



CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Francisco Javier		
Family name	Pena Pereira		
Gender (*)	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web:	
Open Researcher and Contributor ID (ORCID) (*)	orcid.org/0000-0002-7721-7641		

(*) Mandatory

A.1. Current position

Position	Associate Professor (PTU)		
Initial date	13/12/2022		
Institution	University of Vigo		
Department/Center	Analytical and Food Chemistry	Faculty of Chemistry	
Country	Spain	Teleph. number	
Key words	Green Analytical Chemistry, Microfluidics, Miniaturization, Plasmonic sensors, Sample preparation		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
01/03/2022-12/12/2022	Interim University professor / University of Vigo / Spain
01/02/2019-28/02/2022	Distinguished researcher / University of Vigo / Spain
01/05/2015-31/07/2018	Postdoctoral researcher / University of Vigo / Spain
01/05/2013-30/04/2015	Postdoctoral researcher / Gdansk University of Technology / Poland
01/04/2011-15/04/2013	Postdoctoral researcher / Gdansk University of Aveiro & CESAM / Portugal
01/09/2005-31/12/2009	Predocctoral researcher / University of Vigo / Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Habilitation in Chemistry	Gdansk University of Technology / Poland	2018
PhD in Chemistry	Universidade de Vigo / Spain	2009
Degree in Chemistry	Universidade de Vigo / Spain	2005

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Francisco Pena-Pereira obtained his Chemistry degree at the University of Vigo (Spain) in 2005. He obtained his PhD in Chemistry from the University of Vigo in 2009 (European Doctorate and Extraordinary award), and the Habilitation in Chemistry from the Gdańsk University of Technology (Poland) in 2018. He has carried out different scientific stays with prominent researchers of his field, namely Prof. E. Psillakis (Technical University of Crete, Greece, 3 months), Prof. A. Canals (University of Alicante, Spain, 1 month), Prof. A.C. Duarte

(University of Aveiro & CESAM, Portugal, 2 years) and Prof. J. Namieśnik (Gdańsk University of Technology, Poland, 2 years). He has authored or co-authored 86 publications in scientific journals, 2 books and 9 book chapters. The contributions accumulate more than 7900 citations, giving an H-index of 37 (source: Scopus, July 30, 2025). The publications include, among others: ACS Sensors (1), Anal. Chem. (4), Anal. Chim. Acta (11), ChemSusChem (1), Food Chemistry (2), Green Chem. (4), Sens. Actu. B (5), Talanta (12) or TrAC Trends Anal. Chem. (12). Furthermore, he holds a national patent. He has participated or is currently participating in 10 funded research projects and 2 European COST Actions. He has participated in several conferences (most of them international) with >60 contributions, including 10 oral communications. F. Pena-Pereira has co-supervised a PhD, 8 MSc and 12 BSc theses and is currently co-supervising 2 PhD thesis. He has been engaged in teaching activities at the University of Vigo (Spain, degrees in “Chemistry” and “Marine Sciences”, and master’s degrees in “Industrial pollution: Evaluation, prevention and control” and “Chemistry and industrial chemistry research”), University of Minho (Portugal, master’s degree in “Characterization and analysis techniques”) and Gdańsk University of Technology (Poland, Inter Applied Chemistry). He is member of the Editorial Advisory Board of three international journals indexed in JCR, including Crit. Rev. Anal. Chem. (IF 5.2, Q1), Adv. Sample Prep (IF 6.5, Q1), Molecules (IF 4.6, Q2) and Analytica (IF 3.6, Q2), and has participated as a referee of more than 200 scientific contributions in more than 40 scientific journals (e.g., ACS Nano, ACS Sustain. Chem. Eng., Anal. Chem., Anal. Chim. Acta, ChemSusChem, Crit. Rev. Anal. Chem., Green Chem., Lab Chip, Sci. Total Environ., Talanta or TrAC Trends Anal. Chem.), books and book chapters. He has been included in the Ranking of Stanford University among the 2% most cited researchers in the world (2020-24, career long impact; 2019-24, single year impact). He is currently the coordinator of the research group: Environmental Analytical Chemistry and Spectroscopy (<https://portalcientifico.uvigo.gal/grupos/17702/detalle>), formerly led by Prof. C. Bendicho since 1995. The group joined the Marine Research Center (CIM) of the University of Vigo in 2017.

General quality indicators of scientific research

7907 total citations, 655 citations per year during the last 5 years, 73 publications among the first quartile (Q1), 12 contributions with more than 100 citations, 71 publications with at least 10 citations (i10 index), and H-index of 37 (data obtained from Scopus).

