# SONIA GÓMEZ LAVÍN

PhD in Chemical and Process Engineering (2010)

University of Cantabria Department of Chemical and Biomolecular Engineering

Telephone: +34 628905790 Email: gomezs@unican.es



## **Current Position**

Technical Support Staff

## **Research topics**

 Description: My research topic is the environmental characterization of Persistent Organic Pollutants (POPs) such us polychlorinated dibenzo-pdioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs), polychlorinated biphenyls (PCBs), perfluorinated compounds (PFCs) and polycyclic aromatic hydrocarbons (PAHs) in sediments, soils and contaminated waters.

Since 2008 my activity is focused on providing technical and analytical support to research projects and private companies dealing with the analysis of dioxins, furans and PCBs by high resolution gas chromatography coupled to high resolution mass spectrometry (HRGC-HRMS) and high-performance liquid chromatography tandem mass spectrometry (HPLC-MS/MS) in environmental matrices.

### • Publications

- A. Urtiaga, C. Fernández, S. Gómez-Lavín, I. Ortiz. Kinetics of the electrochemical mineralization of perfluorooctanoic acid on nanocrystalline conductive diamond electrodes. Chemosphere 129: 20-26 (2015)
- S. Gómez, D. Gorri, A. Irabien. Assessment of PCDD/Fs and PCBs in Sediments from the Spanish Northern Atlantic Coast. Water, Air and Soil Pollution 221: 287–299 (2011)
- S. Gómez, D. Gorri, A. Irabien. Organochlorine Pesticide Residues in Sediments from Coastal Environment in Cantabria (Northern Spain) and Evaluation of the Atlantic Coast. Environmental Monitoring and Assessment 176(1-4): 385-401 (2011)
- J.M. Armitage, A. Franco, S. Gómez, I.T. Cousins. Modelling the potential influence of particle deposition on the accumulation of organic contaminants by submerged aquatic vegetation. Environmental Science and Technology 42 (11): 4052-4059 (2008)

http://scholar.google.es/citations?hl=es&user=JkQRvtQAAAAJ

- Congress contributions (since 2013)
  - S. Gómez-Lavín, I. Fuertes, M. P. Elizalde, A. Urtiaga. Perfluorinated compounds (PFASs) in Northern Spain municipal solid waste landfill leachates. SETAC Europe 26<sup>th</sup> Annual Meeting. Nantes (France, May 2016. Accepted Poster presentation.
  - S. Gómez-Lavín, I. Ortiz, A. Urtiaga. Occurrence of Perfluorinated Compounds (PFASs) in Northern Spain Municipal Solid Waste Landfill Leachates. Fluoros 2015: An International Symposium on Fluorinated Organics in the Environment. Colorado (EEUU), July 2015. Poster
  - S. Gómez-Lavín, V. García, I. Ortiz, A. Urtiaga. Technologies for remediation of PFASs pollution in water emissions. 6<sup>th</sup> International Workshop on Per-and Polyfluorinated Alkyl Substances- PFAS. Idstein (Germany), June 2014. Poster.
  - C. Fernández, S. Gómez-Lavín, I. Ortiz, A. Urtiaga. Electrochemical Degradation of Perfluorooctanoic Acid in Water by BDD Anodes. 5<sup>th</sup> International Workshop on Per-and Polyfluorinated Alkyl Substances-PFAS. Helsingør (Denmark), October 2013. Poster.
  - S. Gómez, D. Gorri, A. Irabien. High Resolution Mass Spectrometry (HRMS): Applications for Dioxin and Furan Analyses in Environmental Samples. XXXIV Reunión Bienal de la Real Sociedad Española de Química (RSEQ). Santander (Spain), September 2013. Poster.
  - S. Gómez, D. Gorri, A. Irabien. Analytical Methodology set up for the analysis of Dioxins and furans in animal Feed and Feed Additives. IV Reunión Nacional de Dioxinas, Furanos y Compuestos Orgánicos Persistentes Relacionados. Alicante (Spain), June 2013.

### • R&D Projects (since 2013)

Title: "Innovative Water Treatment Technologies for the Removal of Perfluorinated Compounds" (CTM2013-44081-R)

Participant entities: Universidad de Cantabria, Universidad del País Vasco, CTC. (Funding: Spanish Ministry of Economy and Competitiveness)

Duration: 2014-2017.

Main researcher: Ana María Urtiaga

Title: National Programme for Recruitment and Incorporation of Human Resources - Subprogramme: Technical support staff Participant entities: University of Cantabria. (Funding: Spanish Ministry of Economy and Competitiveness) Duration, since January 2010 to January 2013.