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APPENDICES

Appendix A Transmission Electron Microscopy

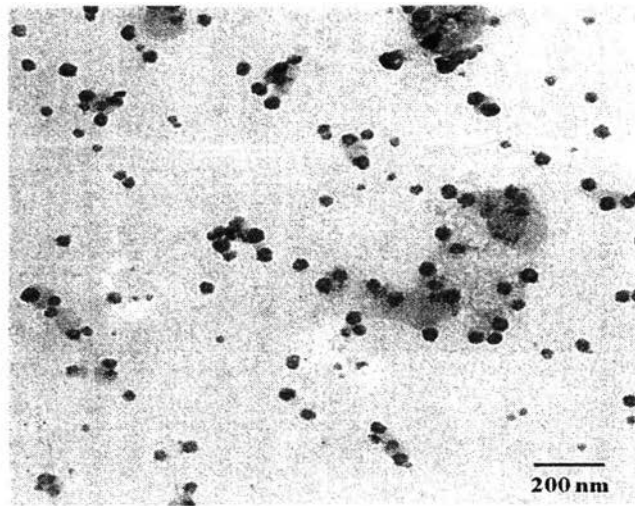


Figure A1 TEM image of PLGA nanoparticles.

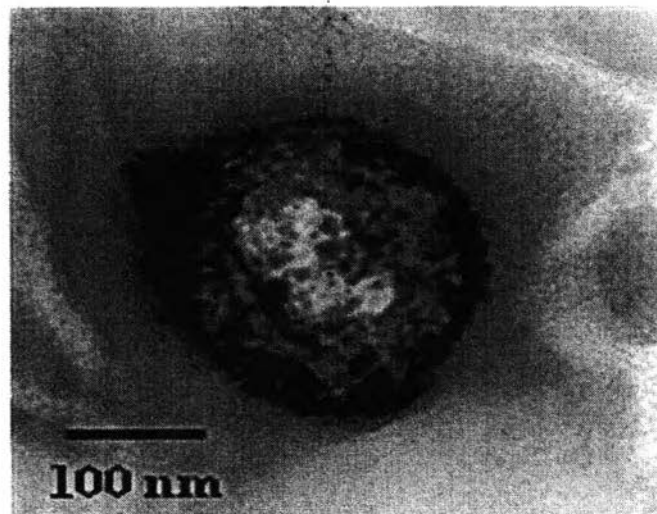


Figure A2 TEM image of PLGA nanoparticles with PLGA 15 mg/ml and magnetite nanoparticles 5 mg/ml

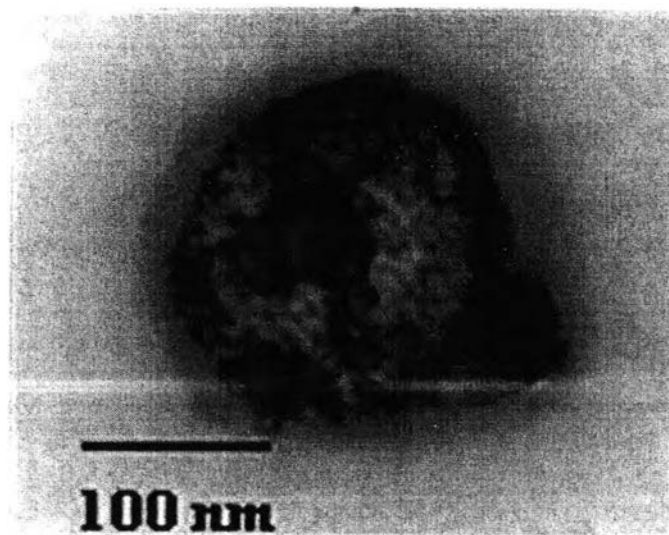


Figure A3 TEM image of PLGA nanoparticles with PLGA 45 mg/ml and magnetite nanoparticles 5 mg/ml.

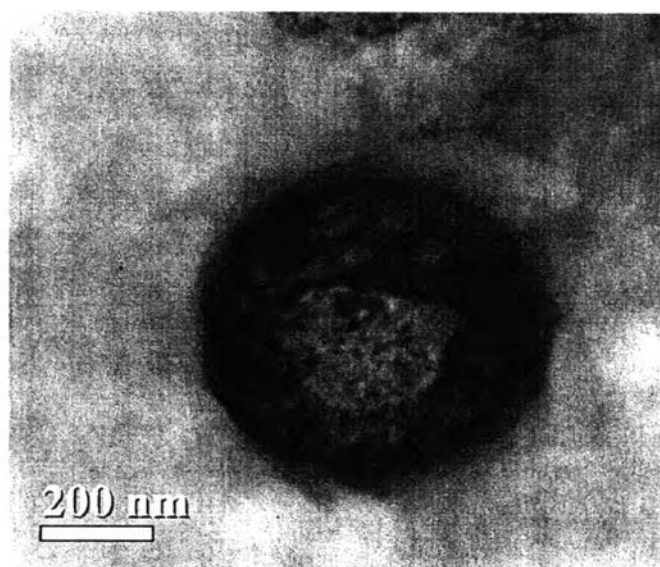


Figure A4 TEM image of PLGA nanoparticles with PLGA 60 mg/ml and magnetite nanoparticles 5 mg/ml.