Part C. RELEVANT MERITS (*sorted by typology*)

C.1. Publications

- 1.- N. Villarino, I. Lavilla, F. Pena-Pereira, C. Bendicho, Droplet-based luminescent sensor supported onto hydrophobic cellulose substrate for assessing fish freshness following smartphone readout, Food Chemistry, 2023, 424, 136475, <https://doi.org/10.1016/j.foodchem.2023.136475>
- 2.- L. Placer, I. Lavilla, F. Pena-Pereira, C. Bendicho, A 3D microfluidic paper-based analytical device with smartphone-assisted colorimetric detection for iodine speciation in seaweed samples, Sens. Actu. B 377 (2023) 133109, <https://doi.org/10.1016/j.snb.2022.133109>
- 3.- N. Villarino, F. Pena-Pereira, I. Lavilla, C. Bendicho, Waterproof cellulose-based substrates for in-drop plasmonic colorimetric sensing of volatiles: Application to acid-labile sulfide determination in waters, ACS Sens. 7 (2022) 839-848, <https://doi.org/10.1021/acssensors.1c02585>
- 4.- L. Placer, I. Lavilla, F. Pena-Pereira, C. Bendicho, Bromine speciation by a paper-based sensor integrated with a citric acid/cysteamine fluorescent probe and smartphone detection, Sens. Actu. B 358 (2022) 131499, <https://doi.org/10.1016/j.snb.2022.131499>
- 5.- L. Placer, L. Estévez, I. Lavilla, F. Pena-Pereira, C. Bendicho, Assessing citric acid-derived luminescent probes for pH and ammonia sensing: A comprehensive experimental and theoretical study, Anal. Chim. Acta 1186 (2021) 339125, <https://doi.org/10.1016/j.aca.2021.339125>

- 6.- F. Pena-Pereira, W. Wojnowski, M. Tobiszewski, AGREE – Analytical GREENness metric approach and software, *Anal. Chem.* 92 (2020) 10076-10082, <https://doi.org/10.1021/acs.analchem.0c01887>
- 7.- F. Pena-Pereira, N. Capón, I. de la Calle, I. Lavilla, C. Bendicho, Fluorescent poly(vinylpyrrolidone)-supported copper nanoclusters in miniaturized analytical systems for iodine sensing, *Sens. Actuat. B* 299 (2019) 126979, <https://doi.org/10.1016/j.snb.2019.126979>.
- 8.- F. Pena-Pereira, I. Lavilla, C. Bendicho, Unmodified gold nanoparticles for in-drop plasmonic-based sensing of iodide, *Sens. Actuat. B* 242 (2017) 940-948, <https://doi.org/10.1016/j.snb.2016.09.161>
- 9.- F. Pena-Pereira, Ł. Marcinkowski, A. Kloskowski, J. Namieśnik, Silica-based ionogels: Nano-confined ionic liquid-rich fibers for headspace solid-phase microextraction coupled with gas chromatography – barrier discharge ionization detection technique, *Anal. Chem.* 86 (2014) 11640-11648, <https://doi.org/10.1021/ac502666f>
- 10.- I. Costas-Mora, V. Romero, F. Pena-Pereira, I. Lavilla, C. Bendicho, Quantum dots confined in an organic drop as luminescent probes for the detection of selenium by microfluorospectrometry after hydridation: Study of the quenching mechanism and analytical performance, *Anal. Chem.* 84 (2012) 4452-4459, <https://doi.org/10.1021/ac300221s>.

C.2. Congress, indicating the modality of their participation

- 1.- F. Pena-Pereira, Alternative solvents to promote more sustainable analytical methodologies, 1st International Caparica Conference on Pollutant Toxic Ions and Molecules, Lisbon (Portugal), 02/11/2015 – 04/11/2015 (Oral)
- 2.- F. Pena-Pereira, I. Lavilla, C. Bendicho, Novel sensing platforms based on microextraction methodologies for microvolume spectrometric analysis, 1st PortASAP Meeting (COST Action), Porto (Portugal), 08/03/2018 - 09/03/201 (Oral).
- 3.- F. Pena-Pereira, I. Lavilla, C. Bendicho, Headspace microextraction approaches combined with optical detection systems for determination of environmentally relevant analytes, XX Euroanalysis, Istanbul (Turkey), 01/09/2019 - 05/09/2019 (Oral).
- 4.- F. Pena-Pereira, I. Lavilla, C. Bendicho, Combining headspace microextraction approaches with miniaturized detection systems and IT equipment for determination of anionic species, 1st European Sample Preparation e-Conference (On-line), 11/03/2021 - 12/03/2021 (Oral).
- 5.- F. Pena-Pereira, Microextraction strategies for determination of halides and halogen oxyanions in environmental samples, 5th STARSS Conference on Separation Science, Hradec Králové (Czech Republic), 02/12/2021 - 03/12/2021 (Oral)
- 6.- F. Pena-Pereira, Greenness assessment of analytical approaches by metric tools, SinS 2023, Solutions in Science Conference, Cardiff (United Kingdom), 04/07/2023 - 06/07/2023 (Oral, Plenary)
- 7.- F. Pena-Pereira, Herramientas métricas para la evaluación de sistemas analíticos desde el punto de vista de la química verde, XXXIV Jornadas Chilenas de Química, Puerto Varas (Chile), 09/01/2024 - 12/01/2024 (Oral, Plenary)

C.3. Research projects.

