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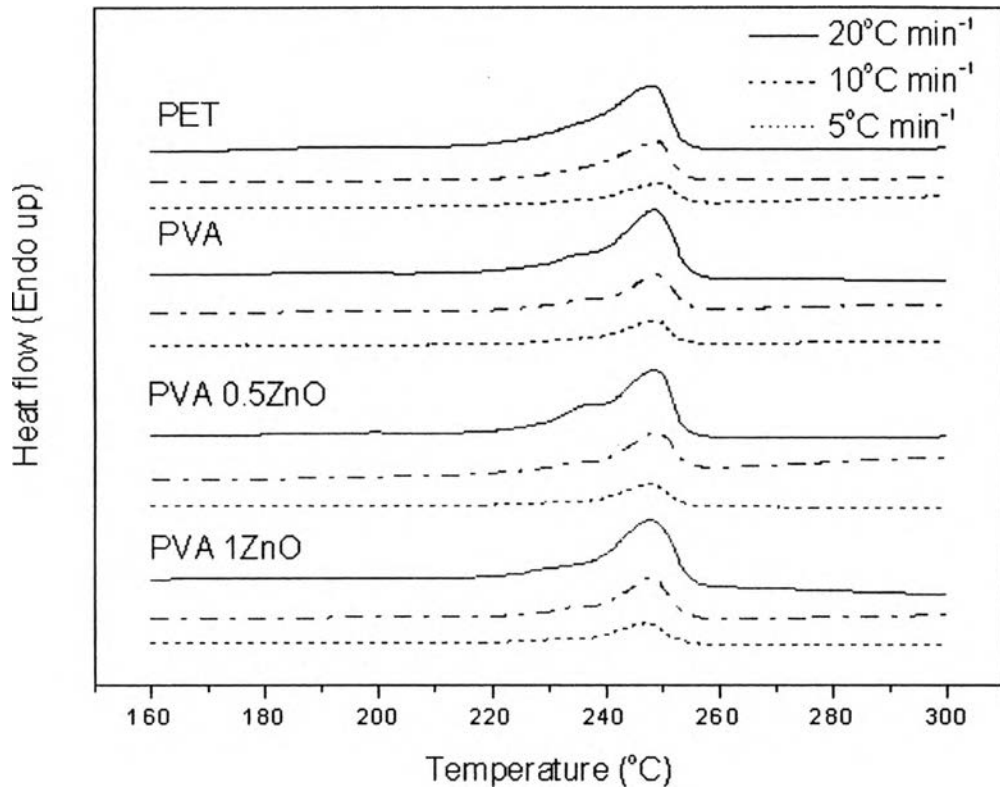
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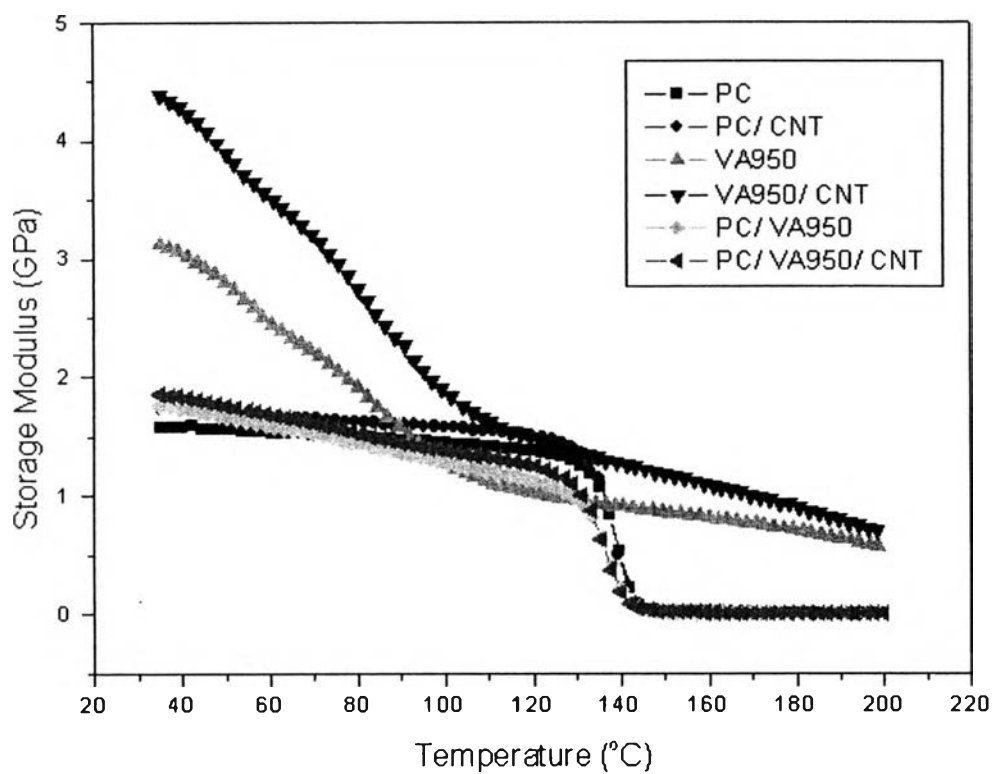
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## APPENDIX