Appendix B Particle Size of PLGA Nanoparticles

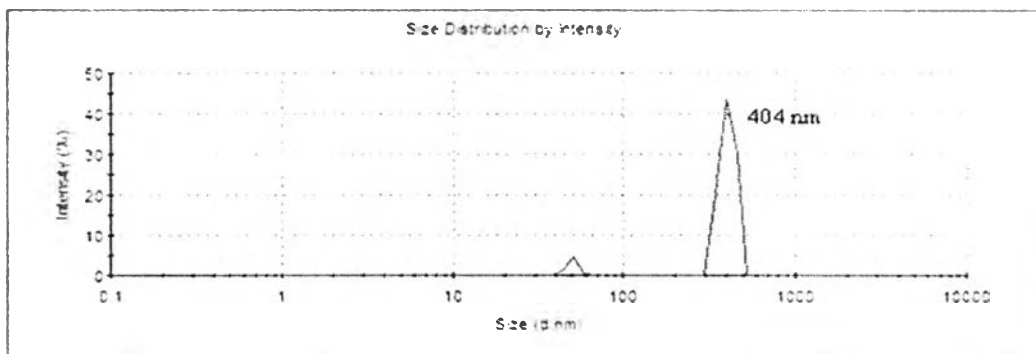
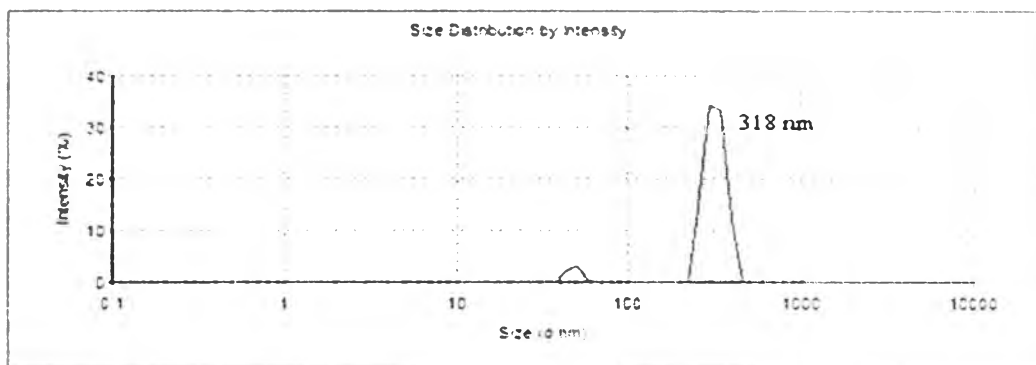
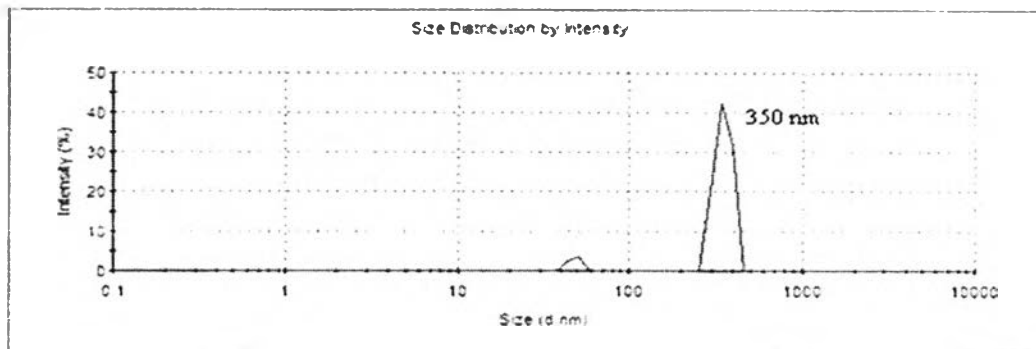


Figure B1 Particle size of PLGA nanoparticle with pure PLGA (no magnetite nanoparticles inside)

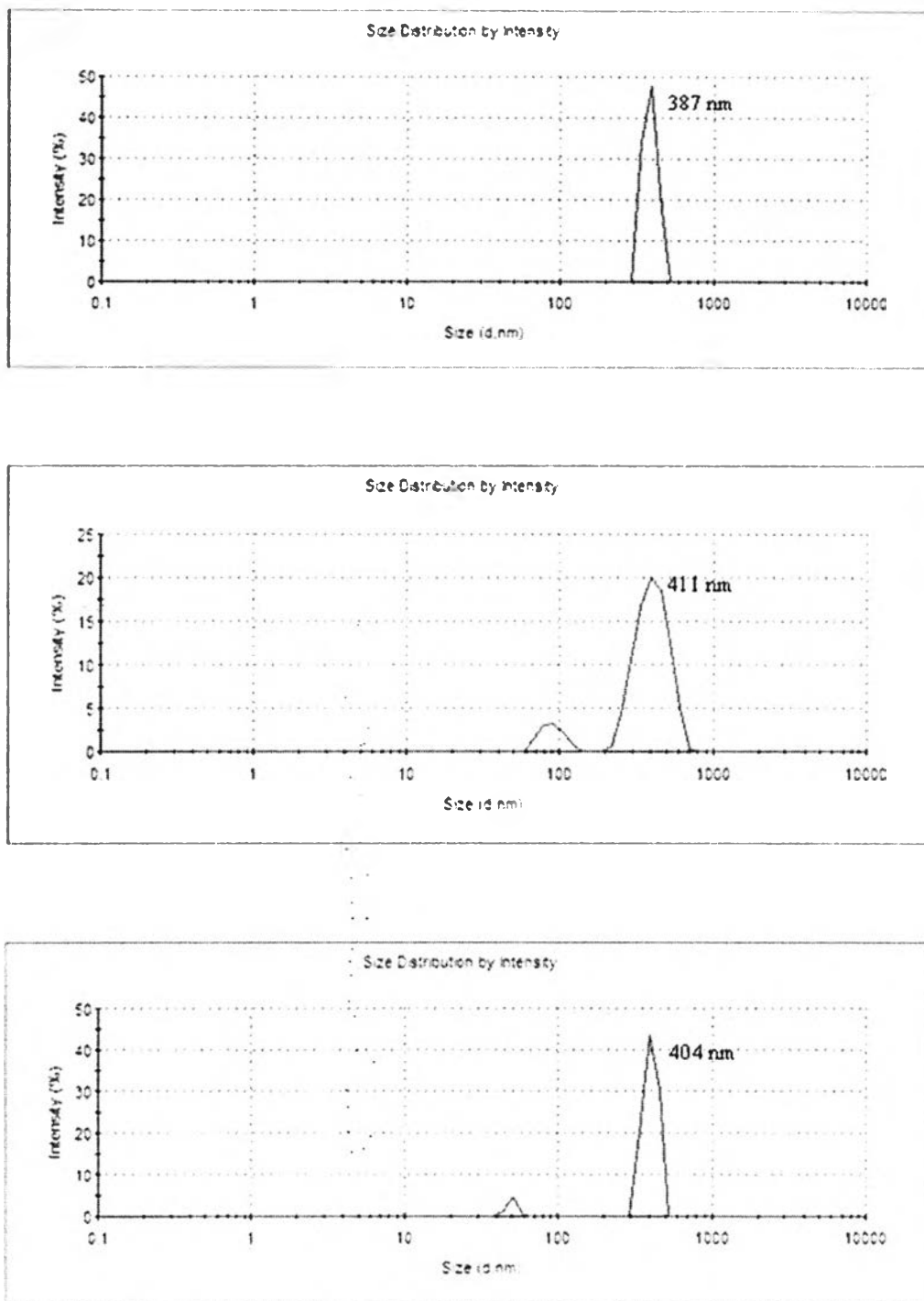


Figure B2 Particle size of PLGA nanoparticle with 5 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