- 1.- Project title: Generación de compuestos volátiles mediante radiación UV como alternativa a los métodos convencionales de introducción de muestras gaseosas en Espectrometría Atómica y de masas

Funding body: Ministerio de Educación y Ciencia

Participating institutions: Universidade de Vigo

Duration, from: 2006 to: 2009 Funding: 29.040 €

Principal investigator: Prof. Carlos Bendicho Hernández

- 2.- Project title: Estrategias innovadoras de preparación de muestra basadas en microextracción en fase líquida e implementación en sistemas analíticos

Funding body: Ministerio de Ciencia e Innovación

Participating institutions: Universidade de Vigo

Duration, from: 2009 to: 2012 Funding: 45980 €

Principal investigator: Prof. Carlos Bendicho Hernández

3.- Project title: ORGANOSOL - Organic matter in atmospheric aerosols: Composition, variability, and sources at urban portuguese areas

Funding body: Compete-FCT

Participating institutions: Universidade de Aveiro (Portugal), Universidade de Vigo

Duration, from: 2012 to: 2015 Funding: 44000 €

Principal investigator: Dr. Regina Duarte

4.- Project title: Sistemas analíticos innovadores basados en receptores nanoestructurados sobre sustratos (nano)celulósicos para la detección de sustancias de interés medioambiental.

Funding body: Ministerio de Economía y Competitividad (RTI2018-093697-B-I00).

Duration, from: 2019 to 2022 Funding: 72600 €

Principal investigator: José Carlos Bendicho Hernández

5.- Project title: Ecodispositivos analíticos basados en tecnologías 'lab-on-paper' para la detección de contaminantes ambientales y alimentarios

Funding body: Ministerio de Economía y Competitividad (RTI2018-093697-B-I00).

Duration, from: 2023 to 2026. Funding: 131250 €

Principal investigator: José Carlos Bendicho Hernández

C.4. Contracts, technological or transfer merits

P201700149: "Dispositivo y método colorimétrico no instrumental para especies químicas volátiles" (21/03/2019).

C.5. Supervision activities

- PhD theses (1 + 2 in progress): Lorena Placer Vidal (July 2024). Nerea Villarino García (estimated date of defense: September 2026) and Alberto Abalde Pujales.

- MSs theses (8): Sonia Senra Ferreiro (April 2010); Isabel Costas Mora (July 2010, March 2011); Alicia Prieto Troitiño (July 2016); Laura Vilas Trigo (July 2016); José Manuel Graña Dosantos (September 2024), Ainhoa Collazo Abalo (September 2024), Ana Fernández Cabo (July 2025).

- BSs theses (12): Lorena Villar Blanco (June 2016), Manuel Martín Alonso (June 2017), Angie Velazquez García (July 2018), Nerea Capón Alonso (July 2018), Óscar Matesanz Pazos (February 2020), Nerea Villarino García (June 2020), Lucía González Avendaño (February 2022), Uxía López González (July 2022), Eva Fernández Posada (February 2023), Ainhoa Collazo Abalo (July 2023), Lucía García Fernández (July 2023), Estefanía Treviño Castro (July 2024).

C.6. Stays in research centres

Postdoctoral stays

1.- Centre: Department of Analytical Chemistry, Gdańsk University of Technology, Gdańsk (Poland)

Date and duration: May 2013-April 2015 (24 months)

Supervisor: Jacek Namieśnik

2.- Centre: CESAM & Department of Chemistry, University of Aveiro, Aveiro (Portugal)

Date and duration: Apr. 2011-April 2013 (24.5 months)

Supervisors: Armando da Costa Duarte, Regina Maria Brandão de Oliveira Duarte

Predocctoral stays

1.- Centre: Technical University of Crete, Chania (Greece)

Date and duration: Oct. 2006; Dec. 2008-Jan. 2009 (3 months)

Supervisors: Eleftheria Psillakis, Nikolas Kalogerakis

2.- Centre: Departamento de Química Analítica, Nutrición y Bromatología de la Universidad de Alicante, Alicante (Spain)

Date and duration: Apr. 2008 (1 month)

Supervisors: Antonio Canals, Lorena Vidal