REFERENCES

- Abdollahi,H. and Zeinali, S. 2004. Spectrophotometric study of complexation equilibrium with H-point standard addition and H-point curve isolated methods. *Talanta* **62**: 151-163.
- Abollino, O., Aceto, M., Sarzanini, C. and Mentasti, E. 2000. The retention of metal species by different solid sorbents mechanisms for heavy metal speciation by sequential three column uptake. *Analytica Chimica Acta* **411**: 223-237.
- Acar, O. 2001. Determination of cadmium and lead in biological samples by zeeman ETAAS using various chemical modifiers. *Talanta* **55**: 613-622.
- Anil, K., Khopkar, M. and Chalmers, R. 1970. 8-Hydroxyquinoline and derivatives. *Solvent extraction of metals.* 77-95.
- Arpa, Ç., Basyilmaz, E., Bektas, S., Genc, Ö. and Yurum, Y. 2000. Cation exchange properties of low rank Turkish coal: removal of Hg, Cd and Pb from waste water. *Fuel Processin Technology* 68: 111-120.
- ATSDR (Agency for Toxic Substance and Disease Registry). 1991b. Toxicology profile for lead, agency for toxic substance and disease registry, U.S. Public Health Service, Atlanta, GA.
- ATSDR (Agency for Toxic Substance and Disease Registry). 1993d. Toxicology profile for lead, agency for toxic substance and disease registry, U.S. Public Health Service, Atlanta, GA.
- ATSDR (Agency for Toxic Substance and Disease Registry). 2005. lead, agency for toxic substance and disease registry, U.S. Public Health Service, Atlanta, GA.

- ATSDR (Agency for Toxic Substance and Disease Registry). 2005. Toxicology profile for cadmium, agency for toxic substance and disease registry, U.S. Public Health Service, Atlanta, GA.
- Australian New Zealand Food Authority, 1998. Standard level of heavy metal contamination in seafood.
- Beaty, R.D. and Kerber, J.D. 1993. *Concepts, Instrumentation and Techniques in Atomic Absorption Spectrometry*, Unitate States of America: The Perkin-Elmer Corporation.
- Buldini, P.L., Ricci, L. and Sharma, J.L. 2002. Recent applications of sample preparation techniques in food analysis. *J. Chromatography A.***975**: 47-70.
- Camel, V. 2003. Solid phase extraction of trace elements. *Spectrochimica Acta Part B* **58:** 1177-1233.
- Cid, B. P., Boia, C., Pombo, L. and Rebelo, E. 2001. Determination of trace metals in fish species of the Ria de Aveiro(Portugal) by electrothermal atomic absorption spectrometry. *Food Chemistry* 75: 93-100.

Chappuis, P. and Pineau, A. 1995. Cadmium. Encyclopedia of analytical Science 1: 418-425.

Correia, P.R.M., Oliveira, E. and Oliveira, P.V. 2000. Simultaneous determination of Cd and Pb in foodstuffs by electrothermal atomic absorption spectrometry. *Analytica Chimica Acta* **405**: 205-211.

Daecharat, S. 2002. Contamination of lead and cadmium in Tapi-Phumduang river sludge. Master

of Science Thesis in Environment Management, Prince of Songkla University.

De, A., Khopkar, S. and Chalmers, R. 1970. 8-Hydroxyquinoline and its derivatives. Solvent extraction: 77-95.

Department of Environmental Quality Promotion.

Department of Medical Science. 2000.

- Ekinci, C. and KÖklÜ, Ü. 2000. Determination of vanadium, manganese, silver and lead by graphite furnace atomic absorption spectrometry after preconcentration on silicagel modified with 3-aminopropyltriethoxysilane. *Spectrochimica Acta Part B* 55: 1491-1495.
- Ferreira, S. L. C., Lemos, V. A., Santelli, R. E., Ganzarolli, E. and Curtius, A. J. 2001. An automated on-line flow system for the preconcentration and determination of lead by flame atomic absorption spectrometry. *Microchemical Journal* 68: 41-46.
- Franzblu, A. 1994a. Cadmium. In Textbook of Clinical Occupational and Environmental Medicine. 736-738. Rosenstock, L. and M.R. Cullen, Eds. Philadelphia: W.B. Suanders Company.
- Ghiasvand, A.R., Ghaderi, R. and Kakanejadifard. 2004. Selective preconcentration of ultra trace copper (II) using octadecyl silica membrane disks modified by a recently synthesized glyoxime derivative. *Talanta* 62: 287-292.
- Goswami, A. and Singh, A. K. 2002. 1,8-Dihydroxyanthraqinone anchored on silica gel: synthesis and application as solid phase extractant for lead (II), Zinc (II) and Cadmium (II) prior to their determination by flame atomic absorption

spectrometry. Talanta 58: 669-678.