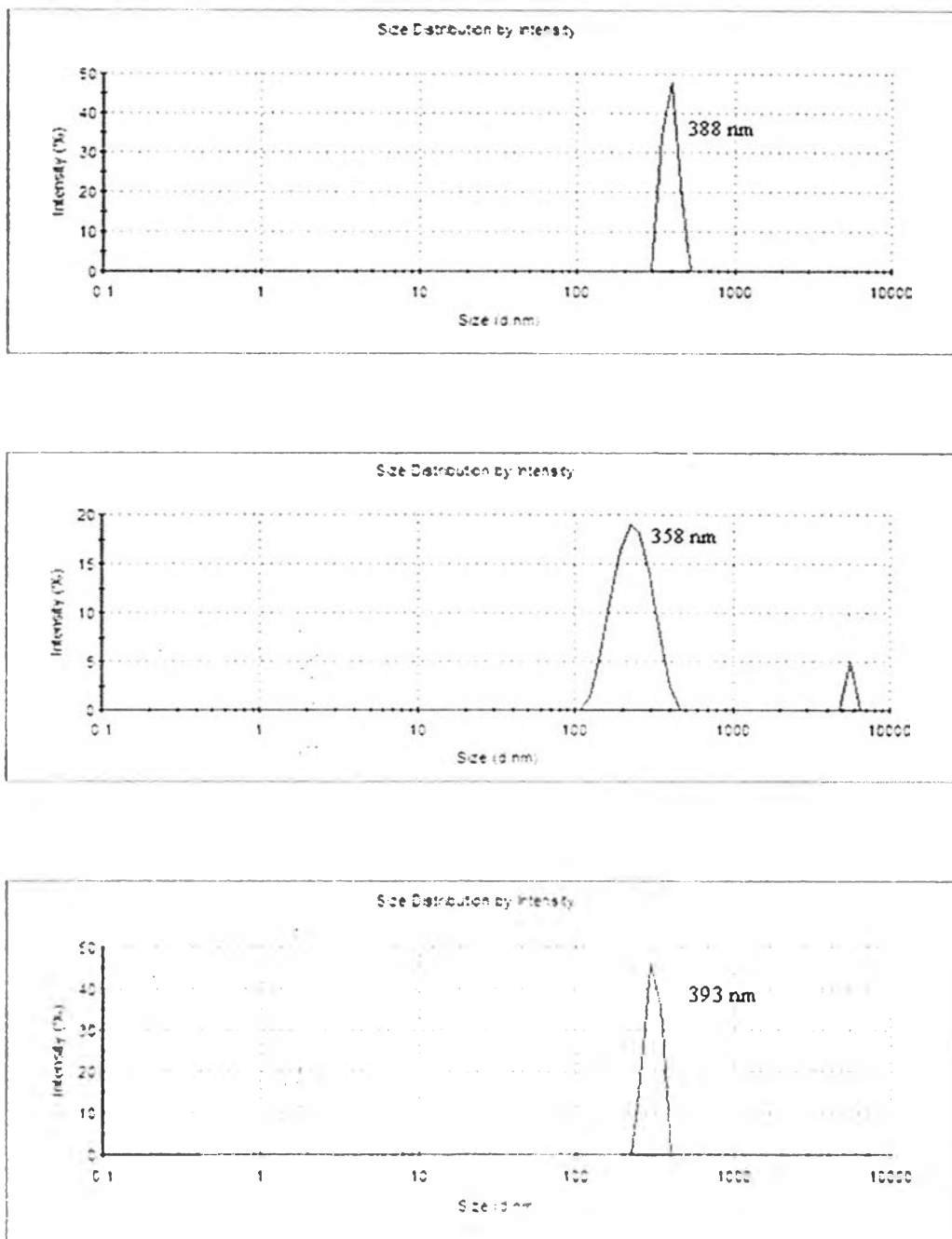


Figure B3 Particle size of PLGA nanoparticle with 15 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

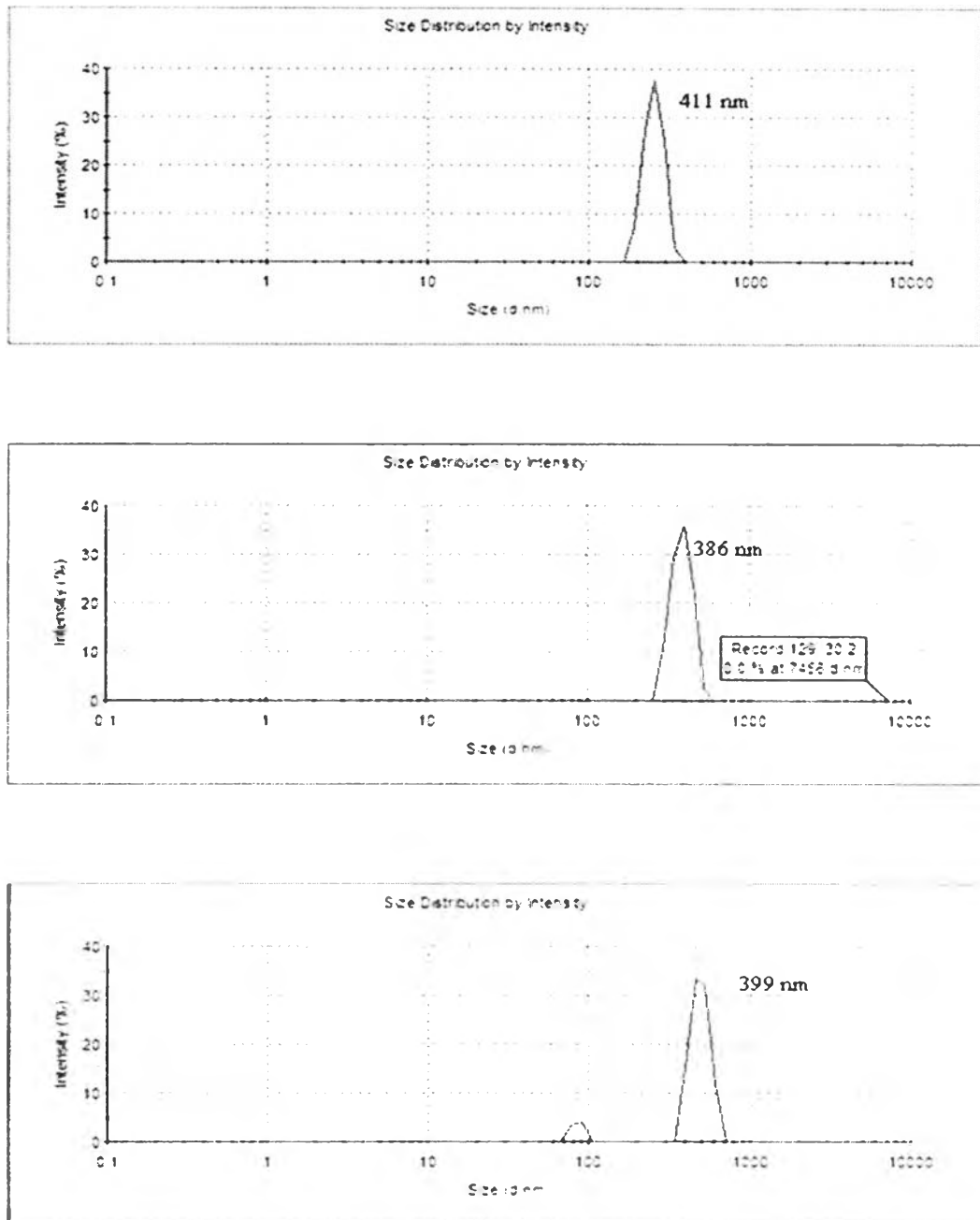


Figure B4 Particle size of PLGA nanoparticle with 30 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

