

REFERENCES

- Abollino, O., Aceto, M., Sarzanini, C. and Mentasti, E. 1999. Behavior of different metal-ligand systems in adsorptive cathodic stripping voltammetry. *Electroanalysis*. 11(12) : 870-878.
- Abu Zuhri, A. Z. and Voelter, W. 1998. Applications of adsorptive stripping voltammetry for the trace analysis of metals, pharmaceuticals and biomolecules. *Fresenius J. Anal Chem.* 360 : 1-9.
- Achterberg, E. P. and Braungardt, C. 1999. Stripping voltammetry for the determination of trace metal speciation and in-situ measurements of trace metal distributions in marine waters. *Analytica Chimica Acta*. 400 : 381-397.
- Agbenin, J. O. 2002. Lead in a Nigerian savanna soil under long-term cultivation. *The Science of the Total Environment*. 286 : 1-14.
- Alemu, H. and Chandravanshi, S. B. 1998. Differential pulse anodic stripping voltammetric determination of copper(II) with N-phenylcinnamohydroxamic acid modified carbon paste electrodes. *Analytica Chimica Acta*. 368 : 165-173.
- Amini, K.M. and Kabiri M. 2004. Determination of trace amounts of nickel by differential pulse adsorptive cathodic stripping voltammetry using calconcarboxylic acid as a chelating agent. *J. the Iranian Chemical Society*, 2(1) : 32-39.
- Andrews, L. S.1992. FOOD SAFETY SERIES *In: Lead and Our Environment*.
- Anil, K., Khopkar, M. and Chalmers, R. 1970. 8-Hydroxyquinoline and derivatives. *Solvent extraction of metals*. 77-95.

- Arancibia, V., Alarcón, L. and Segura, R. 2004. Supercritical fluid extraction of cadmium as Cd-oxine complex from human hair. Determination by square wave anodic or adsorptive stripping voltammetry. *Analytica Chimica Acta*. 502 : 189-194.
- Arrnalis, S. and Johansson, G. 1997. On-line trace metal determination by pre-concentration on immobilized 8-quinolinol with flow recycling anodic stripping voltammetry. *Analytica Chimica Acta*. 339 : 155-159.
- Ashraf, W., Seddigi, Z., Abulkibash, A. and Khalid, M. 2006. Levels of selected metals in canned fish consumed in Kingdom of Saudi Arabia. *Environmental Monitoring and Assessment*. 117 : 271-279.
- ATSDR (Agency for Toxic Substances and Disease Registry). 2005. Lead. Atlanta. p.1-13.
- Babaei, A., Shams, E. and Samadzadeh, A. 2006. Simultaneous determination of copper, bismuth and lead by adsorptive stripping voltammetry in the presence of Thymolphthalexone. *ANALYTICAL SCIENCES*. 22 : 955-959.
- Bo, T. and Liu, H. 2004. Separation methods for pharmacologically active xanthenes. *J. Chromatography B*. 812 : 165-174.
- Buffle, J. and Tercier-Waeber, M. L. 2005. Voltammetric environmental tracemetal analysis and speciation: from laboratory to in situ measurements. *Trends in Analytical Chemistry*. 24(3) :172-191.
- 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.
- Celik, U., Cakli, S. and Oehlenschlager, J. 2004. Determination of the lead and cadmium burden in some northeastern Atlantic and Mediterranean fish species by DPSAV. *Eur Food Res Technol*. 218 : 298 – 305.

- Chen, S., Zhang, Z., Yu, H., Liu, W. and Sun, M. 2002. Determination of trace lead by hydride generation–inductively coupled plasma–mass spectrometry. *Analytica Chimica Acta*. 463 : 177-188.
- Chew, L. T., Bradley, D. A., Mohd, A. Y. and Jamil, M. M.2000. Zinc, lead and copper in human teeth measured by induced coupled argon plasma atomic emission spectroscopy (ICP-AES). *Applied Radiation and Isotopes*. 53 : 633-638.
- Colombo, C. and Van Den Berg, C.M.G. 1997. Simultaneous determination of several trace metals in seawater using cathodic stripping voltammetry with mixed ligands. *Analytica Chimica Acta*. 337 : 29-40.
- Degefa, H. T., Chandravanshi B. S. and Alemu, H. 1999. Differential pulse anodic stripping voltammetric determination of lead(II) with *N-p*- Chlorophenylcinnamohydroxamic acid modified carbon paste electrode. *Electroanalysis*. 11(17) : 1305-1311.
- Dolan, S. P. and Capar, S G. 2002. Multi-element analysis of food by microwave digestion and inductively coupled plasma-atomic emission spectrometry. *J. Food Composition and Analysis*. 15 : 593-615.
- D'Mello, J. P. F.2003. Food Safety: Contaminants and Toxins. p. 210-213. Wiley -VCH. USA.
- Edward, G. 1986. Lead in canned foods. *Agriculture and Human Values*. 3(1-2):91-145.
- Erdoğrul, Ö. and Erbilir, F. 2006. Heavy metal and trace elements in various fish samples from Sir Dam Lake, Kahramanmaraş, Turkey. *Environ Monit Assess*. 130 : 373-379.
- Fajgelj, A. and Byrne, A. R.1995. Determination of lead, cadmium and thallium by neutron activation analysis in environmental samples. *J.Radioanalytical and Nuclear Chemistry*. 189 : 333-343.

