

## REFERENCES

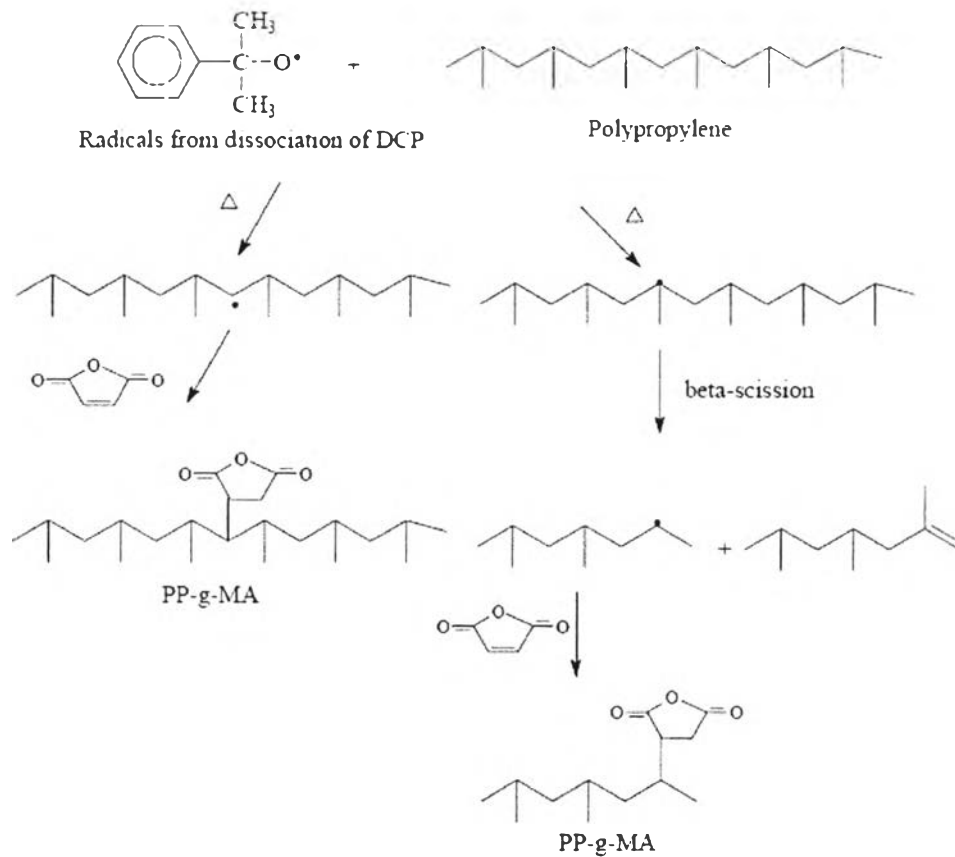
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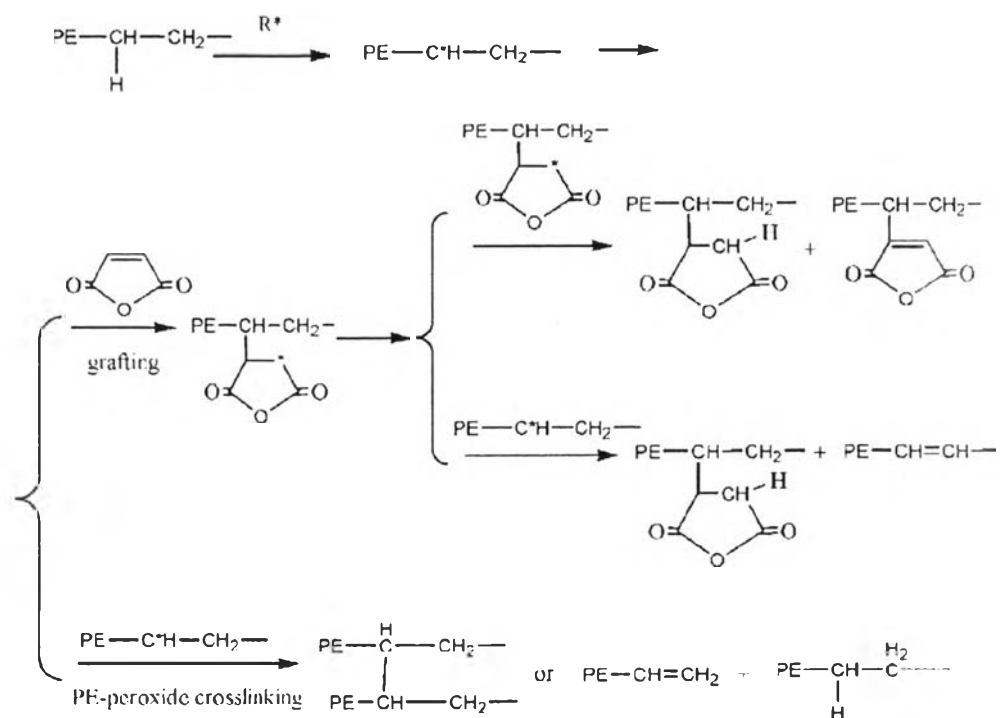
## APPENDICES

