

## Alberto de Diego Rodriguez

Research ID.: L-7381-2014

Address: Department of Analytical Chemistry; Faculty of Science and Technology; University of the Basque Country; Sarriena auzoa z/g; POBox 48940 Leioa, Basque Country.

Total no of publications: 67

H-Index: 17

Alberto de Diego obtained his PhD degree in 1996 and then spent two years in a post-doctoral position in the CNRS (Bordeaux/Pau, France), working on the development and application of methods for mercury speciation analysis. Nowadays, he is assistant professor in the Department of Analytical Chemistry of the UPV/EHU. He has supervised six PhD Thesis (already presented), and currently supervises the work of three more PhD students. He has co-authored 12 book chapters, published more than 50 research articles in international journals and participated in the elaboration of two academic books. His main research areas of interest include the development and optimization of analytical methods, monitoring of environmental pollution in aquatic and atmospheric environments and the application of chemometrics to the analysis of environmental data.

### Recent publications

- 1 **Metals and metalloids in fruits of tomatoes (*Solanum Lycopersicum*) and their cultivation soils in the Basque Country: concentrations and accumulation trends;** A. Rodriguez-Iruretagoiena\*, J. Trebolazabala, I. Martinez-Arkarazo, A. de Diego, J. M. Madariaga; *FOOD CHEMISTRY*, in press; (doi: <http://dx.doi.org/10.1016/j.foodchem.2014.10.133>).
- 2 **A new methodology to investigate chemical pollution in aquatic systems: from the local scale to a wide world perspective. A case study: the estuary of the Nerbioi-Ibaizabal River (Bilbao, Basque Country);** A. Gredilla, S. Fdez-Ortiz de Vallejuelo, G. Arana, A. de Diego, J. M. Madariaga; *ECOLOGICAL INDICATORS*, 45, 364-370, (2014).
- 3 **The use of unsupervised pattern recognition techniques to investigate metal pollution in estuaries;** A. Gredilla, S. Fdez-Ortiz de Vallejuelo, J. M. Amigo, A. de Diego, J. M. Madariaga; *TRAC, TRENDS IN ANALYTICAL CHEMISTRY*, 46, 59-69, (2013)
- 4 **A novel methodology using ultrasound-assisted dialysis to determine simultaneously a wide number of persistent organic pollutants in semi-permeable membrane devices;** J. Bustamante, P. Navarro, G. Arana, A. de Diego, J. M. Madariaga; *TALANTA*, 114, 32-37, (2013)
- 5 **Study of parameters affecting the behaviour of trace elements in a polluted estuary. Canonical correlation analysis as a tool in environmental impact assessment;** J. M. Amigo, A. Gredilla, S. Fdez-Ortiz de Vallejuelo, A. de Diego, J. M. Madariaga; *CHEMOMETRICS AND INTELLIGENT LABORATORY SYSTEMS*, 119, 1-10, (2012)
- 6 **Risk assessment of trace elements in sediments: the case of the estuary of the Nerbioi-Ibaizabal River (Basque Country);** S. Fdez-Ortiz de Vallejuelo, G. Arana, A. de Diego, J. M. Madariaga; *JOURNAL OF HAZARDOUS MATERIALS*, 181, 565-573, (2010)
- 7 **Use of reflectance infrared spectroscopy for monitoring the metal content of the estuarine sediments of the Nerbioi-Ibaizabal River (Metropolitan Bilbao, Bay of Biscay, Basque Country);** J. Moros, S. Fdez-Ortiz de Vallejuelo, A. Gredilla, A. de Diego, J. M. Madariaga, S. Garrigues, M. de la Guardia; *ENVIRONMENTAL SCIENCE AND TECHNOLOGY*, 43, 9314-9320, (2009)
- 8 **Ultrasound energy focused in a glass probe: a novel approach to the simultaneous extraction of trace elements from sediments;** S. Fdez-Ortiz de Vallejuelo, A. Barrena, A. de Diego, G. Arana, J. M. Madariaga; *TALANTA*, 80, 434-439, (2009)
- 9 **Raman spectroscopy speciation of natural and anthropogenic solid phases in river and estuarine sediments with appreciable amount of clay and organic matter;** U. Villanueva, J. C. Raposo, K. Castro, A. de Diego, G. Arana, J. M. Madariaga; *JOURNAL OF RAMAN SPECTROSCOPY*, 39, 1195-1203, (2008)

