

REFERENCES

- [1] P.L. Smedley and D.G. Kinniburgh, "A review of the source, behaviour and distribution of arsenic in natural waters," *Appl. Geochem.*, 17, 2002, 517-568.
- [2] D.Q. Hung, O. Nekrassova and R.G. Compton, "Analytical methods for inorganic arsenic in water: a review," *Talanta*, 64, 2004, 269-277.
- [3] Y. He, Y. Zheng and D.C. Locke, "Cathodic stripping voltammetric analysis of arsenic species in environmental water samples," *Microchem. J.*, 85, 2007, 265-269.
- [4] V. Arancibia, A. Lopez, M.C. Zuniga and R. Segura, "Extraction of arsenic as the diethyl dithiophosphate complex with supercritical fluid and quantitation by cathodic stripping voltammetry," *Talanta*, 68, 2006, 1567-1573.
- [5] R. Piech and W.W. Kubiak, "Determination of trace arsenic with DDTC-Na by cathodic stripping voltammetry in presence of copper ions," *J. Electroanal. Chem.*, 599, 2007, 59-64.
- [6] S. Sanlloriente-Mendez, O. Dominguez-Renedo and M.J. Arcos-Martinez, "Experimental design optimization of arsenic speciation in groundwater," *Anal. Lett.*, 43, 2010, 1922-1932.
- [7] L.M. Carvalho, P.C. Nascimento, D. Bohrer, E.J. Pilau, R. Stefanello and M. Lauer, "Voltammetric Behavior of Arsenic(III) in the Presence of Sodium Diethyl Dithiocarbamate and Its Determination in Water and Highly Saline Samples by Adsorptive Stripping Voltammetry," *Electroanalysis*, 18, 2006, 1081-1089.

- [8] L.M. Carvalho, P.C. Nascimento, D. Bohrer, R. Stefanello, E.J. Pilau and M.B. Rosa, "Redox Speciation of Inorganic Arsenic in Water and Saline Samples by Adsorptive Cathodic Stripping Voltammetry in the Presence of Sodium Diethyl Dithiocarbamate," *Electroanalysis*, 20, 2008, 776-781.
- [9] H. Greschonig and K.J. Irgolic, "Electrochemical methods for the determination of total arsenic and arsenic compounds," *Appl. Organomet. Chem.*, 6, 1992, 565-577.
- [10] M. Kumaresan and P. Riyazuddin, "Overview of speciation chemistry of arsenic," *Curr. Sci.*, 80 (7), 2001, 837-846.
- [11] L. Jiajie and Y. Nagaosa, "Cathodic stripping voltammetric determination of As(III) with in situ plated bismuth-film electrode using the catalytic hydrogen wave," *Anal. Chim. Acta*, 593, 2007, 1-6.
- [12] S. Hu, J. Lu and C. Jing, "A novel colorimetric method for field arsenic speciation analysis," *J. Environ. Sci. (China)*, 24, 2012, 1341-1346.
- [13] U.S. EPA, Toxicity and Exposure Assessment for Children's Health, "Inorganic Arsenic TEACH Chemical Summary," 2007, http://www.epa.gov/teach/chem_summ/Arsenic_summary.pdf, (16/06/2014).
- [14] WHO, "Exposure to arsenic: A major public health concern," 2010, <http://www.who.int/ipcs/features/arsenic.pdf>, (16/06/2014)
- [15] WHO/IPCS (EHC), "Arsenic and Arsenic Compounds," 224 2001, http://www.who.int/ipcs/publications/ehc/ehc_224/en/, (16/06/2014)
- [16] B.K. Mandal and K.T. Suzuki, "Arsenic round the world: a review," *Talanta*, 58, 2002, 201-235.
- [17] LDHH, SEET, "Information for Health Care Professionals: Arsenic Exposure and Toxicity," 2009,

http://new.dhh.louisiana.gov/assets/oph/CenterEH/envepi/Arsenic_for_Health_Providers_Final.pdf, (16/06/2014)