- Gurnani, V., Singh, A.K. and Venkataramni, B. 2003. Cellulose functionalized with 8-Hydroxyquinoline: new method of synthesis and applications as a solid phase extractant in the determination of metal ions by flame atomic absorption spectrometry. *Analytica Chimica Acta* 485: 221-232.
- Hamepatawee, R. and Kronghrot, J. 2001. Sample preparation technique for element analysis by instrumentation. *Department of Science Service* **157**: 14-16.

Hanbook of Perkin Elmer AAnalyst 800 atomic absorption spectrometer.

Hill, S. 1995. Lead. Encyclopedia of analytical science 4: 2506-2511.

- Hagen, D., Markell, C., Schmitt, G. and Blevins, D. 1990. Membrane approach to solid phase extractions. *Analytica Chimica Acta* 236: 157-161.
- Hashemi, O.R., Kargar, M.R., Raoufi, F., Moghimi, A., Aghabozorg, H. and Ganjali, M.R. 2001.
 Separation and preconcentration of trace amount of lead on octadecyl silica
 membrane disks modified with a new S-containing Schiff's base and its
 determination by flame atomic absorption spectrometry. *Microchemical Journal* 69: 1-6.
- Ingle, J.D., J.R. and Crouch, S.R. 1988. Spectrochemical Analysis, 590 pp. United State of

America: Prentice-Hall, Inc

Inthorn, D., Sidtitoon, N., Silapanuntakul, S. and Incharoensakdi, A. Sorption of mercury, cadmium and lead by microalgae. *Science Asia* **28**: 253-261.

- Jal. P.K., Patel, S. and Mishra, B.K. 2004. Chemical modification of silica surface by immobilization of functional groups for extractive concentration of metal ions. *Talanta* 62: 1005-1028.
- Jeon, I. and Ikins, W. 1995. Analyzing food for nutrition labeling and hazardous contamination: 169-193.
- Junk, G., Avery, M. and Richard, J. 1988. Interferences in Solid phase extraction using c18 bonded porous silica cartridges. *Analytical Chemistry* **60**: 1347-1352.
- Kan-atireklap, S., Kan-atireklap, S., Sanguansin, J. and Bantivivatkul, S. 1999. Contamination of heavy metals in some marine organisms along the East Coast of the Gulf of Thailand. Technical paper of Eastern marine fisheries and development center.

Katenil, N. 2005. Report of food product exportation in 2003. National Food Institute 29: 41-53.

Khowsittiwong, B. 1995. Hazadous waste management. Bangkok.

- Kilian, K. and Pyrzynska, K. 2001. Preconcentration of metal ions on porphyrin-modified sorbents as pretreatment step in AAS determination. *Fresenius J. Analytical Chemistry* 371:1076-1081.
- Kumar, M., Rathore, D.P.S. and Singh, A.K. 2000. Amberlite XAD-2 functionalized with *o*aminophenol: synthesis and applications as extractant for copper (II), cobalt (II), cadmium (II), nickel (II), zinc (II) and lead (II). *Talanta* 51: 1187-1196.
- Kungsuwan, A. Ittipong, B. and Kornchatree, P. 1997. Heavy metals content in Cephalopods. *Fishery* 1: 55-65.

Lauwerys, R.P. and P. Hoet. 1993. Lead. Industrial Chemical Exposure: Guidelines for

Biological Monitoring, 2d ed. 55-64. Florida: Lewis Publishers.