- Fang, G., Meng, S., Zhang, G. and Pan J. 2001. Spectrophotometric determination of lead in foods with dibromo-*p*-methyl-bromosulfonazo. *Talanta*. 54 : 585 - 589.
- Garay, F. and Solis V. 1999. Square wave stripping voltammetry of Cd–oxine complexes; surface redox reactions. *J. Electroanalytical Chemistry*. 476 : 165–170.
- Golob, T., Doberšek, U., Kump P., and Necemer, M. 2005. Determination of trace and minor elements in Slovenian honey by total reflection X-ray fluorescence spectroscopy. *Food Chemistry*. 91(4) : 593-600.
- Graeme, K. A. and Pollack, C. V. 1998. Heavy metal toxicity, part II: Lead and metal fume fever. *J. Emergency Medicine*. 16(2) : 171-177.
- Guo, Y. and Guadalupe, R.A. 1999. Preconcentration and voltammetry of mercury on a functionalized sol-gel thin film modified glassy carbon electrode. *J. Pharmaceutical and Biomedical Analysis*. 19 : 175-181.
- Herzog, G. and Arrigan, D.W.M. 2005. Determination of trace metals by underpotential deposition–stripping voltammetry at solid electrodes. *Trends in Analytical Chemistry*. 24(3) : 208-217.
- Hoening, M. and Kersabiec, de Anne-Marie. 1996. Sample preparation steps for analysis by atomic spectroscopy methods: present status. *Spectrochimica Acta Part B*. 51 : 1297-1307.
- Hoening, M. 2001. Preparation steps in environmental trace element analysis facts and traps. *Talanta*. 54 : 1021-1038.
- Hseu, Z.-Y. 2004. Evaluating heavy metal contents in nine composts using four digestion methods. *Bioresource Technology*. 95 : 53–59.

- Huang, S-S., Cheng, Y-D. Li, B-F. and Liu G-D. 1998. Simultaneous anodic stripping voltammetric determination of lead and cadmium with a carbon paste electrode modified by tributyl phosphate. *Mikrochim. Acta*. 130 : 97-101.
- Hu, C., Wu, K., Dai, X. and Hu, S. 2003. Simultaneous determination of lead(II) and cadmium(II) at a diacetyldioxime modified carbon paste electrode by differential pulse stripping voltammetry. *Talanta*. 60 : 17-24.
- Ibrahim, H. 2005. Carbon paste electrode modified with silver thimerosal for the potentiometric flow injection analysis of silver(I). *Analytica Chimica Acta*. 545 : 158-165.
- Ijeri, V. S. and Srivastava, A. K. 2001. Voltammetric determination of lead at chemically modified electrodes based on crown ethers. *Analytical Sciences*. 17 : 605-608.
- Ikem, A. and Egiebor, N.O. 2005. Assessment of trace elements in canned fishes (mackerel, tuna, salmon, sardines and herrings) marketed in Georgia and Alabama (United States of America). *J. Food Composition and Analysis*. 18 : 771-787.
- Jiang, D., Hu, G., Jiang, J., Xiang, H., Deng, H. and Li, Y. 2003. Relationship between protective effect of xanthone on endothelial cells and endogenous nitric oxide synthase inhibitors. *Bioorganic & Medicinal Chemistry*. 11 : 5171-5177.
- Jin, A., Teschke, K. and Copesb, R. 1997. The relationship of lead in soil to lead in blood and implications for standard setting. *The Science of the Total Environment* . 208 : 23-40.
- Jin, L. 1997. Determination of Trace Metals and Copper Complexation in Freshwater Systems of the Bonavista Peninsula, Newfoundland by Stripping Voltammetry. M.Sc., Sichuan University. P 16-17.
- Johnson, F.M. 1998. The genetic effects of environmental lead. *Mutation Research*. 410 : 123-140.

