

REFERENCES

- 1 R. Otson and X. Cao, *J. Chromatogr. A.*, **802** (1998) 307.
- 2 P.K. Dasgupta, *Atmos. Environ.*, **18** (1984) 1593.
- 3 P.K. Dasgupta, and P.F. Lindgren, *Environ. Sci. Technol.*, **23** (1989) 895.
- 4 Z. Genfa, P.K. Dasgupta, Y.-S. Cheng, *Atmos. Environ.*, **25A** (1991) 2717.
- 5 P.K. Dasgupta, W.L. McDowell, and J-S. Rhee, *Analyst*, **111**(1986) 87.
- 6 P.K. Dasgupta, and D.A. Phillips, *Sep. Sci. Technol.*, **22** (1987) 1255.
- 7 P.K. Dasgupta, S. Dong, H. Hwang, H.-C. Yang, and Z. Genfa, *Atmos. Environ.* **22** (1988) 949.
- 8 P.K. Dasgupta, S. Dong, H. Hwang, *Aerosol Sci. Technol.*, **12** (1990) 98.
- 9 G. Zhang, P.K. Dasgupta, and A. Sigg, *Anal. Chim. Acta.*, **260** (1992) 57.
- 10 J. Li, and P.K. Dasgupta, *Anal. Chem.*, **72** (2000) 5338.
- 11 J. Li, P.K. Dasgupta, Z. Genfa, M.A. Hutterli, *Field Anal. Chem. Tech.*, **5** (2001) 2.
- 12 P.F. Lindgren, P.K. Dasgupta, *Anal. Chem.*, **61** (1988) 19.
- 13 P. K Simon, P. K. Dasgupta, and Z. Vecera, *Anal. Chem.*, **63** (1991) 1237.
- 14 P.K. Simon, and P.K. Dasgupta, *Anal. Chem.*, **65** (1993) 1134.
- 15 Z. Vecera, and P.K. Dasgupta, *Anal. Chem.*, **63** (1991) 2210.
- 16 P.K. Dasgupta, L. Ni, S. K. Poruthoor, and D. C.Hindes, *Anal. Chem.*, **69** (1997) 5018.
- 17 M. Takeuchi, J. Li, K. J. Morris and P. K. Dasgupta. *Anal. Chem.*, **76** (2004) 1204.
- 18 C.B. Boring, S. K. Poruthoor, P.K. Dasgupta, *Talanta*, **48** (1999) 675.
- 19 C.B. Boring, R. Al-Horr, Z. Genfa, P.K. Dasgupta, M.W. Martin, W.F. Smith, *Anal. Chem.*, **74** (2002) 1256.
- 20 Z. Genfa, S. Slanina, C.B. Boring, P.A.C. Jongejan, P.K. Dasgupta, *Atmos. Environ.*, **37** (2003) 1351.
- 21 S. Liu, and P.K. Dasgupta, *Anal. Chem.*, **34** (1995) 2042.
- 22 A.A. Cardoso, and P.K. Dasgupta, *Anal.Chem.*, **67** (1995) 2562.
- 23 H. Liu, and P.K. Dasgupta, *Anal. Chem.*, **67** (1995) 4221.