### Appendix A Grafting Mechanism of Polypropylene

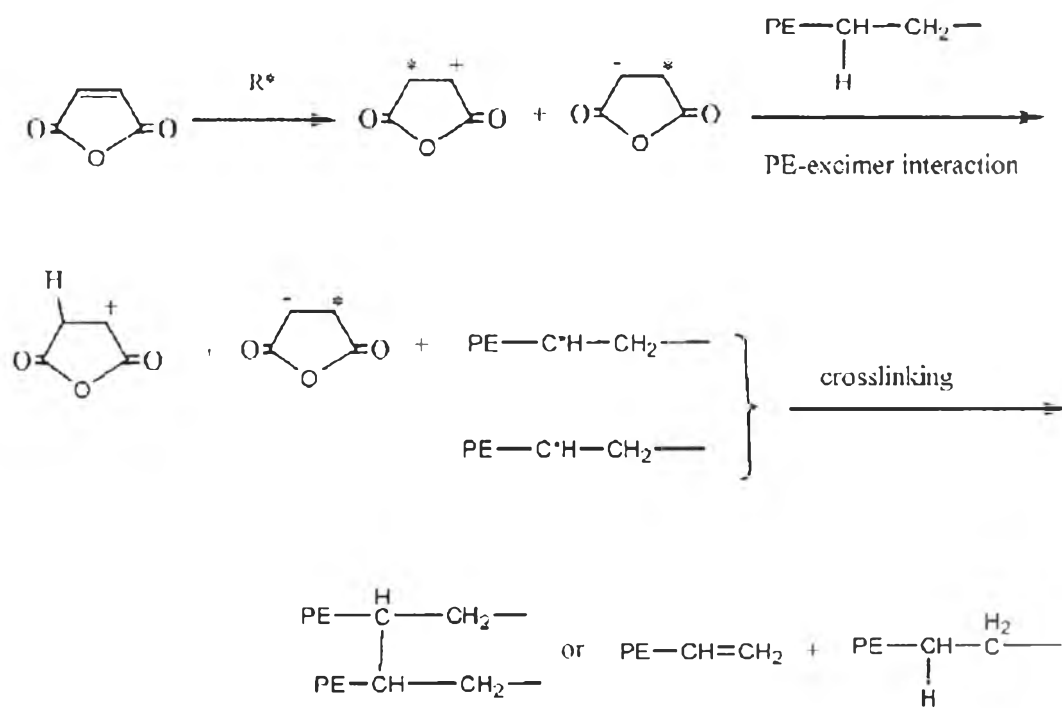


**Figure A1** Grafting mechanism of grafting reaction of MAH onto PP molecules during melt reactive process.

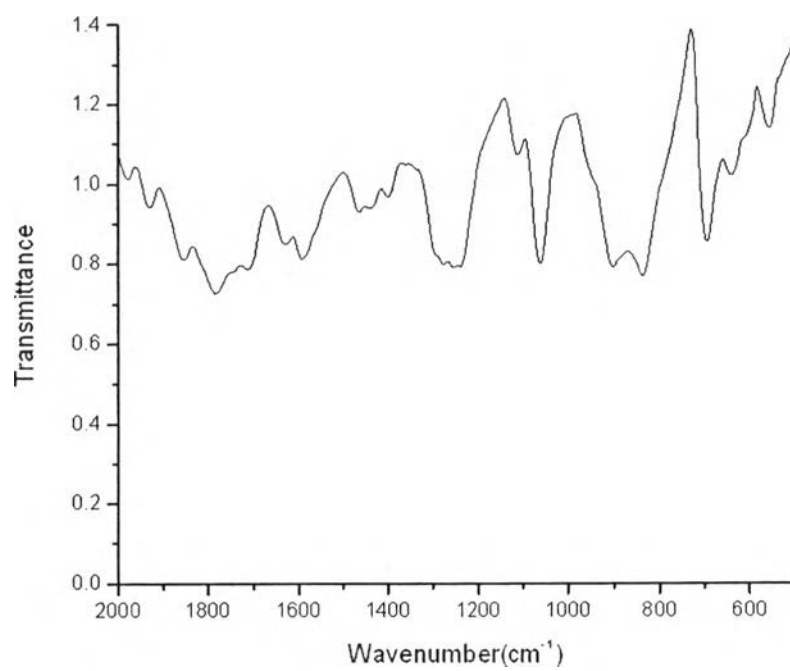
## Appendix B Grafting Mechanism of Polyethylene



**Figure B1** Gaylord's mechanism about the PE-peroxide crossing.



**Figure B2** Gaylord's mechanism about the PE-MAH excimer interaction.

**Appendix C FT-IR Spectra of Pure Maleic Anhydride (MAH)****Figure C1** FT-IR spectra of pure MAH.

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1. Suwanprateed, J.; Kerdsuk, S.; Boonsiri, T.; and Pratumpong, P. (2010). Evaluation of heat treatment regimes and their influences on the properties of powder-printed high-density polyethylene bone implant. Polymer International Journal. (submitted)

**Proceedings:**

1. Kerdsuk, S.; Brian P., G.; and Nithitanakul, M. (2012, April 24) Grafting maleic anhydride onto polyethylene and polypropylene: Grafting efficiency and rheology study. Proceedings of the 3<sup>rd</sup> Research Symposium on Petrochemicals and materials Technology and the 18<sup>th</sup> PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.

**Presentations:**

1. Kerdsuk, S.; Brian P., G.; and Nithitanakul, M. (2012, April 24) Grafting maleic anhydride onto polyethylene and polypropylene: Grafting efficiency and rheology study. Paper presented at the 3<sup>rd</sup> Research Symposium on Petrochemicals and materials Technology and the 18<sup>th</sup> PPC Symposium on Petroleum, Petrochemicals, and Polymers, Bangkok, Thailand.