REFERENCES

- Allen, S. N., Edge, M., Holdsworth, D., Rahman, A., Catalina, F., Fontan, E., Escalona, M. A., and Sibon, F. F. (2000). Ageing and spectroscopic properties of polyehtylenes: comparison with metallocene polymer.

 Polymer Degradation and Stability, 67, 57-67.
- Bauer, I., Habicher, D. W., Korner, S., and Al-Malaika, S. (1997). Antioxidant interaction between organic phosphites and hindered amine light stabilizers: effects during photoxidation of polypropylene-II. Polymer Degradation and Stability, 55, 217-224.
- Döner, G. and Lang, W. R. (1998a). Influence of various stabilizer systems on the ageing behavior of PE-MI)---I. Hot-water ageing of compression molded plaques. Polymer Degradation and Stability, 62, 421-430.
- Döner, G. and Lang, W. R. (1998b). Influence of various stabilizer systems on the ageing behavior of PE-MD---II. Ageing of pipe specimens in air and water at clevated temperatures. <u>Polymer Degradation and Stability</u>, 62, 431-440.
- Epacher, E., Fekete, E., Gahleitner, M., and Pukânszky, B. (1999a). Chemical reaction during the processing of stabilized PE: 1. Discolouration and stabilizer consumption. <u>Polymer Degradation and Stability</u>, 63, 489-597.
- Epacher, E., Fekete, E., Gahleitner, M., and Pukânszky, B. (1999b). Chemical reaction during the processing of stabilized PE: 2. Structure/property correlations. L'olymer Degradation and Stability, 63, 499-507.
- Günther, A., König, T., Habicher, D. W., and Schwetlick, K. (1997). Antioxidant action of organic sulphites---I. Esters of sulphurous acid as secondary antioxidants. Polymer Degradation and Stability, 55, 209-216.

- Gugumus, F. (1997, April). Thermoxoidative degradation of polyolefins in the solid state: Part 5. Kinetics of functional group formation in PE-HD and PE-LLD. Polymer Degradation and Stability, 55, 21-43.
- Johnson, D. (1999). Additives '99. <u>Plastics Engineering</u>, 55(11), 35. Society of Plastics Engineers, Inc. Brookfield: CT.
- Kyriakou, A. S., Statherpoulos, M., Parissakis, K. G., Papaspyrides D. C., and Kartalis, N. C. (1999). Oxidative induction time method based on thermogravimetry for monitoring the restabilization of post-use LDPE.
 Polymer Degradation and Stability, 66, 49-53.
- Liauw, M. C., Childs, A., Allen, S. N., Edge, M., Franklin, R. K., and Collopy, G. D. (1999). Effect of interactions between stabilisers and silica used for anti-blocking applications on UV and thermal stability of polyethylene film 2. Degradation studies. Polymer Degradation and Stability, 65, 207-215.
- Park, W. D., Hwang, Y. E., Kim, R. J., Choi, K. J. I, Kim, A. Y., and Woo, C. H. (1999). Catalytic degradation of polyethylene over solid acid catalysts.

 Polymer Degradation and Stability, 65, 193-198.
- Shlyapnikov, A. Yu., and Tyuleneva, K. N. (1997). Inhibited oxidation of polyethylene: anatomy of induction period*. Polymer Degradation and Stability, 56, 311-315.
- Wendlandt, WM. W. (1986). <u>Thermal analysis</u>. 3rd ed. USA: John Wiley & Sons, Inc.

APPENDIX

- ·Statistical formulae.
- 1. Delta, $\Delta =$ Maximum value of data in the same set Minimum value of data in the same set
- 2. Standard deviation $= \sqrt{\frac{\sum nx^2 (\sum x)^2}{n(n-1)}}$

where n = number of data values

x = data value in the set

'2. Method of slope calculation to determine stress at zero-slope point yield.

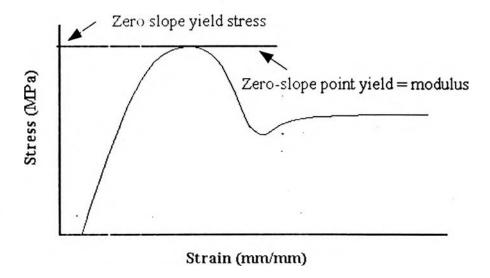


Figure A.1 Example of stress at zero-slope (yield point) calculation.

CURRICULUM VITAE

Name : Mr. Kridsada Funkumai

Birth date : April 30, 1975

Nationality : Thai

University education :

1994-1997 Bachelor of Science in Industrial

Chemistry, Faculty of Agricultural Engineering and Technology Rajamangala

Institute of Technology, Klong 6,

Phatumthanee, Thailand.