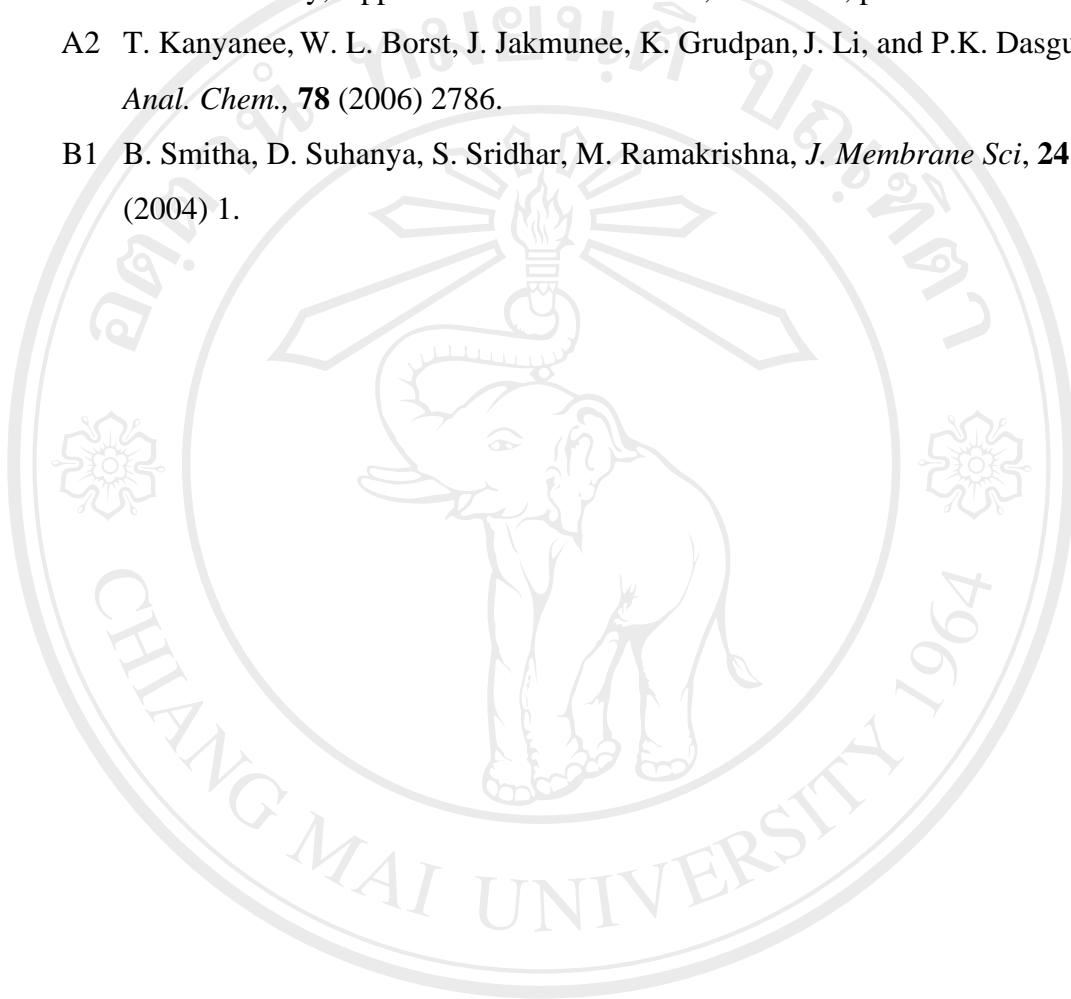
- 24 A. A. Cardoso, H. Liu, P. K. Dasgupta, *Talanta*, **44** (1997) 1099.
- 25 E. A Pereira, P. K Dasgupta, *Int. J. Environ. Anal. Chem.*, **66** (1997) 201.
- 26 Z.Genfa, P. K.Dasgupta, *Anal. Chem.*, **72** (2000) 3165.
- 27 P.W. West and G.C. Gaeke, *Anal. Chem.*, **28** (1956) 1816.
- 28 P.K. Dasgupta, K. Decesare, and J. C. Ullrey, *Anal. Chem.*, **52** (1980) 1912.
- 29 P.K. Dasgupta, *Anal. Chem.*, **53** (1981) 2084.
- 30 P.K. Dasgupta, *JPCA. Journal*, **31** (1981) 779.
- 31 S. K. Goyal, *J. Environ. Monit.*, **3** (2001) 666.
- 32 H. Vekisquez, H. Ramfrez, J. Dfaz, M. G. Nava, B. S. Borrego, and J. Morales, *J. Chromatogr. A*, **739** (1996) 295.
- 33 Y. Hisamatsu, L. Ping, and P.K. Dasgupta, *JAPCA. journal*, **39** (1989) 975.