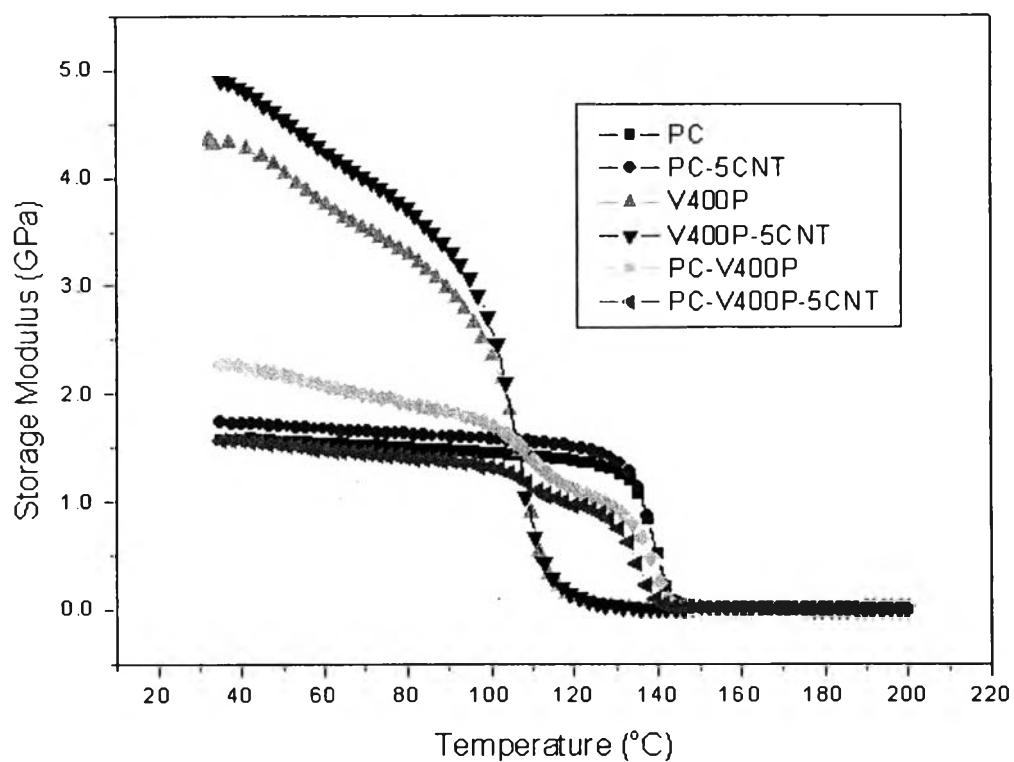
### Appendix Experimental Data



**Figure A1** DSC heating scans on the neat PET (PET), PET/ 10 wt% VA950 (PVA), PET/ 10 wt% VA950/ 0.5 phr ZnO (PVA 0.5ZnO), and PET/ 10 wt% VA950/ 1 ZnO (PVA 1ZnO) where the cooling rate was 10°C/min and the heating rate was varied from 5 to 20°C/min.



