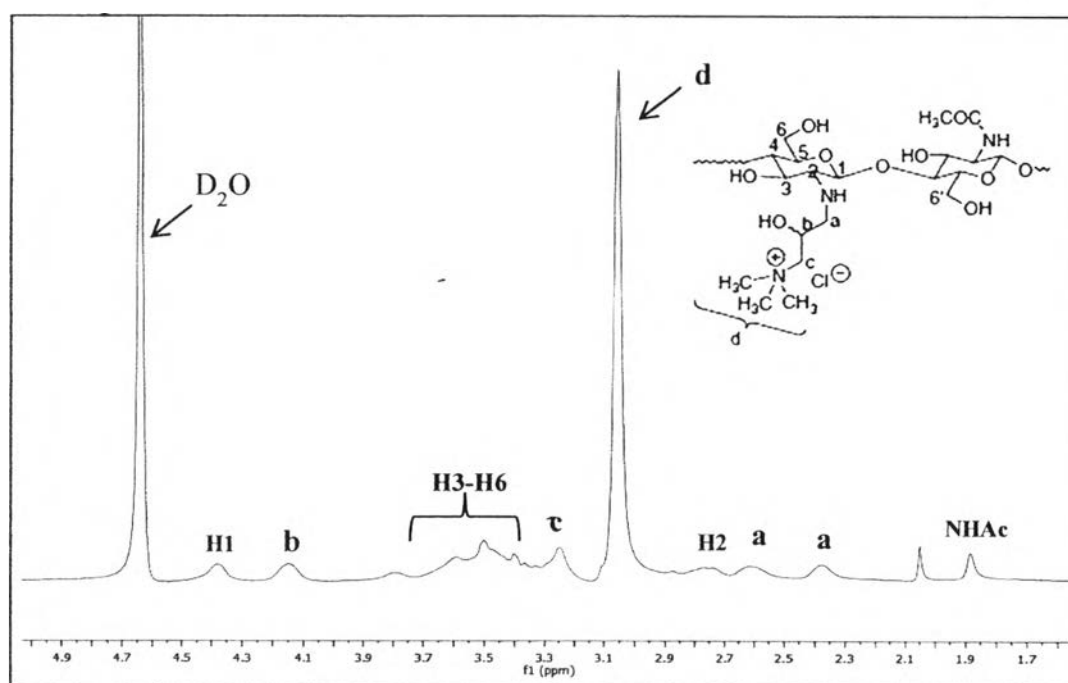


Figure B1 ¹H NMR of QCh₁

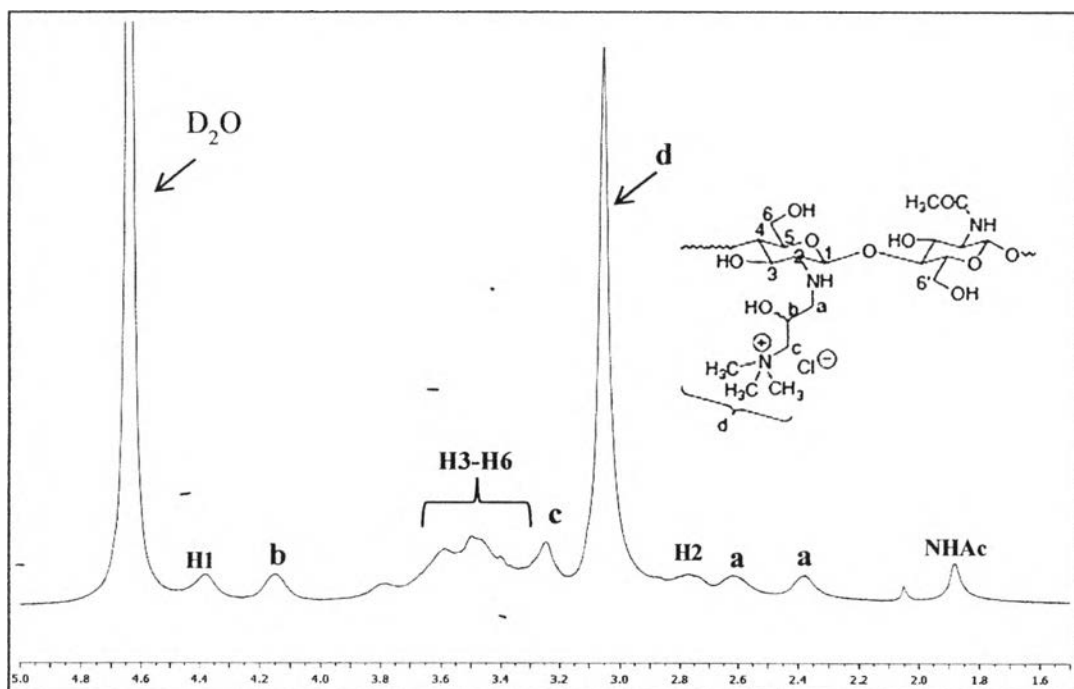