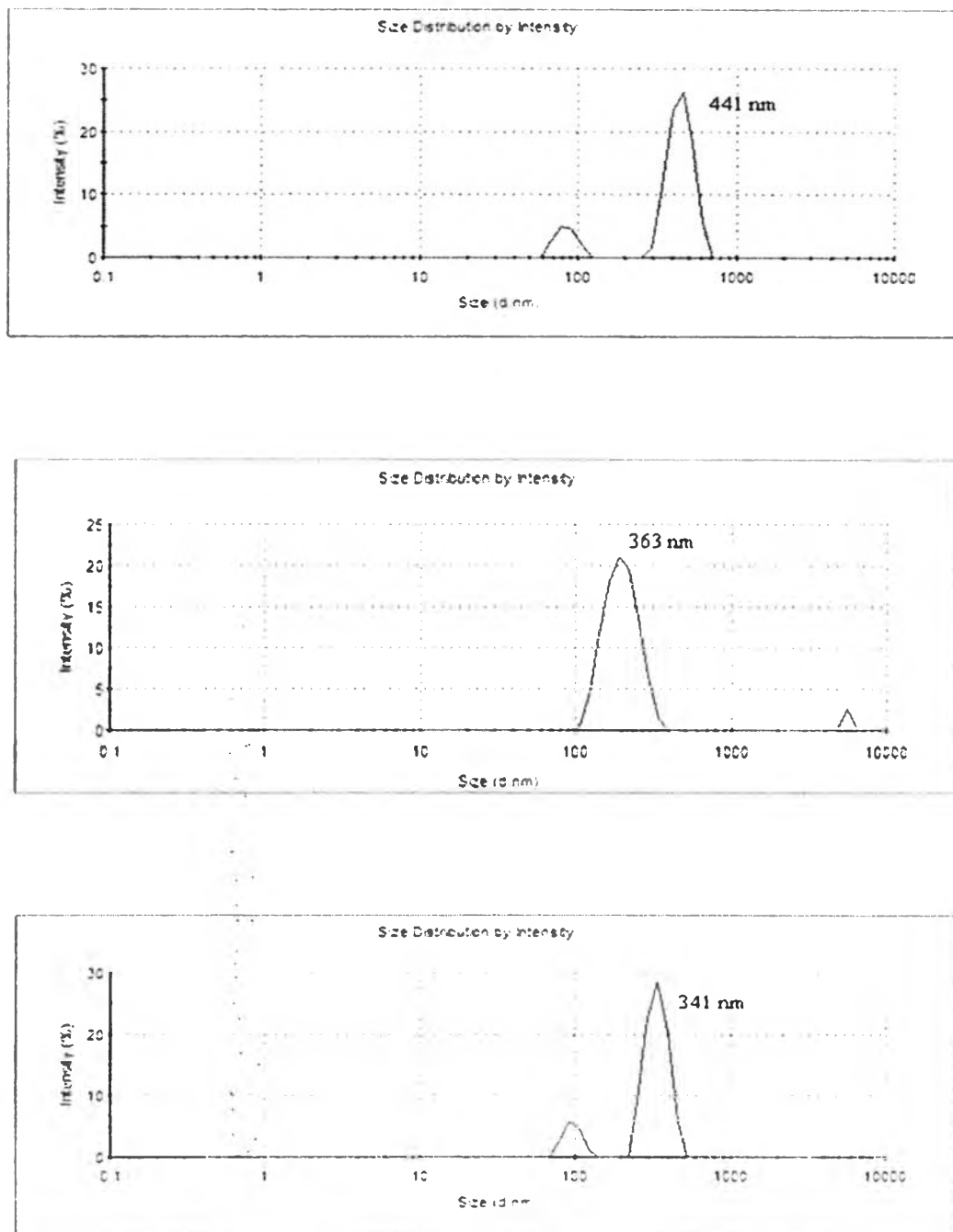


Figure B5 Particle size of PLGA nanoparticle with 45 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

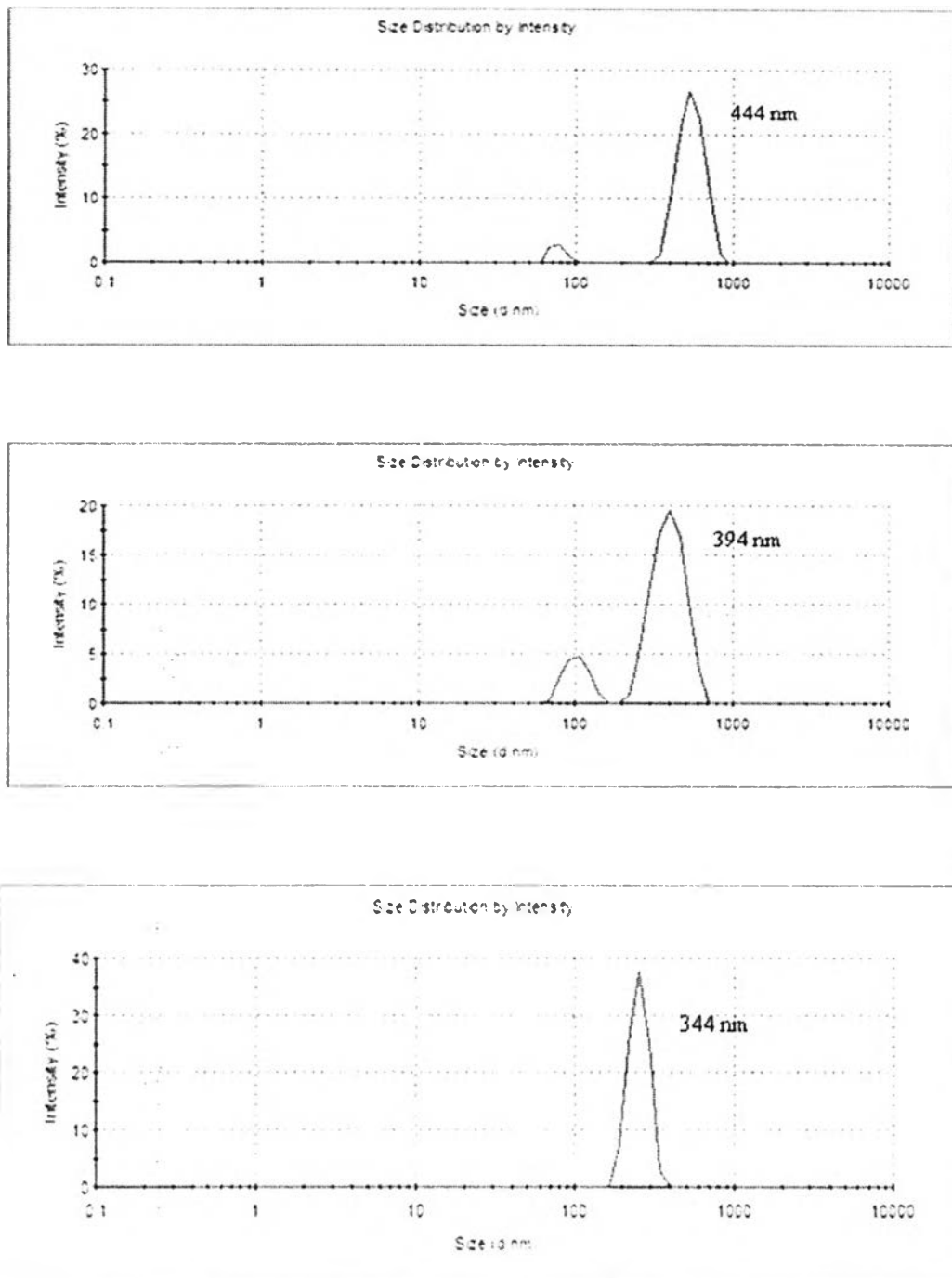


Figure B6 Particle size of PLGA nanoparticle with 60 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