- [18] M. Burguera, J.L. Burguera, “Analytical methodology for speciation of arsenic in environmental and biological samples,” *Talanta*, 44, 1997, 1581-1604.
- [19] Z. Gong, X. Lu, M. Ma, C. Watt and X.C. Le, “Arsenic speciation analysis,” *Talanta*, 58, 2002, 77-96.
- [20] R.V. Hedegaard and J.J. Sloth, “Speciation of arsenic and mercury in feed: why and how?,” *Biotechnol. Agron. Soc. Environ.* 15 (S1), 2011, 45-51.
- [21] R.N. Ratnaïke, “Review Acute and chronic arsenic toxicity,” *Postgrad. Med. J.*, 79, 2003, 391–396.
- [22] K. A. Francesconi and D. Kuehnelt, “Determination of arsenic species: A critical review of methods and applications, 2000–2003,” *Analyst*, 129, 2004, 373-395.
- [23] D. Melamed, “Monitoring arsenic in the environment: a review of science and technologies with the potential for field measurements,” *Anal. Chim. Acta*, 532, 2005, 1-13.
- [24] E. Munoz and S. Palmero, “Analysis and speciation of arsenic by stripping potentiometry: a review,” *Talanta*, 65, 2005, 613-620.
- [25] J.H.T. Luong, E. Majid and K.B. Male, “Analytical Tools for Monitoring Arsenic in the Environment,” *Open Anal. Chem. J.*, 1, 2007, 7-14.
- [26] M. Tuzen, K.O. Saygi, I. Karaman and M. Soylak, “Selective speciation and determination of inorganic arsenic in water, food and biological samples,” *Food Chem. Toxicol.*, 48, 2010, 41-46.

- [27] H.I. Ulusoy, M. Akcay, S. Ulusoy and R. Gurkan, "Determination of ultra trace arsenic species in water samples by hydride generation atomic absorption spectrometry after cloud point extraction," *Anal. Chim. Acta*, 703, 2011, 137-144.
- [28] R. Liua, P. Wu, M. Xi, K. Xu and Yi Lv, "Inorganic arsenic speciation analysis of water samples by trapping arsine on tungsten coil for atomic fluorescence spectrometric determination," *Talanta*, 78, 2009, 885-890.
- [29] C.L.T. Correia, R.A. Goncalves, M.S. Azevedo, M.A. Vieira and R.C. Campos, "Determination of total arsenic in seawater by hydride generation atomic fluorescence spectrometry," *Microchem. J.*, 96, 2010, 157-160.
- [30] I. Komorowicz and D. Baralkiewicz, "Arsenic and its speciation in water samples by high performance liquid chromatography inductively coupled plasma mass spectrometry—Last decade review," *Talanta*, 84, 2011, 247-261.
- [31] D.E. Mays and A. Hussam, "Voltammetric methods for determination and speciation of inorganic arsenic in the environment—A review," *Anal. Chim. Acta*, 646, 2009, 6-16.
- [32] P. Sarkar, S. Banerjee, D. Bhattacharyay and A.P.F. Turner, "Electrochemical sensing systems for arsenate estimation by oxidation of L-cysteine," *Ecotoxicol. Environ. Saf.*, 73, 2010, 1495-1501.
- [33] G. Somer and Z. Almas, "Differential pulse polarographic determination of trace quantities of arsenic using catalytic hydrogen wave and its application," *J. Electroanal. Chem.*, 593, 2006, 179-184.
- [34] T.A. Ivandini, D. Yamada, T. Watanabe, H. Matsuura, N. Nakano, A. Fujishima and Y. Einaga, "Development of amperometric arsine gas sensor using gold-modified diamond electrodes," *J. Electroanal. Chem.*, 645, 2010, 58-63.