Figure B2 ^1H NMR of QCh₂

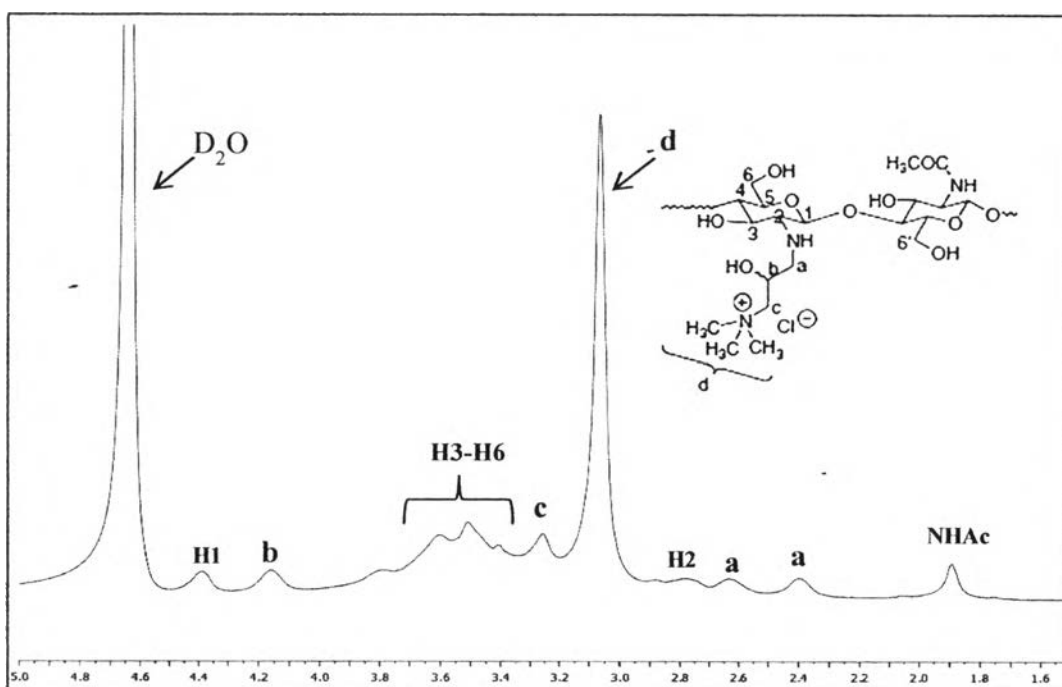
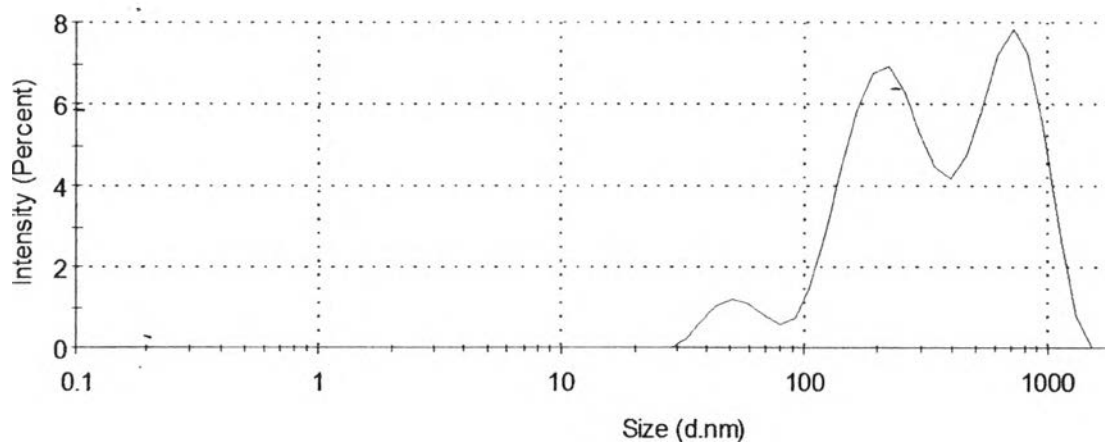