**Figure A2** Storage modulus as a function of temperature for PC, PC/VA950 blends, and composites with 5 wt% CNT.



**Figure A3** Storage modulus as a function of temperature for PC, PC/V400P blends, and composites with 5 wt% CNT.



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**Publications:**

1. Pisitsak, P., and Magaraphan, R. (2009) Influences of a liquid crystalline polymer, Vectra A950, on crystallization kinetics and thermal stability of poly(trimethylene terephthalate). Journal of Thermal Analysis and Calorimetry, 95(2), 661-666.
2. Pisitsak, P., and Magaraphan, R. (2009) Rheological, morphological, thermal, and mechanical properties of blends of Vectra A950 and poly(trimethylene terephthalate): A study on a high-viscosity-ratio system. Polymer Testing, 28(2), 116-127.
3. Pisitsak, P., and Magaraphan, R. (2008) Influences of Zr<sup>4+</sup> and polyacrylamide on structural and optical properties of ZnO nanoparticles prepared via microwave irradiation. Advanced Materials Research, 55-57, 613-616.
4. Pisitsak, P., and Magaraphan, R. (2008) Non-isothermal crystallization kinetics and melting behaviors of thermoplastic/liquid crystalline polymer blends of poly(trimethylene terephthalate)/Vectra A950. Advances in Science and Technology, 54, 249-254.



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6. Pisitsak, P., and Magaraphan, R. Structural and mechanical response of poly(ethylene terephthalate) and its blend with a liquid crystalline polymer to microwave radiation, in preparation.

**Proceedings and Presentations:**

1. Pisitsak, P., Magaraphan, R., and Jana, S.C., (2010, May 16-20) A study on electrically conductive blends of polycarbonate/ liquid crystalline polymer/ multi-walled carbon nanotubes. ANTEC 2010: Plastics Technical Conference, Florida, USA.
2. Pisitsak, P., and Magaraphan, R. (2008, June 8-13) Non-isothermal crystallization kinetics and melting behaviors of thermoplastic/liquid crystalline polymer blends of poly(trimethylene terephthalate)/Vectra A950 CIMTEC 2008 – 3<sup>rd</sup> International Conference – Smart Materials Structures Systems, Sicily, Italy.
3. Pisitsak, P., and Magaraphan, R. (2008, April 4-6) Adsorption of a nonionic surfactant at the water–natural rubber interface. RGJ-Ph.D. Congress IX, Chonburi, Thailand.
4. Pisitsak, P., and Magaraphan, R. (2008, January 30 - February 1) Relationships between rheology and morphology of Poly(trimethylene terephthalate)/Vectra A950. Proceedings of PACCON 2008, Pure and Applied Chemistry Conference, Bangkok, Thailand.
5. Pisitsak, P., and Magaraphan, R. (2007, June 21-24) Thermal and rheological properties of the *in-situ* submicron composites of liquid crystalline polymer and PTT blends. InterPlas Thailand 2007, Bangkok, Thailand.
6. Pisitsak, P., and Magaraphan, R. (2007, June 11-15) Rheology–morphology relationships in poly(trimethylene terephthalate)/liquid crystalline polymer in situ composites. 3<sup>rd</sup> China-Europe Symposium on Processing and Properties of Reinforced Polymers, Budapest, Hungary.
7. Pisitsak, P., and Magaraphan, R. (2006, September 21-24) Brittle-to-tough bioplastics made of ENR-g-PCL. InnoBioPlast 2006, Bangkok, Thailand.