- 34 K. Brudzewski, *Sensor Actuat. B.*, **9** (1992) 59.
- 35 J. Lin and E. Obermeier, *Sensor Actuat. B.*, **15-16** (1993) 319.
- 36 C.M. Mari, M. Beghi, and S. Pizzini, *Sensor Actuat. B.*, **2** (1990) 51.
- 37 A. W. E. Hodgson, P. Jacquinot, and P. C. Hauser, *Anal. Chem.*, **71** (1999) 2831.
- 38 <http://store.pksafety.net/so2sensor.html> (27 Febuary 2008).
- 39 J. Kaczmarek and R. Gondko, *Microchim. Acta*, **90** (1986) 235.
- 40 M. Kass, A. Ivaska, *Anal. Chim. Acta*, **449** (2001) 189.
- 41 M. R. Milani, A. A. Cardoso, *Microchem. J.*, **74** (2003) 75.
- 42 P. Sritharathikhun, M. Oshima, Y. Wei, J. Simon, and S. Motomizu, *Anal. Sci.*, **20** (2004) 113.
- 43 K. Toda, S. Ohira, T. Tanaka, and T. Nishimura, *Environ. Sci. Technol.*, **38** (2004) 1529.
- 44 S. Ohira, K. Toda, S. Ikebe, P.K. Dasgupta, *Anal. Chem.*, **74** (2002) 5890.
- 45 C. Isenberg, *The Science of Soap Films and Soap Bubbles. Advanced Education Toys Ltd.*, (1978) 17.
- 46 J. Cassidy, and D. Stein, *The unbelievable bubble.* Klutz press, USA, 1987.
- 47 K.R. Williams, *J. Chem. Ed.*, **79** (2002) 1168.
- 48 G. Raemme, *Educ. Chem.*, **29** (1992) 159.

- 49 Y. Matsuyama, T. Yasuoka, H. Shimada, S. Mitsuzawa, T. Sasaki, *Kagaku to Kyoiku*, **43** (1995) 716.
- 50 Y. Sakai, *Nippon Kikai Gakkai Ronbunshu B-hen*, **53** (1987) 3785.
- 51 J. Guo, M. Heslop, *J. Flow Measure. Instrum.*, **15** (2004) 331.
- 52 M. Hayashi,; S. Aso, *Memoirs of the Faculty of Engineering, Kyushu University (1943-1999)*, **47** (1987) 157.
- 53 M. Kessler, D. Leith, *Aerosol Sci. Technol.*, **15** (1991) 8.
- 54 S. Qiu, T. Simon, *Proc. Intersoc. Energy Conv. Eng. Conf.*, **27** (1992) 5517.
- 55 Y. Kakuta, H. Adachi, N Tanaka, T. Matsuto, G.R. Haikibutsu, *Haikibutsu Gakkai Ronbunshi*, **8** (1997) 22.
- 56 K. Cummins, *J. Chem. Educ.*, **68** (1991) 617.
- 57 <http://www.lenntech.com/membrane-technology.htm> (27 Febuary 2008).
- 58 E. Schneiderman, A. M. Stalcup, *J. Chromatogr B*, **745** (2000) 83.
- 59 S. P. Kusumocahyo, T. Kanamori, K. Sumaru, T. Iwatsubo, T. Shinbo, *J. Membrane Sci.*, **231**(2004) 127.
- 60 S. P.Kusumocahyo, K. Sumaru, T. Kanamori, T. Iwatsubo, T.Shinbo, *J. Membrane Sci.*, **230** (2004) 171.
- 61 J.Paris, C.Molina-Jouve, D.Nuel, P.Moulin, F.Charbit, *J. Membrane Sci.*, **237** (2004) 9.
- 62 A. Yudiarto, E. Dewi, and T. Kokugan, *Sep. Puri. Technol.*, **19** (2000)103.