Appendix B Zeta Potential of PLGA Nanoparticles

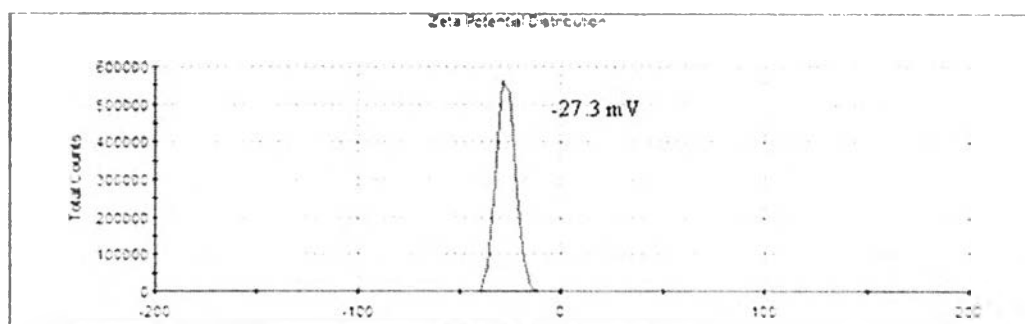
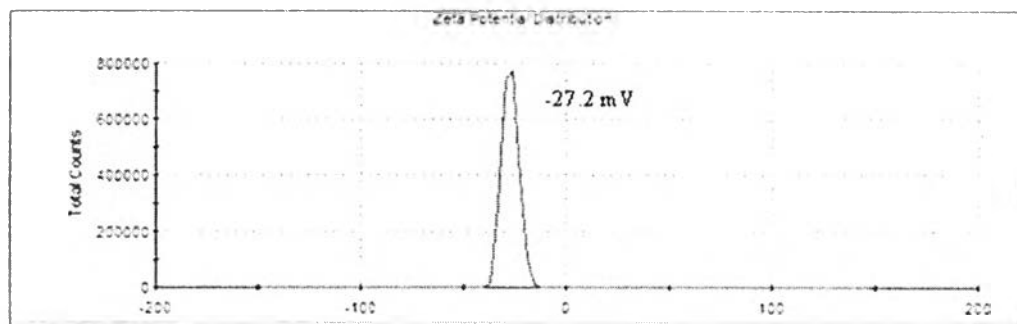
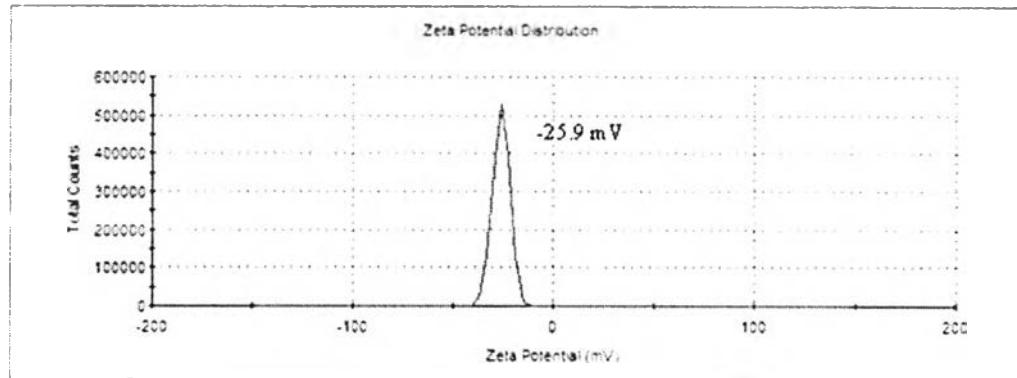


Figure C1 Zeta potential of PLGA nanoparticle with with pure PLGA (no magnetite nanoparticles inside).

