

บรรณานุกรม

เกื้อภูล ปิยะจอมขวัญ และสิทธิโชค วัลลภาทิตย์. 2547. โอกาสของมันสำปะหลังกับอุตสาหกรรม. สืบค้นจาก: http://www.cassava.org/News/Starchasso_2547.pdf (3 กุมภาพันธ์ 2548).

มูลนิธิสถาบันพลังงานทดแทนเอทานอล-ไบโอดีเซลแห่งประเทศไทย. 2000. เชื้อเพลิงเอทานอล. สืบค้นจาก: <http://www.ethanol-thailand.com> (4 กุมภาพันธ์ 2547).

เยี่ยมชมโรงงาน. 2543. โรงงานต้นแบบผลิตแอลกอฮอล์จากมันสำปะหลัง วท. วิศวกรรมสาร. 55-58.

รัตนา จิระรัตนานนท์. 2541. กระบวนการแยกด้วยเยื่อแผ่นสังเคราะห์. ภาควิชาวิศวกรรมเคมี มหาวิทยาลัยเทคโนโลยีพระจอมเกล้าธนบุรี.

Baker, R.W. 2004. Membrane Technology and Applications, John Wiley & Sons.

Baelen, D.V., Bruggen, B.V., Dungen, K.V., Degreve, J., and Vandecasteele, C. 2005. Pervaporation of water-alcohol mixtures and acetic acid-water mixtures. Chem. Eng. Sci. 60: 1583–1590.

Burke, J. 1984. Solubility parameter: Theory and Applications. สืบค้นจาก: <http://palimpsest.stanford.edu/byauth/burke/solpar/solpar2.html> (20 ธันวาคม 2548).

Carmo, M.J. and Gubulin, J.C. 1997. Ethanol-Water Adsorption on Commercial 3 °A Zeolites: Kinetic and Thermodynamics data. Braz. J. Chem. Eng. 14: 1-11.

Chang, C. L. and Chang, M. S. 2004. Preparation of multi-layer silicone/PVDF composite membranes for pervaporation of ethanol aqueous solutions. J. Membr. Sci. 238: 117–122.

- Chang, C. L. and Chang, M. S. 2002. Preparation of composite membranes of functionalized silicone polymers and PVDF for pervaporation of ethanol–water mixture. *Desalination*. 148: 39– 42.
- Dillon, C.P. Materials selection for the chemical process industries, McGraw–Hill.
- Feng, X. and Huang, R.Y.M. 1996. Estimation of activation energy for permeation in pervaporation process. *J. Membr. Sci.* 118: 127–131.
- Gonzalez–Velasco, J.R., Gonzalez–Marcos, J.A. and Lopez–Dehesa, C. 2002. Pervaporation of ethanol–water mixture through poly (1-trimethylsilyl-1-propyne) (PTMSP) membranes. *Desalination*. 149: 61– 65.
- Guan, J. and Hu, X. 2003. Simulation and analysis of pressure swing adsorption: ethanol drying process by the electrical analogue. *Sep. Purif. Technol.* 31: 31–35.
- Huang, R.Y.M. and Yeom., C.K. 1990. Pervaporation separation of aqueous mixtures using crosslinked poly(vinyl alcohol). II. Permeation of ethanol–water mixtures. *J. Membr. Sci.* 51: 273–292.
- Huang, R.Y.M., Pal, R. and Moon, G.Y. 1999. Characteristics of sodium alginate membranes for the pervaporation dehydration of ethanol–water and isopropanol–water mixtures. *J. Membr. Sci.* 160: 101–113.
- Ikegami, T., Yanagishita, H., Kitamoto, D., Negishi, H., Haraya, K. and Sano, T. 2002. Concentration of fermented ethanol by pervaporation using silicalite membranes coated with silicone rubber. *Desalination*. 149: 49– 54.
- Jiraratananon, R., Chanachai, A., Huang, R.Y.M., and Uttapap, D. 2002. Pervaporation dehydration of ethanol– water mixtures with chitosan/hydroxyethylcellulose (CS/HEC) composite membranes. I Effect of operating conditions. *J. Membr. Sci.* 195: 143–151.

Kazuhisa Miyamoto. 1997. Chapter 3 – Production of fuel alcohol from cellulosic biomass. สืบค้นจาก: <http://www.fao.org/docrep/W7241E/w7241e00.htm#Contents> (4 กุมภาพันธ์ 2547).

Kim, J.H., Lee, K.H. and Kim, S.Y. 2000. Pervaporation separation of water from ethanol through polyimide composite membrane. *J. Membr. Sci.* 169: 81–93.