- Jurado-González, A. J., Galindo-Riaño, D. M. and Garcia-Vargas, M. 2003. Experimental designs in the development of a new method for the sensitive determination of cadmium in seawater by adsorptive cathodic stripping voltammetry. *Analytica Chimica Acta* 487 : 229-241.
- Juresa, D. and Blanusa, M. 2003. Mercury, arsenic, lead and cadmium in fish and shellfish from the Adriatic Sea. *Food Additives and Contaminants*. 20(3) : 241-246.
- Khansari, E. F., Ghazi-Khansari, M. and Abdollahi, M. 2005. Heavy metals content of canned tuna fish. *Food Chemistry*. 93 : 293–296.
- Korn, M. A., Andrade, J. B., Jesus, D. S., Lemos V. A., Bandeira M., Santos, W., Bezerra M. A., Amorim, F., Souza, A.S. and Ferreira, S. L. C. 2006. Separation and preconcentration procedures for the determination of lead using spectrometric techniques. *Talanta*. 69 : 16-24.
- Landrigan, P. J., Boffetta, P. and Apostoli, P. 2000. The reproductive toxicity and carcinogenicity of lead. *American J. Industrial medicine*. 38 : 231-243.
- Lapinee, C. 2006. Determination of cadmium and lead in seafood samples using solid phase extraction and graphite furnace atomic absorption spectrometry. Master of Science Thesis in Chemistry. Prince of Songkla University.
- Li, Yi-H., Long, H. and Zhou, F. Q. 2005. Determination of trace tin by catalytic adsorptive cathodic stripping voltammetry. *Analytica Chimica Acta*. 554 : 86-91.
- Limson, J. and Nyokong, T. 1997. Substituted catechols as complexing agents for the determination of bismuth, lead, copper and cadmium by adsorptive stripping voltammetry. *Analytica Chimica Acta*. 344 : 87-95.

- Loska, K. and Wiechula, D. 2006. Comparison of sample digestion procedures for the determination of arsenic in bottom sediment using hydride generation AAS. *Microchim Acta*. 154 : 235-240.
- Maichin, B., Zischka, M. and Knapp, G. 2003. Pressurized wet digestion in open vessels. *Anal Bioanal Chem*. 376 : 715-720.
- Martinez-Villegas, N., Flores-Velez, L.Ma. and Dominguez, O. 2004. Sorption of lead in soil as a function of pH:a study case in Mexico. *Chemosphere*. 57 : 1537–1542.
- Mauss, E. A. 1993. Lead Poisoning: The Continuing Epidemic. *Child and Adolescent Social Work Journal*. 10(5) : 379-393.
- Mitra, S. 2003. Preparation of samples for metals analysis. *In Sample Preparation Techniques in Analytical Chemistry*. A John Wiley & Sons, Inc. New jersey.
- Molina-Holgado, T., Pinilla-Macias, J.M. and Hernaadez-Hernandez, L. 1995. Voltammetric determination of lead with a chemically modified carbon paste electrode with diphenylthiocarbazone. *Analytica Chimica Acta*. 309 : 117-122.
- Mousavi, M.F., Rahmani, A., Golabi, S.M., Shamsipur, M. and Sharghi, H. 2001. Differential pulse anodic stripping voltammetric determination of lead(II) with a 1,4-bis(prop-2'-enyloxy)-9,10-anthraquinone modified carbon paste electrode. *Talanta* .55 : 305-312.
- Novozamsky, I., van der Lee, H. J. and Houba, V. J. G. 1995. Sample Digestion Procedures for Trace Element Determination. *Mikrochim Acta*. 119 : 183-189.
- Oliveira, M. F., Saczk, A. A., Okumura, L. L., Fernandes, A. P., Moraes, M. and Stradiotto, N. R. 2004. Simultaneous determination of zinc, copper, lead, and cadmium in fuel ethanol by anodic stripping voltammetry using a glassy carbon–mercury-film electrode. *Anal Bioanal Chem*. 380: 135-140.