- 10 **Production of artifact methylmercury during the analysis of certified reference sediments: use of ionic exchange in the sample treatment step to minimise the problem**; A. Delgado, O. Zuloaga, A. de Diego, J. M. Madariaga; ANALYTICA CHIMICA ACTA, 582, 109-115, (2007)
- 11 **Fast method for routine simultaneous analysis of methylmercury and butyltins in seafood**; M. Zabaljauregui, A. Delgado, O. Zuloaga, A. de Diego, J. M.I Madariaga; JOURNAL OF CHROMATOGRAPHY A, 1148, 78-85, (2007)

#### Recent projects

- 1 **Funding organism:** Comunidad de Trabajo de los Pirineos (CTP); **Title:** "Impacto de la contaminación metálica difusa (atmosférica) y local (procedente de actividades mineras) sobre comunidades microbianas de lagos de Pirinaicos (CTP2012/P08)"; **IP:** Jean Christophe Auguet (Coordinator), Alberto de Diego (IP Basque partner); 19000 euro; 01/01/2013-31/12/2014
- 2 **Funding organism:** MICINN del gobierno español; **Title:** "Procesos biogeoquímicos responsables de la inusual formación y degradación de arenas cementadas en entornos estuarinos de latitudes templadas (CMT2012-36612)"; **IP:** Marian Olazabal; 133100 euro; 01/01/2012-31/12/2014
- 3 **Funding organism:** Comunidad Europea (programa Interreg IV B SUDOE); **Title:** "Observatoire de recherche sur la qualité de l'environnement du Grand Sud-Ouest Européen (ORQUE SUDOE, SOE3/P2/F591/5)"; **IP:** Olivier Donard (Coordinator); Juan Manuel Madariaga (IP Basque partner); 1 685 550 euros (for the consortium); 204 425 euros (for the Basque partner); 01/09/2011-31/12/2014
- 4 **Funding organism:** Cátedra UNESCO de "Desarrollo sostenible y Educación ambiental" de la UPV/EHU; **Title:** "Oka ibaiaren itsasadarreko kutsadura metalikoaren azterketa biogeokimikoa (OKAMET)"; **IP:** Alberto de Diego; 39000 euros; 01/01/2010-31/12/2011
- 5 **Funding organism:** gobierno vasco (ETORTEK); **Title:** "Salud del suelo y contaminación química: desarrollo y aplicación de tecnologías para identificación, diagnóstico y terapia (BERRILUR III)"; **IP:** Juan Manuel Madariaga Mota; 150157 euros; 01/01/2009-31/12/2011
- 6 **Funding organism:** Cátedra UNESCO de "Desarrollo sostenible y Educación ambiental" de la UPV/EHU; **Title:** "Konposatu organiko iraunkorren eta tributileztainuaren bidezko kutsadura Oka ibaiaren estuarioan: hurbilketa biogeokimikoa (OKATUR)"; **IP:** Alberto de Diego; 32050 euros; 01/01/2008-31/12/2009
- 7 **Funding organism:** MCYT del gobierno español; **Title:** "Evaluación integral de la contaminación en puertos del litoral norte español mediante herramientas químicas, biológicas y ecotoxicológicas"; **IP:** Nestor Etxebarria Loizate; 130000 euros; 01/01/2007-31/12/2009

#### Other merits

Supervision of Ms Thesis: 19

Secretary of the Department of Analytical Chemistry: 2007-2011