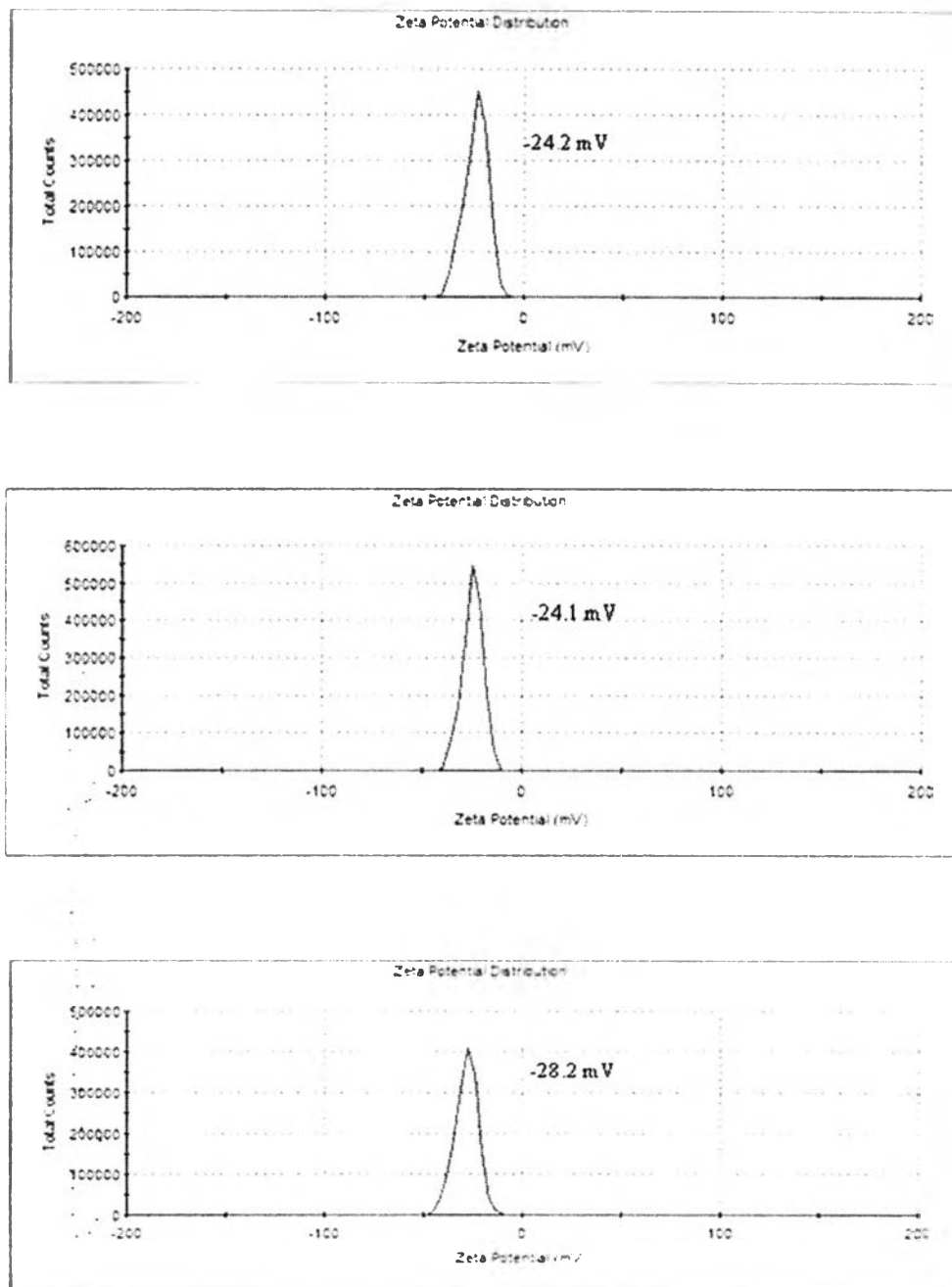


Figure C2 Zeta potential of PLGA nanoparticle with 5 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

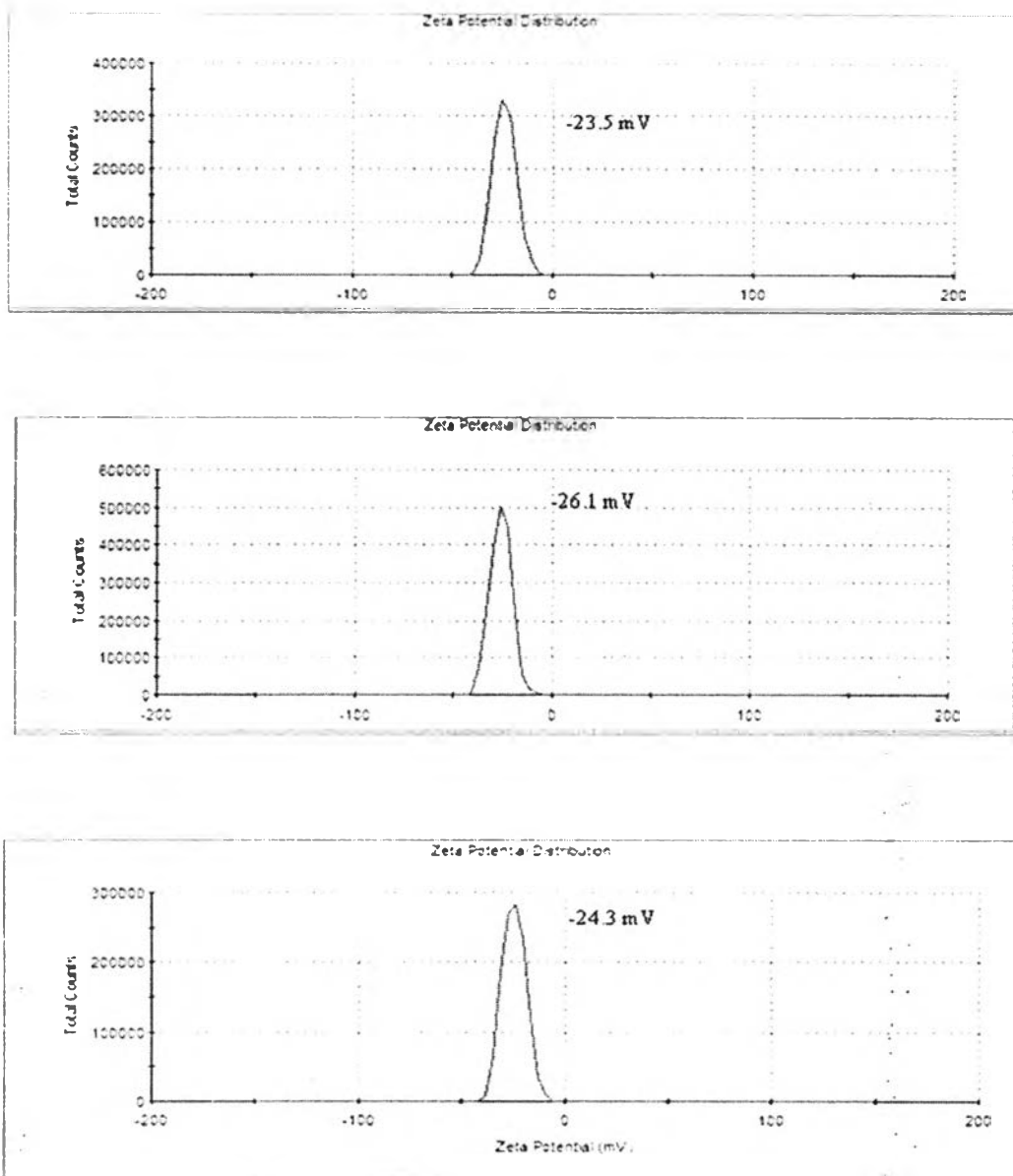


Figure C3 Zeta potential of PLGA nanoparticle with 15 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