- Leepipatpiboon, V. 1995. Trace enrichment by solid-phase extraction for the analysis of heavy metals in water. *J. Chromatography A* **697**: 137-143.
- Lemos, V. A. and Ferreira, S. L. C. 2001. On-line preconcentration system for lead determination in seafood samples by flame atomic absorption spectrometry using polyurethane foam loaded with 2-(2-benzothiazolylazo)-2-p-cresol. *Analytica Chimica Acta* 441: 281-289.
- Liska, I. 2000. Fifty years of solid phase extraction in water analysis historical development and overview. *Chromatography A* **885**: 3-6.
- Lundgren, J. and Schilt, A. 1977. Analytical studies and applications of ferroin type chromogens immobilized by adsorption on a styrene-dyvinylbenzene copolymer. *Analytical Chemistry* **49**: 974-979.
- Ma, R. and Adams, F. 1996. Flow injection sorbent extraction with dialkyldithiophosphates as chelating agent for the determination of cadmium, copper and lead by flame atomic absorption spectrometry. *Spectrochimica Acta Part B* **51**: 1917-1923.
- 3M company, 2004. Solid phase extraction membrane. General guidelines for applications, St. Paul, MN. USA.
- Meesuk, P. and Benjakul, S. 1998. The determination of arsenic and heavy metals in aquatic animals and seaweed in Songkhla lake in December 1995. *Thaksin University* 1: 45-49.
- Monteiro, C., Itavo, R.V. and Moraes, L.E.S. 2003. Concentration of heavy meatals in *Sotalia fluviatilis* (Cetacea: Delphinidae) off the coast of Ceará, northeast Brazil.

Environmental Pollution 123: 319-324.

- Narin, I. and Soylak, M. 2003. Enrichment and determinations of nickel (II), Cadmium (II), copper (II), Cobalt (II) and Lead (II) ions in natural waters, table salts, tea and urine samples as pyrrolydine dithiocarbamate chelates by membrane filtrationflame atomic absorption spectrometry combination. *Analytical Chimica Acta* **493**: 205-21.
- Nascentes, C. C., Korn, M. and Arruda, A. Z. 2001. A fast ultrasound-assisted extraction of Ca, Mg, Mn and Zn from vegetables. *Microchemical Journal* **69**: 37-43.
- Neggers, Y. and Lane, R. 1995. Minerals. Analytical food for nutrition labeling and hazardous contamination: 169-193.
- NRCC (National Research Council Canada). 1979. Effect of cadmium in the Canada Environment, NRCC 16743. Associate Committee on Scientific Criteria for Environmental Quality, Subcommittee on Health Metals and Certain Other Elements.
- Nutall, K.L. 1995. Evaluating lead exposure in the laboratory. *Laboratory Medicine*. 2 (1995), 118-123.
- Pereira, M. G., Pereira-Filho, E. R., Berndt, H. and Arruda, M. A. Z. 2004. Determination of cadmium and lead at low levels by using preconcentration at fullerene coupled to thermospray flame furnace atomic absorption spectrometry. *Spectrochimica Acta Part* B 59: 515-521.
- Pereira, L.A., Amorim, I.G. and Silva, J.B.B. 2004. Development of methodologies to determine aluminium, cadmium, chromium and lead in drinking water by ETAAS using permanent modifiers. *Talanta* 64: 395-400.

Poole, C. 2000. (a) Solid phase extraction. *Encyclpedia of separation science* **3**: 1405-1412.

- Poole, C. 2000. (b) Solid phase extraction with disks. *Encyclpedia of separation science* **9**: 4141-4146.
- Rossi, D. and Zhang, N. 2000. Automating solid phase extraction: current aspects and future prospects. *Chromatography A* **885**: 97-102.
- Saavedra, Y., González, A., Fernández, P. and Blanco, J. 2004. A simple optimized microwave digestion method for multielement monitoring in mussel samples. *Spectrochimica Acta Part B* **59**: 533-541.
- Shamsipur, M., Ghiasvand, A.R., Sharghi, H. and Nacimi, H. 2000. Solid phase extraction of ultra trace copper (II) using octadecyl silica membrane disks modified by a naphthol-derivative Schiff's base. *Analytica Chimica Acta* 408: 271-277.
- Shamsipur, M., Raoufi, F. and Sharghi, H. 2000. Solid phase extraction and determination of lead in soil and water samples using octadecyl silica membrane disks modified by bis[1-hydroxy-9,10-antraquinone-2-methyl] sulfide and flame atomic absorption spectrometry. *Talanta* 52: 637-643.
- Shamsipur, M., Avanes, A., Rofouei, M.K., Sharghi, H. and Aghapour, G. 2001. Solid phase extraction and determination of ultra trace amount of copper (II) using octadecyl silica membrane disks modified by 11-hydroxynaphthacene-5,12-quinone and flame atomic absorption spectrometry. *Talanta* 54: 863-869.
- Sheppard, B. S., Heitkemper, D. T. and Gaston, C. M. 1994. Microwave Digestion for
 Determination of Arsenic, Cadmium and Lead in seafood Product by Inductive
 Coupled Plasma Atomic Emission and Mass Spectrometry. *Analyst* 119: 1683-1686.