- 63 E.M.Van der Ent, T. P. H. Thielen, M. A. C. Stuart, A. Van der Padt, J. T. F Keurentjes, *Ind. Eng. Chem. Res.*, **40** (2001) 6021.
- 64 H. M. Krieg, J. C.Breytenbach, and K.Keizer, *J. Membrane Sci.*, **164** (2000) 177.
- 65 J. Wang, C. Fu, T. Lin, L. Yu, and S. Zhu, *J. Membrane Sci.*, **276** (2006) 193.
- 66 Y. Xiao, and T. Chung, *J. Membrane Sci.*, **290** (2007) 78.
- 67 H.D. Wang, L.Y. Chu, H. Song, J. Yang, R. Xie, and M. Yang, *J. Membrane Sci.*, **297** (2007) 262.
- 68 S. Touil, S. Tingry, J. Palmeri, S. Bouchtalla, A.Deratani, *Polymer*, **46** (2005) 9615.
- 69 H. L.Chen , L. G. Wu, J. Tan, C. L. Zhu, *Chem. Eng. J.*, **78** (2000) 159.

- 70 H. Takaba, J. D.Way, *Ind. Eng. Chem. Res.*, **42** (2003) 1243.
- 71 V. Dubey , L. K. Pandey, C. Saxena, *Sep. Puri. Technol.*, **50** (2006) 45.
- 72 S. Touil, S. Tingry, S. Bouchtalla, A. Deratani, *Desalination*, **193** (2006) 291.
- 73 <http://www.rpi.edu/dept/chem-eng/Biotech-Environ/patillo/membrane.biochem/mem.types.html> (27 Febuary 2008).
- 74 M. Teramoto, Q. Huang, T. Maki, H. Matsuyama, *Sep. Puri. Technol.*, **16** (1999) 109.
- 75 A. Figoli, W.F.C. Sager, M.H.V. Mulder, *J. Membrane Sci.*, **181** (2001) 97.
- 76 S. Duan, A. Ito, A. Ohkawa, *J. Membrane Sci.*, **215** (2003) 53.
- 77 A. Ito, S. Duan, Y. Ikenori, A. Ohkawa, *Sep. Puri. Technol.*, **24** (2001) 235.
- 78 P. Scovazzo, J. Kieft, D. A. Finan, C. Koval, D. DuBois, R. Noble, *J. Membrane Sci.*, **238** (2004) 57.
- 79 Q. Gan, D. Rooney, M. Xue, G. Thompson, Y. Zou, *J. Membrane Sci.*, **280** (2006) 948.
- 80 S. Lee, B.S.Kim, E.W. Lee, Y. Park, J.M. Lee, *Desalination*, **200** (2006) 21.
- 81 K. Okabe, N. Matsumiya, H. Mano, *Sep. Puri. Technol.*, **57** (2007) 240.
- 82 J. Ilconich, C. Myers, H. Pennline, D. Luebke, *J. Membrane Sci.*, **298** (2007) 41.
- 83 P. O. Carvalho, Q. B. Cass, S. A. Calafatti, F. J. Contesini, and R. Bizacol, *Braz. J. Chem. Eng.*, **23** (2006) 291.
- 84 [http://en.wikipedia.org/wiki/Chirality_\(chemistry\)#Chirality_in_biology](http://en.wikipedia.org/wiki/Chirality_(chemistry)#Chirality_in_biology) (27 Feb 2008).
- 85 J.T.F. Keurentjes, L.J.W.M. Nabuurs, E.A. Vegter, *J. Membrane Sci.*, **113** (1996) 351.
- 86 P. Dygiel, P.Wieczorek, J. A. Jonsson, M. Milewska, and P. Kafarskie, *Tetrahedron*, **55** (1999) 9923.
- 87 C. Thoelen, M. De bruyn, E. Theunissen, Y. Kondo, I.F.J. Vankelecom, P. Grobet, M. Yoshikawa, P.A. Jacobs, *J. Membrane Sci.*, **186** (2001) 153.