- [35] A. Cavicchioli, M.A. La-Scalea and I.G.R. Gutz, "Analysis and Speciation of Traces of Arsenic in Environmental, Food and Industrial Samples by Voltammetry: a Review," *Electroanalysis*, 16, 2004, 697-711.
- [36] D.A. Skoog, F.J. Holler and S.R. Crouch, *Principles of instrument analysis*, Thomson Brooks/Cole. , California, USA, 6th ed., 2007.
- [37] H.H. Bauer, G.D. Christian, and J.E. O Reilly, *Instrumental Analysis*, Allyn and Bacon, Inc., Massachusetts, 1978.
- [38] <http://www.tau.ac.il/~advanal/StrippingVoltammetry.htm> (16/06/2014)
- [39] W. Holak, "Determination of Arsenic by Cathodic Stripping Voltammetry with a Hanging Mercury Drop Electrode," *Anal. Chem.* 52, 1980, 2189-2192.
- [40] H. Li and R.B. Smart, "Determination of sub-nanomolar concentration of arsenic(III) in natural waters by square wave cathodic stripping voltammetry," *Anal. Chim. Acta*, 325, 1996, 25-32.
- [41] G. Henze, W. Wagner and S. Sander, "Speciation of arsenic(V) and arsenic(III) by cathodic stripping voltammetry in fresh water samples," *Fresenius J. Anal. Chem.*, 358, 1997 741-744.
- [42] C.M. Barra and M.M.C. Santos, "Speciation of Inorganic Arsenic in Natural Waters by Square-Wave Cathodic Stripping Voltammetry," *Electroanalysis*, 13, 2001, 1098-1104.
- [43] M.A. Ferreira and A.A. Barros, "Determination of As(III) and arsenic(V) in natural waters by cathodic stripping voltammetry at a hanging mercury drop electrode," *Anal. Chim. Acta*, 459, 2002, 151-159.
- [44] Y. He, Y. Zheng, M. Ramnaraine and D.C. Locke, "Differential pulse cathodic stripping voltammetric speciation of trace level inorganic

- arsenic compounds in natural water samples,” *Anal. Chim. Acta*, 511, 2004, 55-61.
- [45] A. Profumo, D. Merli and M. Pesavento, “Voltammetric determination of inorganic As(III) and total inorganic As in natural waters,” *Anal. Chim. Acta*, 539, 2005, 245-250.
- [46] R. Piech, B. Bas, E. Niewiara and W.W. Kubiak, “Determination of trace arsenic on hanging copper amalgam drop electrode,” *Talanta*, 72, 2007, 762-767.
- [47] M.S.S. Pereira, E. Winter, J.R. Guimaraes, S. Rath and A.H. Fostier, “A simple voltammetric procedure for speciation and evaluation of As removal from water,” *Environ. Chem. Lett.*, 5, 2007, 137-141.
- [48] J. Junsomboon, P. Sooksamiti, K. Grudpan, S. Lapanantnoppakhun, P. Thavornyuthikarn and J. Jakmune, “Cathodic Stripping Voltammetric Procedure for Determination of Some Inorganic Arsenic Species in Water, Soil and Ores Samples,” *Chiang Mai J. Sci.*, 36 (3), 2009, 369-383.
- [49] M. Grabarczyk, “Stripping Voltammetric Determination of As(III) in Natural Water Samples Containing Surface Active Compounds,” *Electroanalysis*, 22, 2010, 2017-2023.
- [50] http://en.wikipedia.org/wiki/Cyclic_voltammetry (17/06/2014)
- [51] http://en.wikipedia.org/wiki/Randles-Sevcik_equation (11/05/2015)
- [52] R. Gulaboski and C.M. Pereira, Electroanalytical techniques and instrumentation in food analysis. In: *Handbook of food analysis instruments*, Semih Ottles (Ed.), 2008, 379-402.
- [53] J. Wang, “Stripping Analysis at Bismuth Electrodes: A Review,” *Electroanalysis*, 17, 2005, 1341-1346.

- [54] A. Economou, "Bismuth-film electrodes: recent developments and potentialities for electroanalysis," *Trends Anal. Chem.*, 25, 2005, 334-340.
- [55] K.S. Kumar and M. Pandurangappa, "Trace Level Arsenic Quantification through Cloud Point Extraction: Application to Biological and Environmental Samples," *Scientific World J.*, 837672 2012.
- [56] http://en.wikipedia.org/wiki/Molybdenum_blue (11/05/2015)
- [57] R.P. Mihajlovic, N.R. Ignjatovic, M.R. Todorovic, I.H. Antunovic and V.M. Kaljevic, "Spectrophotometric determination of phosphorus in coal and coal ash using bismuth-phosphomolybdate complex," *J. Serb. Chem. Soc.*, 68, 2003, 65–73.
- [58] J.C. Miller and J.N. Miller, *Statistics for Analysis Chemistry*, Ellis Horwood, New York, 3rd ed., 1993.
- [59] P. Salaun, B. Planer-Friedrich and C.M.G. Van den Berg, "Inorganic arsenic speciation in water and seawater by anodic stripping voltammetry with a gold microelectrode" *Anal. Chim. Acta*, 585, 2007, 312-322.