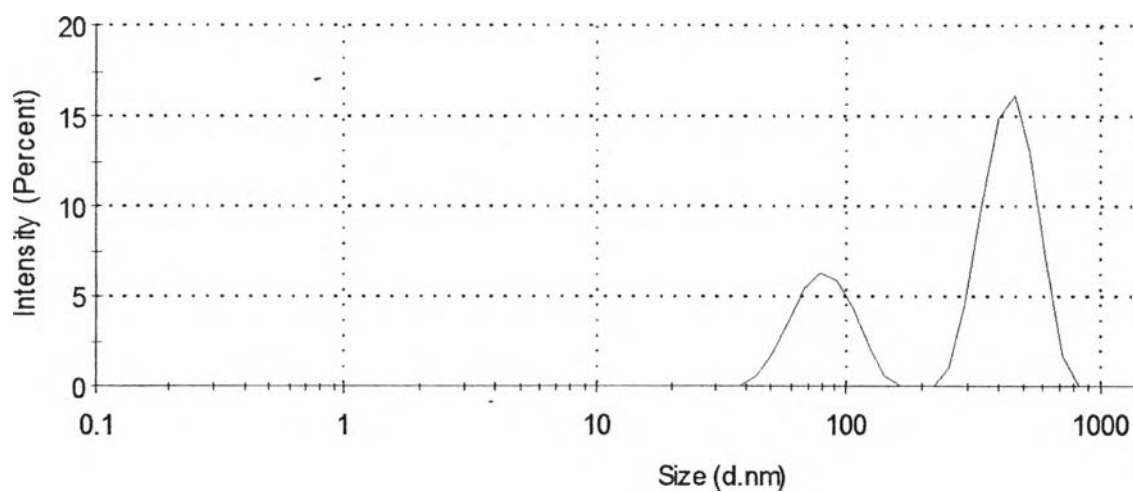
Figure B3 ^1H NMR of QCh₃

APPENDIX C Size Distribution of QCh/TC Nanoparticles and QCh Nanoparticles

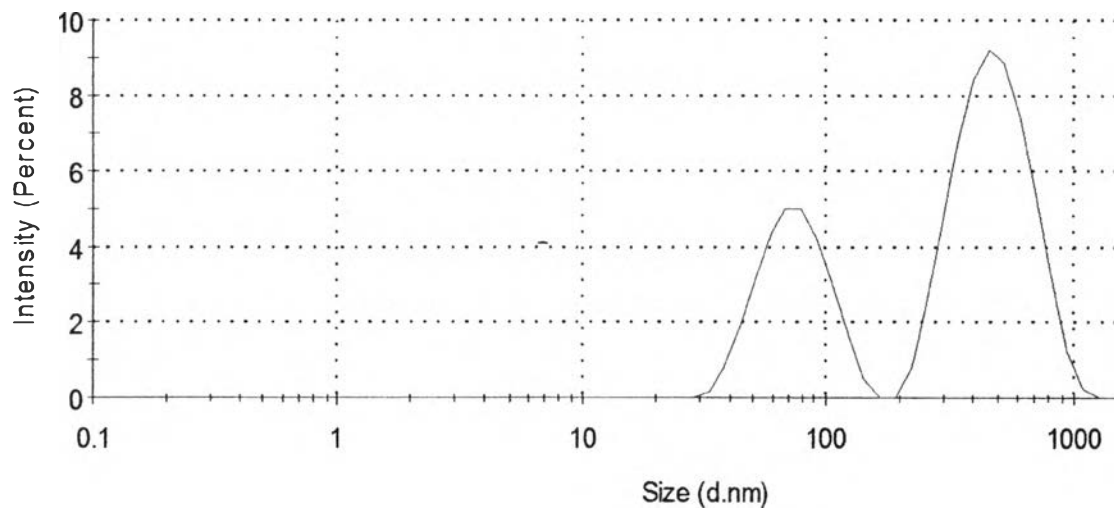
Size Distribution of QCh nanoparticles (1:0)



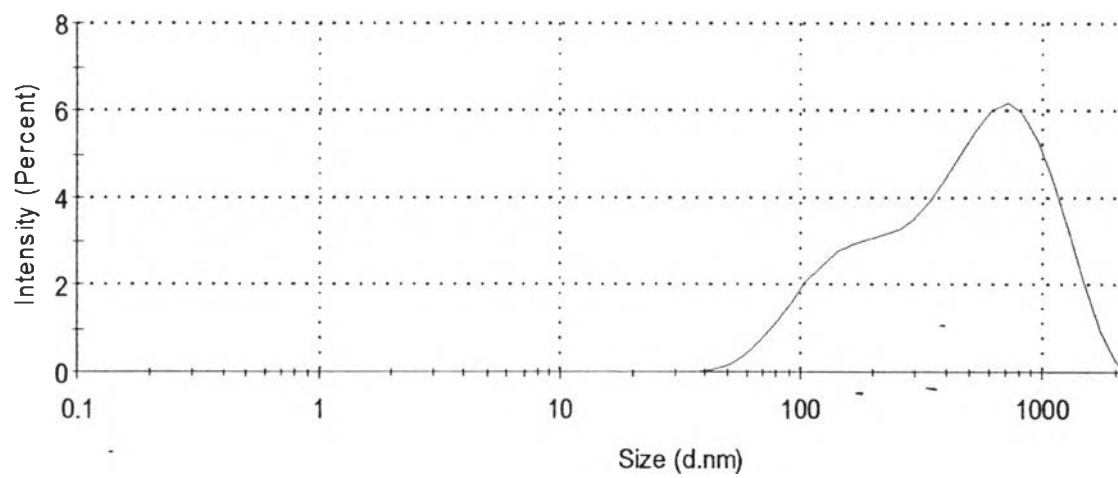
Size Distribution of QCh/TC nanoparticles (1:1)