- Shulikawit, W., Jangthong, N. and Chaowasrimud, D. 2002. Sample preparation for chemical analysis. *Department of Science Service* **159**: 14-16
- Soylak, M., Divrikli, U., Elci, L. and Dogan, M. 2002. Preconcentration of Cr (II), Co (II), Cu (II), Fe (II) and Pb (II) as calmagites on cellulose nitrate membrane filter prior to their flame atomic absorption spectrometric determinations. *Talanta* 56: 565-570.
- Srisuk, C., Prawpun, S. and Paiboonwattanapol, O. 2000. Contamination of heavy metals in food from ceramic container. *Department of Science Service* **152**: 1-3.
- Strahmann, H. and Kock, K. 1978. Selective removal of heavy metal ions from aqueous solutions by diafiltration of macromolecular complex. *Recent development in separation science* 4: 29-38.
- Sturgeon, R. E., Berman, S. S., Willie, S. N. and Desaulniers, J. A. H. 1981. Preconcentration of Trace Elements from Seawater with Silica-Immobilized 8-Hydroxyquinoline. *Analytical Chem*istry 53: 2337-2340.
- Sures, B., Taraschewski, H. and Haung, C. 1995. Determination of trace metals (Cd, Pb) in fish by electrothermal atomic absorption spectrometry after microwave digestion. *Analytica Chimica Acta* 311: 135-139.
- Suthatham, R. 2005. Importing rule and food standard for Russia. *National Food Institute* **24**: 29-35.
- Suwannarath, G. 1995. Level of some heavy metals in Klong Wat Basin, Changwat Songkhla. Master of Science Thesis in Environmental Management, Prince of Songkla University.

Suwanpinij, P. 2004. Nutrition. Biology I; 73-103.

- Tang, Y. Chen, B. and Mo, S. Separation and preconcentration of ultra trace lead in biological organisms and its determination by graphite furnace atomic absorption spectrometry. *Talanta* 43: 761-765.
- Thai Industrial Standard Institute and Department of Medical Science. 2000. Development of cadmium and lead analysis in food samples. *Training document* : 1-30.
- Thurman, E. and Snavely, K. 2000. Advances in solid phase extraction disk for environmental chemistry. *Trends analytical chemistry* **19**: 18-23.
- Tüzen, M. 2003. Determination of heavy metals in fish sample of the middle Black Sea (Turkey) by graphite furnance atomic absorption spectrometry. *Food Chemistry* 80: 119 – 123.
- Tsuchiya, K. 1986. Lead. In Handbook on the Toxicology of Metal. Friberg, L., G.F. Nordberg and V.B. Vouk, eds. 298 353. Amsterdam: Elsevier.
- UNEP (United Nations Environment Program). 1991. Environmental data report. Report Prepared by the GEMS Mornitoring and Assessment Research Center. London, UK.
- Wen, B. and Shan, X. 2002. Improved immobilization of 8-hydroxyquinoline on polyacrylonitrile fiber and application of the material to the determination of trace metals in seawater by inductively coupled plasma mass spectrometry. *Anal Bioanal Chem* 374: 948-954.
- Wang,Z.H., Zhang, Z.P., Wang, Z.P., Liu, L.W. and Yan, X.P.2004. Acrylic acid grafted polytetrafluoroethylene fiber as new packing for flow injection on-line microcolumn preconcentration coupled with flame atomic absorption

spectrometry for determination of lead and cadmium in environmental and biological samples. *Analytica Chimica Acta* **514**: 151-157.

- Willie, S. N., Tekgul, H. and Sturgeon, R. E. 1998. Immobilization of 8-Hydroxyquinoline onto silicone tubing for the determination of trace elements in seawater using flow injection ICP-MS. *Talanta* 47: 439-445.
- Yamini, Y., Chaloosi, M. and Ebrahimzadeh, H. 2002. Solid phase extraction and graphite furnace atomic absorption spectrometric determination of ultra trace amount of bismuth in water samples. *Talanta* 56: 797-803.
- Zaporozhets, O. A. and Tsyukalo, L. Y. 2002. Xylenol orange adsorbed on silica surface as a solid phase reagent for lead determination using diffuse reflectance spectroscopy. *Talanta* 58: 861-868.