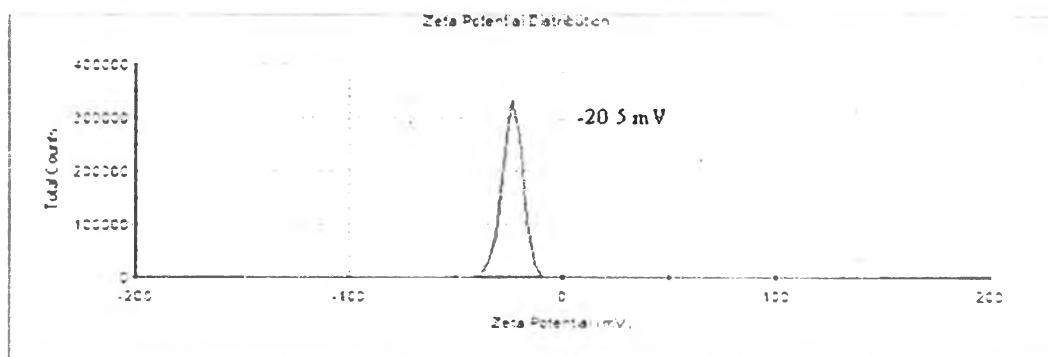
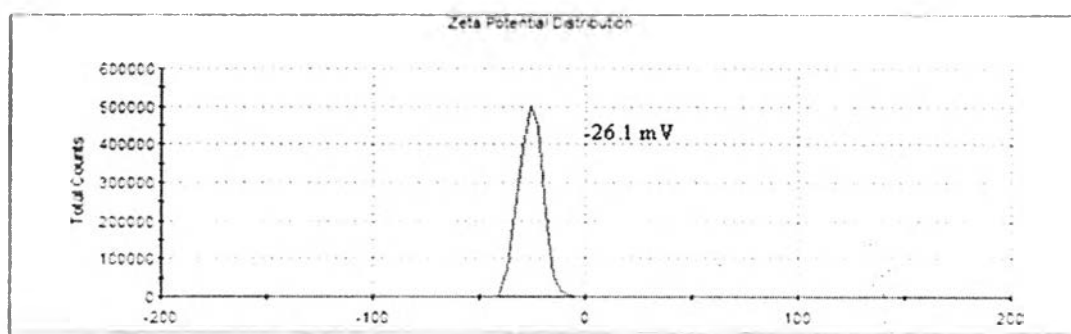
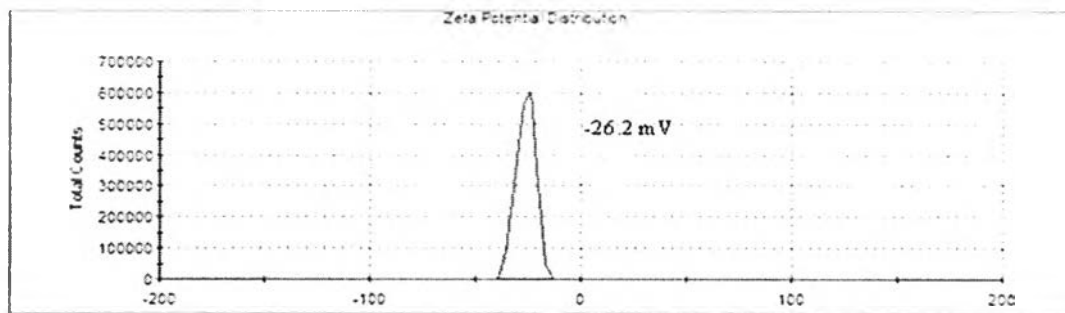


Figure C4 Zeta potential of PLGA nanoparticle with 30 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

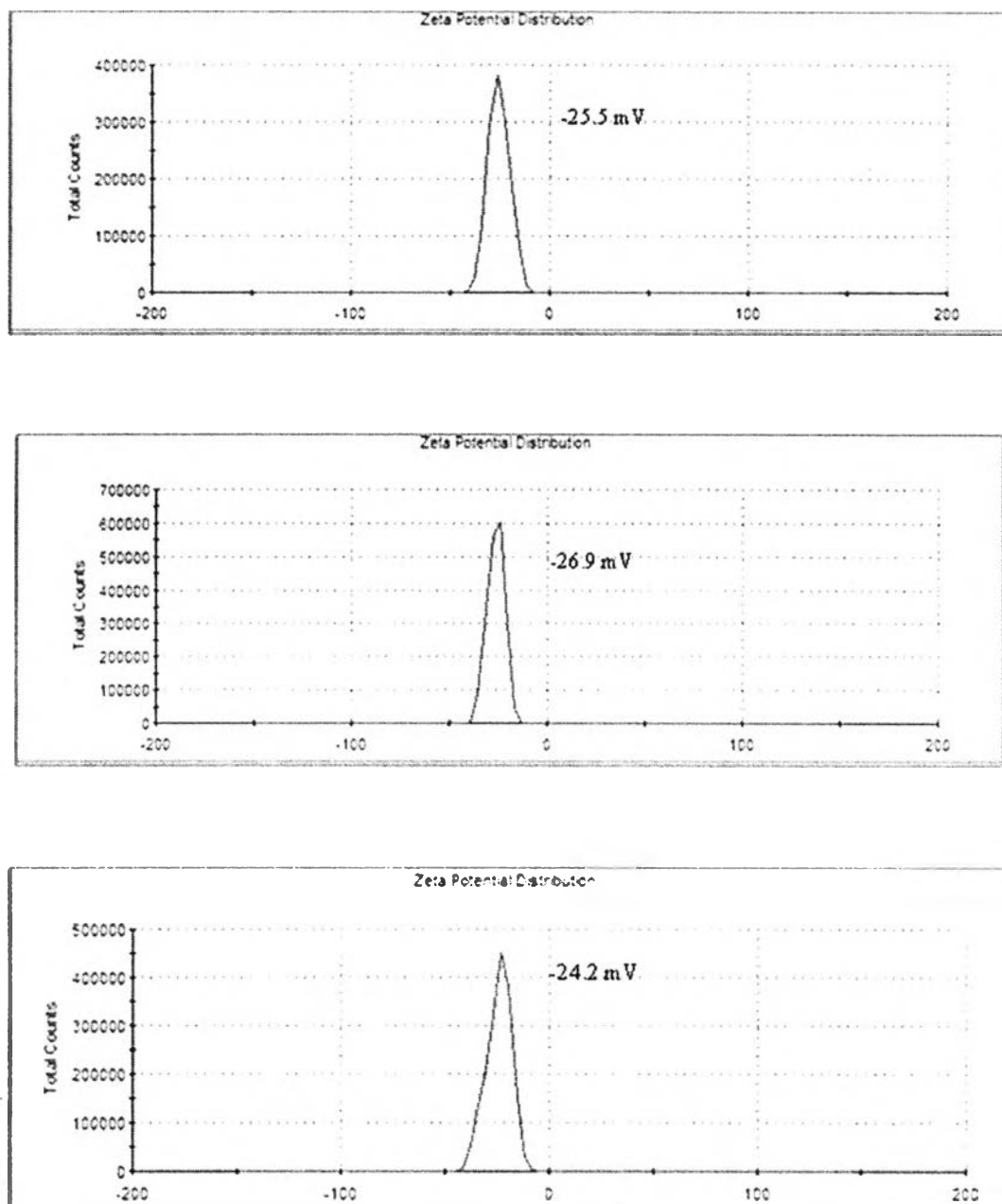


Figure C5 Zeta potential of PLGA nanoparticle with 45 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