Li, L., Xiao, Z., Tan, S., Pu, L. and Zang, Z. 2004. Composite PDMS membrane with high flux for the separation of organics from water by pervaporation. *J. Membr. Sci.* 243: 177–187.

Li, S., Tuan, V.A., Noble, R.D. and Falconer, J.L. 2002. ZSM-11 membranes: Characterization and Pervaporation Performance. *AIChE J.* 48(2): 269–278.

Mahesh, K.S. and Guest, A. 2004. Pervaporation: An Overview. สืบค้นจาก: <http://www.cheresources.com/pervaporation.shtml> (8 พฤษภาคม 2547).

Matsuda, H., Yanagishita, H., Negishi, H., Kitamoto, D., Ikegami, T., Haraya, K., Nakane, T., Idemoto, Y., Koura, N. and Sano, T. 2002. Improvement of ethanol selectivity of silicalite membrane in pervaporation by silicone rubber coating. *J. Membr. Sci.* 210: 433–437.

McCabe, W.L., Smith, J.C. and Harriott, P. 1993. *Unit Operation of Chemical Engineering*, McGraw-Hill.

Mettler Toledo Titrators DL32/DL39. *Fundamentals of the Coulometric Karl Fischer Titration with Selected Application*, Mettler-Toledo, Switzerland.

Mohammadi, T., Aroujalian, A. and Bakhshi, A. 2005. Pervaporation of dilute alcoholic mixtures using PDMS membrane. *Chem. Eng. Sci.* 60: 1875–1880.

- Molina, J.M., Vatai, G. and Bekassy-Molnar, E. 2002. Comparison of Pervaporation of different alcohols from water on CMG-OM-010 and 1060 Sulzer membrane. Desalination. 149: 89–94.
- Radovanovic, P., Thiel, S.W. and Hwang, S.T. 1990. Transport of Ethanol-Water Dimers in Pervaporation through a Silicone rubber membrane. J. Membr. Sci. 48: 55–65.
- Roberto, C. 2005. Theory of Concentration Polarization in Crossflow Filtration. สืบค้นจาก: <http://www.yale.edu/env/elimelech/CP1/sld003.htm> (4 ตุลาคม 2548).
- Rousseau, R.W. 1987. Handbook of Separation Process technology, John Wiley & Sons.
- Salem, M. and Ben, S. 1999. Effect of heat of adsorption on the adsorptive drying of solvents at equilibrium in a packed bed of zeolite. Chem. Eng. J. 74: 197–204.
- Shaban, H.I. 1997. Pervaporation separation of water from organic mixtures. Sep. Purif. Technol. 11: 119–126.
- Seader, J.D. and Henley, E. J. 1998. Separation Process Principle, John Wiley & Sons.
- Seok, D.R., Kang, S.G. and Hwang S.T. 1987. Use of pervaporation for separating azeotropic mixtures using two different hollow fiber membranes. J. Membr. Sci. 33: 7–81.
- Shah, D., Kissick, K., Ghorpade, A., Hannah, R., Bhattacharyya, D. 2000. Pervaporation of alcohol-water and dimethylformamide-water mixture using hydrophilic zeolite NaA membranes and experimental result. J. Membr. Sci. 179: 185–205.
- Soane, D.S. 1992. Polymer Application for Biotechnology. Prentice-Hall, USA. 85–88.

- Sonja, T., Andrea R. and Lanaya V. 1998. Pervaporation. สืบค้นจาก:
<http://ceenve.calpoly.edu/cota/enve436/projects/Pervap/pervaporation.html>
(4 กุมภาพันธ์ 2547).
- Sulzer chemtech. 2006. Pervaporation Systems. สืบค้นจาก:
[http://www.sulzerchemtech.com/eprise/SulzerChemtech/Sites/
products_services /pervap.html](http://www.sulzerchemtech.com/eprise/SulzerChemtech/Sites/products_services/pervap.html) (11 มกราคม 2549).
- Tsuyumoto, M., Akita, K. and Teramoto, A. 1995. Pervaporation transport of aqueous ethanol: Dependence of permeation rate on ethanol concentration and permeate side pressure. Desalination. 103: 211–222.
- Vauclair, C., Tarjus, H. and Schaetzel, P. 1997. Permselective properties of PVA-PAA blended membrane used for dehydration of fuel oil by pervaporation. J. Membr. Sci. 125: 293–301.
- Watson, J.M. and Payne, P.A. 1990. A Study of Organic Compound Pervaporation through Silicone rubber. J. Membr. Sci. 49: 171–205.
- Winston Ho, W.S. and Kamalesh, K.S. 1992. Membrane handbook. Van Nostrand Reinhold, New York.