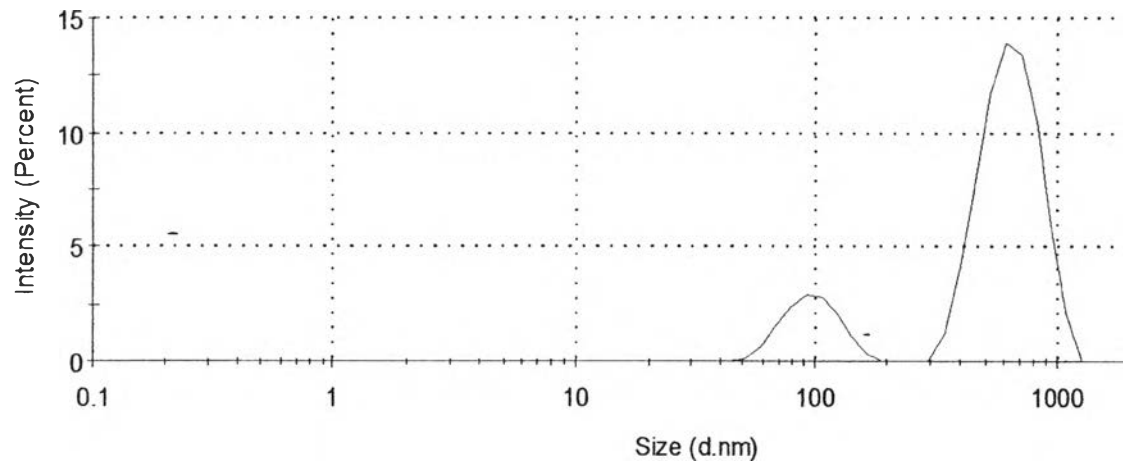
Size Distribution of QCh/TC nanoparticles (1:2)



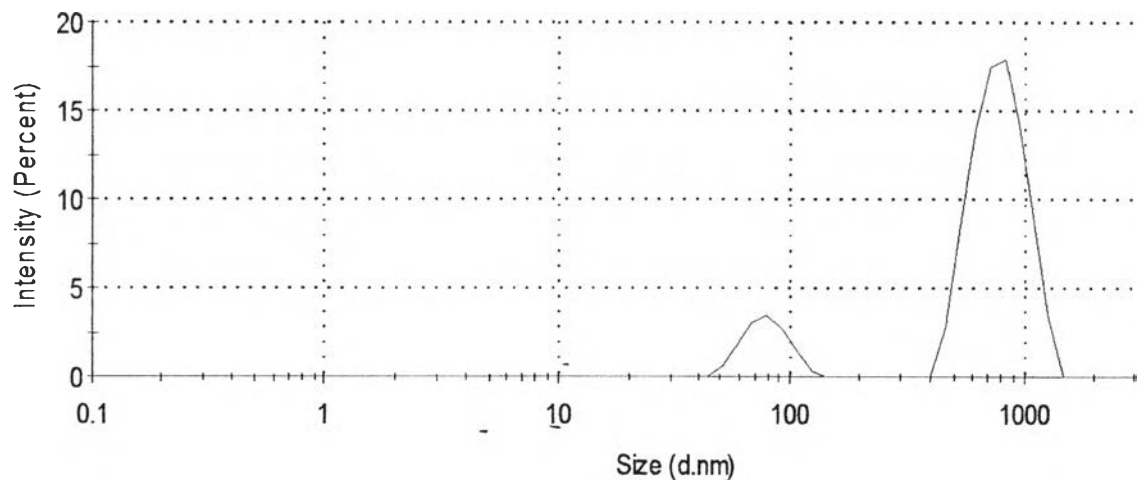
Size Distribution of QCh/TC nanoparticles (1:3)



Size Distribution of QCh/TC nanoparticles (1:4)



Size Distribution of QCh/TC nanoparticles (1:5)



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2. Tongrain, T.; and Supaphol, P. (2014, May 16) Preparation of Poly (vinyl alcohol) Film Blended with Quaternary Ammonium Chitosan Nanoparticles Loaded Tetracycline for Antibacterial Wound Dressing. Poster presentation at The European Biotechnology Conference 2014, Lecce, Italy.