- Pauliukaite, R., Metelka, R., Švancara, I., Królicka, A., Bobrowski, A., Vytras, K., Norkus, E. and Kalcher, K. 2002. Carbon paste electrodes modified with Bi₂O₃ as sensors for the determination of Cd and Pb. *Anal Bioanal Chem.* 374 : 1155–1158.
- Photicunapat, C. 2005. The electrochemical behavior of quinine compounds and their applications to metal analysis. Master of Science Thesis in Chemistry. Prince of Songkla University.
- Rannurags N. 2006. Determination of metals in water by electrodes modified with quinine compounds. Master of Science Thesis in Chemistry. Prince of Songkla University.
- Sabry, S. M. and Wahbi, A. M. 1999. Application of orthogonal functions to differential pulse voltammetric analysis simultaneous determination of tin and lead in soft drinks. *Analytica Chimica Acta.* 401 : 173-183.
- Sandroni, V. and Smith, C.M.M. 2002. Microwave digestion of sludge, soil and sediment samples for metal analysis by inductively coupled plasma–atomic emission spectrometry. *Analytica Chimica Acta.* 468 : 335-344.
- Santos, Jr D., Barbosa, Jr F., Tomazelli, A. C., Krug, F. J., Nóbrega, J. A. and Arruda, M. A. Z. 2002. Determination of Cd and Pb in food slurries by GFAAS using cryogenic grinding for sample preparation. *Anal Bioanal Chem.* 373 : 183-189.
- Shams, E., Abdollahi, H. Yekehtaz, M. and Hajian, R. 2004. H-point standard addition method in the analysis by differential pulse anodic stripping voltammetry simultaneous determination of lead and tin. *Talanta.* 63 : 359-364.
- Shams, E., Babaei, A. and Soltaninezhad, M. 2004. Simultaneous determination of copper, zinc and lead by adsorptive stripping voltammetry in the presence of Morin. *Analytica Chimica Acta.* 501 : 119-124.

- Shemirani, F., Rajabi, M., Asghari, A., and Milani-Hosseini, R. M. 2005. Simultaneous determination of traces of cadmium and zinc by adsorptive stripping voltammetry. *Canadian Journal of Analytical Sciences and Spectroscopy*. 50(4) : 175-181.
- Sherlock J.C. 1987. Lead in food and the diet. *Environmental Geochemistry and Health*. 9(2) : 43-47.
- Supapan, B. 2005. Simultaneous determination of barium, cadmium, lead and copper by differential pulse anodic stripping voltammetry. Master of Science Thesis in Chemistry. Khon Kaen University.
- Suren, E., Yilmaz S., Turkoglu, M. and Kaya, S. 2005. Concentrations of cadmium and lead heavy metals in Dardanelles seawater. *Environ Monit Assess*. 1-8.
- Tarley, T. R. Cesar, Coltro, W.K.T., Wendell, Matsushita, M. and Souza, N.E. 2001. Characteristic levels of some heavy metals from Brazilian canned sardines (*Sardinella brasiliensis*). *J. Food Composition and Analysis*. 14: 611-617.
- Thornton, I., Rautiu, R. and Brush, S. 2001. Lead exposure to humans and other organisms. In LEAD the facts. p. 113-142. Ian Allan Printing Ltd. England.
- Tongtavee, N., Shiowatana J., McLaren, R. G. and Gray, C. W. 2005. Assessment of lead availability in contaminated soil using isotope dilution techniques. *Science of the Total Environment*. 348 : 244- 256.
- Toscano, C.D., and Guilarte, T.R. 2005. Lead neurotoxicity: From exposure to molecular effects. *Brain Research Reviews*. 49 : 529-554.
- Tuzen M. and Soylak M. 2007. Determination of trace metals in canned fish marketed in Turkey. *Food Chemistry*. 101 : 1378-1382.

- Van Den Berg, C.M.G. 1986. Determination of copper, cadmium and lead in seawater by cathodic stripping voltammetry of complexes with 8 - hydroxyquinoline. *J. Electroanal. Chem.* 215 : 111-121.
- Voegborlo, R.B., El-Methnani, A.M. and Abedin, M.Z. 1999. Mercury, cadmium and lead content of canned tuna fish. *Food Chemistry.* 67 : 341-345.
- Wang, J. 2000. Analytical Electrochemistry. 2nd Ed. p.75-84. Wiley -VCH. USA.
- WHO (World Health Organization). 1987. Air quality guidelines for Europe. WHO, Copenhagen.
- WHO (World Health Organization). 2001. Lead *In: Air Quality Guidelines* 2nd ed. WHO Regional Office for Europe. Copenhagen., Denmark. p.1-17.
- Wu, Q. and Batley, G. E. 1995. Determination of sub-nanomolar concentrations of lead in sea water by adsorptive stripping voltammetry with xylenol orange. *Analytica Chimica Acta.* 309 : 95-101.
- Yokoi, K., Yamaguchi, A., Mizumachi, M. and Koide, T. 1995. Direct determination of trace concentrations of lead in fresh water samples by adsorptive cathodic stripping voltammetry of a lead-Calcein Blue complex. *Analytica Chimica Acta.* 316 : 363-369.
- Zuhri, A .A. and Voelter, W. 1998. Applications of adsorptive stripping voltammetry for the trace analysis of metals, pharmaceuticals and biomolecules. *Fresenius J Anal Chem.* 360 : 1-9.