- 88 J. D. Clark, B. Han, A. S. Bhowm, S. R. Wickramasinghe, *Sep. Puri. Technol.*, **42** (2005) 201.

- 89 P.Hadik, L. Kotsis, M. Eniszne-Bodogh, L.P. Szabo, E. Nagy, *Sep. Puri. Technol.*, **41** (2005) 299.
- 90 P. Hadik, L. P. Szabbb, E. Nagy, *Desalination*, **148** (2002) 193.
- 91 A. Maximini, H. Chmiel, H. Holdik, N.W. Maier, *J. Membrane Sci.*, **276** (2006) 221.
- 92 Q. Yang, T. S. Chung, *J. Membrane Sci.*, **294** (2007) 127.
- 93 K. Naemura, Y. Tobe, T. Kaneda, *Coordin. Chem. Rev.*, **148** (1996) 199.
- 94 H. M. Krieg, J. Lotter, K. Keizer, and J. C. Breytenbach, *J. Membrane Sci.*, **167** (2000) 33.
- 95 J. Andreaus, J. Draxler, R. Marr, and H. Lohner, *J. Colloid Interf. Sci.*, **185** (1997) 306.
- 96 D. W. Armstrong, H. L. Jin, *Anal. Chem.*, **59** (1987) 2237.
- 97 S. Cohen-Addad and D. Quere, *NATO ASI series, B. Phy.*, **323** (1994) 195.
- 98 L. Jing-fu, J. Gui-bin, *Microchem J.*, **68** (2001) 29.
- 99 M. Sandahl, L. Mathiasson, J. Ake Jonsson, *J. Chromatogr. A.*, **975** (2002) 211.
- 100 J. Liu , J. Chao, G. Jiang, Y. Cai, J. Liu, *J. Chromatogr. A.*, **995** (2003) 21.
- 101 Q. Zhou, J. Liu, Y. Cai , G. Liu, G. Jiang, *Microchem. J.*, **74** (2003) 157.
- 102 J. Trocewicz, *J. Chromatogr. B.*, **801** (2004) 213.
- 103 M. V. Khrolenko, P. P. Wieczorek, *J. Chromatogr. A.*, **1093** (2005) 111.
- 104 M. Tudorache, J. Emneus, *J. Membrane Sci.*, **256** (2005) 143.
- 105 http://www.sigmaaldrich.com/Brands/Supelco_Home/Spotlights/SPME_centeral.html (27 Feb 2008).
- 106 J. Pawliszyn, *solid phase micro extraction: theory and practice*, Eilley-VCH, USA,1887,pp 15-20.
- 107 X. Liu, J. Pawliszyn, *J. Membrane Sci.*, **268** (2006) 65.
- 108 Liu, S., Dasgupta, P. K, *Anal. Chem.*, **67** (1995) 2042.
- 109 Dionex application note 31.
- 110 A. Chattopadhyay, *J. Chem. Educ.*, **77** (2000) 1339.
- 111 H. Vekisquez, H. Ramfrez, J. Diaz, M. G. Nava, B. S. Borrego, and J. Morales, *J.Chromatogr. A.*, **739** (1996) 295.

- 112 R. M. Milani and A.A Cardoso, *Microchem. J.*, **74** (2003) 75.
- 113 S.E. Schwartz, and J. E.Freiberg, *Atmos. Environ.*, **15** (1981) 1129.
- 114 S.E. Schwartz, and J. E.Freiberg, *Atmos. Environ.*, **15** (1981) 1145.
- A1 Conductometry, Application Bulletin 102/2 e, Methohm, p9/9.
- A2 T. Kanyanee, W. L. Borst, J. Jakmunee, K. Grudpan, J. Li, and P.K. Dasgupta, *Anal. Chem.*, **78** (2006) 2786.
- B1 B. Smitha, D. Suhanya, S. Sridhar, M. Ramakrishna, *J. Membrane Sci.*, **241** (2004) 1.



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright © by Chiang Mai University
All rights reserved