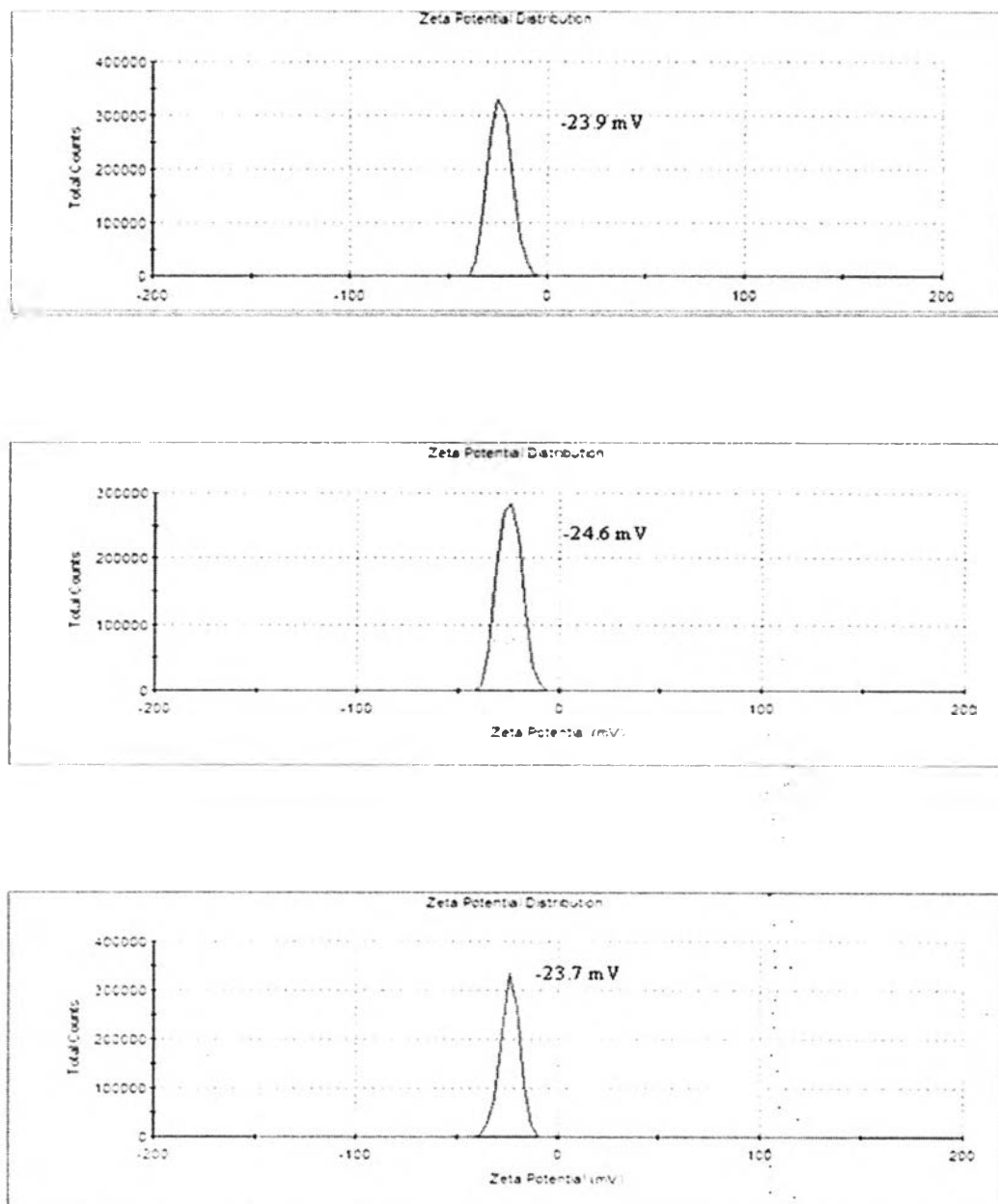
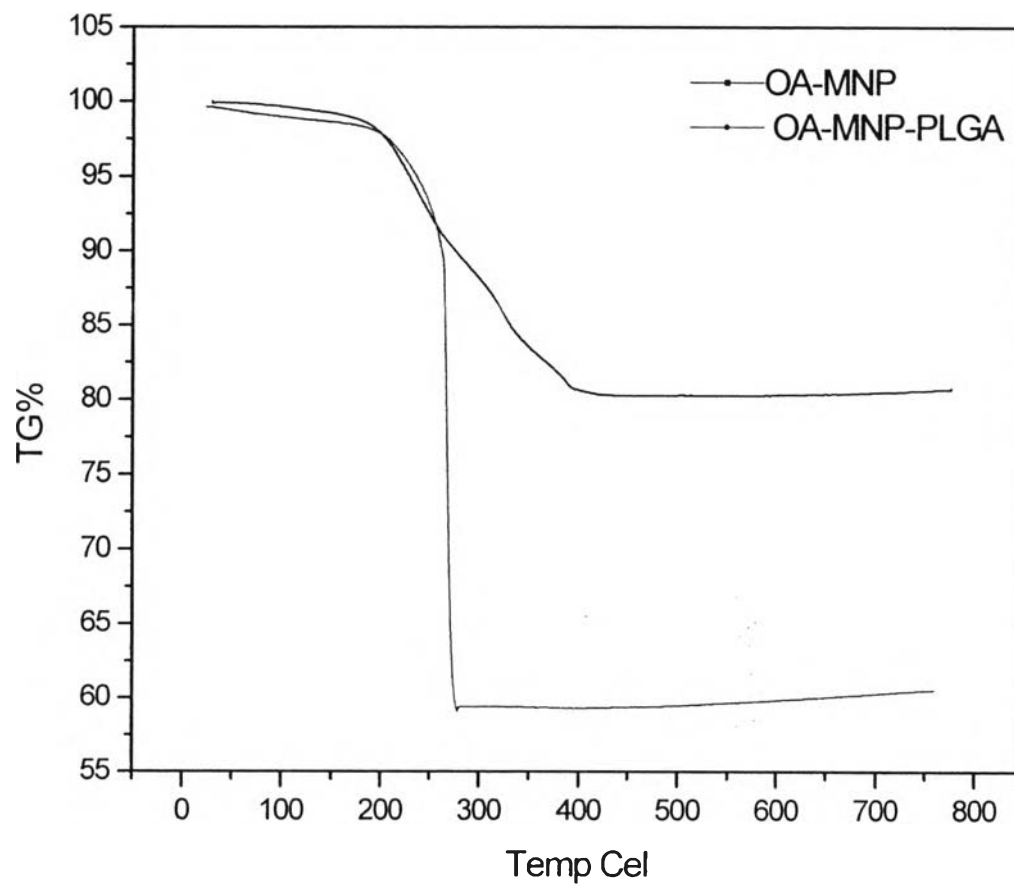


Figure C6 Zeta potential of PLGA nanoparticle with 60 mg/ml of PLGA and 5 mg/ml of magnetite nanoparticle.

Appendix D Thermogravimetric Analysis**Figure D1** Thermogram of oleic coated magnetite and PLGA encapsulate magnetite

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Presentations:

1. Bootdee, K.; Grady, B.P.; and Nithitanakul, M. (2010, March 21-25) Synthesis and Encapsulation of Magnetite Nanoparticles in PLGA. Paper presented at the 239th ACS National Meeting & Exposition 2010, San Francisco, CA, USA.
2. Bootdee, K.; Grady, B.P.; and Nithitanakul, M. (2010, April 22) Super Paramagnetic Iron Oxide Nanoparticles into Poly(D,L-lactide-co-glycolide) Sub-micron Particles for Magnetic Drug Carrier. Paper presented at the 16th PPC Symposium on Petroleum, Petrochemicals and Polymers 2010, Bangkok, Thailand