

**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                                     | M <sup>a</sup> Ángeles |  |            |
| Family name                                    | Sanromán Braga         |  |            |
| Gender (*)                                     | Female                 | Birth date (dd/mm/yyyy)  | 10/06/1964 |
| Social Security, Passport, ID number           |                        |  |            |
| e-mail   | sanroman@uvigo.gal     | URL Web: <a href="https://biosuv.webs2.uvigo.es/el-grupo/equipo-humano/dra-ma-angeles-sanroman-braga/">https://biosuv.webs2.uvigo.es/el-grupo/equipo-humano/dra-ma-angeles-sanroman-braga/</a> |            |
| Open Researcher and Contributor ID (ORCID) (*) | 0000-0002-8148-2130    |  |            |

(\*) *Mandatory*

**A.1. Current position**

|                   |  |                |  |
|-------------------|--|----------------|--|
| Position          | Professor  |                |  |
| Initial date      | 26/04/2019   |                |  |
| Institution       | Universidad de Vigo  |                |  |
| Department/Center | Ingeniería Química   |                |  |
| Country           | Spain  | Teleph. number |  |
| Key words         | Advanced water treatment technologies; Environmental biotechnology; Electrochemical and photo-assisted processes; Organic Micropollutants removal; Green Chemistry; Adsorption; Biomass thermal conversion; Catalyst |                |  |

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

| Period                  | Position/Institution/Country/Interruption cause                                  |
|-------------------------|--|
| 01/01/1988 - 30/09/1991 | FPI Research Fellow (University of Santiago de Compostela, Spain)                |
| 01/10/1991 - 14/10/1991 | University Assistant 1 (University of Vigo, Spain)                               |
| 15/10/1991 - 14/05/1992 | University Assistant 2 (University of Vigo, Spain)                               |
| 15/05/1992 - 26/05/1994 | Associate Professor – Full-time – Temporary position (University of Vigo, Spain) |
| 27/05/1994 - 25/04/2019 | Associate Professor – Full-time (University of Vigo, Spain)                      |

**A.3. Education**

| PhD, Licensed, Graduate                | University/Country     | Year |
|--|------------------------|------|
| Licensed Chemical-Chemical Engineering | Santiago de Compostela | 1987 |
| PhD Chemistry                          | Santiago de Compostela | 1991 |

(Include all the necessary rows)

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

M<sup>a</sup> Ángeles Sanromán is Professor of Chemical Engineering at the University of Vigo. She is graduate in Chemical Engineering from the University of Santiago de Compostela, Spain (1987). Completed her PhD degree (1991), focusing on the development of bioreactor and cell immobilisation techniques. In 1991, she got a position as assistant professor joined the staff at the University of Vigo in the Chemical Engineering Department. She is the Head of the Research group Bioengineering & Sustainable Processes (BIOSUV Group) at the University of Vigo. Currently, develops the following research lines: i) Environmental Technology applied to soil and water remediation; ii) Advanced Oxidation Processes; iii) Reuse, Recycling & Valorisation of wastes; iv) Green Chemistry. Her teaching and research assessments have been positively recognised with 6 five-year teaching periods and 5 six-year research periods.



She authored > 400 scientific articles, including 17 reviews, and collaborated in several books. Its h index is 63 (Scopus), and the total number of citations is higher 14500. Her publication activities include a high number of his publications in Q1 (70% with 15% in the first decyl) and in 84.5% of all his publications in the top 25% journals according to CiteScore (Elsevier). The impact of her research is also reflected in the international collaborations with 41% of the articles co-authored with researchers in other countries/regions (source: Scopus).

Author of more than 500 communications to National and International Conferences, receiving several awards in recognition of her work. She has participated in more than 50 national and international research and innovation projects and technology transfer contracts with public administration and companies, mainly as principal investigator.

It is remarkable her work as director of the Research Results Transfer Office at the University of Vigo (1994-1998) and member of the National Agency for Evaluation and Prospective (ANEP) in the subject of Chemical Technology (2007-2011). She has been collaborating as panel member in the Coordination and Evaluation Subdivision belonging to the Spanish Agency of Investigation (AEI) in the scientific area of Technology Transfer (2015-2018) and Materials Energy and Environmental (2019-2022). Prof Sanromán has been the Director of the CINTECX Research Center since May 2024. In addition, she acts as reviewer in regular evaluation tasks of research projects in competitive calls for several national and international calls. She is members of several academic societies and editorial boards of journals, highlighting her position as Associate Editor of the journal *Bioresource Technology* (2010-2023). In addition, she is member of several organising and scientific committees of international congresses. It is important to mention that Prof Sanromán is presently involved with various Networks of Excellence, specifically focusing on the use of electrochemistry in environmental applications. These networks operate both at a national and regional level, including the E3TECH Network and the REGATA Network. It is also significant her labour as guidance, supervisor or leadership of young researchers.

Prof Sanroman is a member of UVigo's BTQM teaching innovation group, that is involved in several innovation activities such as "ZERO-WASTE SL" and "ZERO-WASTE+ SL" projects, selected in UVigo's 2021 and 2022 educational innovation calls, in collaboration with NGO Amigos da Terra, led by Prof. Sanromán. BTQ group also engages high school students in research through STEMbach programs, supervising projects and participating in "CINTECX Open Day". Prof. Sanromán gives science popularization talks to high schoolers, focusing on female scientists' contributions. She contributed to "Quiero ser investigadora" (2023), a book that highlights pioneering women scientists to inspire young people. Additionally, she participates in forums and activities for the International Day of Women and Girls in Science, as part of CINTECX and UVigo's Faculty of Chemistry initiatives. She has supervised more than 24 PhD theses and is currently overseeing 6 researchers. Her research career has been recognized with the 2023 Parga Pondal Research Medal from the Royal Galician Academy of Sciences and Distinguished Scientist Awards in 2015 and 2021.

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

#### **C.1. Publications 10 Selected Publications in 2022-2025 type Q1 from 414 papers:**

1. Iberache N., Díez A.M., Hadfi A., Errami M., Pazos M., Sanroman M.Á. (2025) High-efficiency removal of imidacloprid from wastewater by heterogeneous electro-Fenton process using MnFe<sub>2</sub>O<sub>4</sub>/g-C<sub>3</sub>N<sub>4</sub> catalyst in a wide range of pH, *Separation and Purification Technology*, 10.1016/j.seppur.2025.133517
2. Terrón D., Holgado-Vázquez J.P., Rosales E., Sanromán M.A., Pazos M. (2025) Zn-MIL53(Fe) as an electro-Fenton catalyst: Application in organic pollutant degradation and pathogen inactivation, *Separation and Purification Technology*, 10.1016/j.seppur.2024.130881
3. Díez A.M., Bolaños-Vázquez M., Chiussi S., Pazos M., Sanromán M.Á. (2024) Screening of agroindustry residues for their usage as oxygen evolution reaction catalysts, *Journal of Environmental Chemical Engineering*, 10.1016/j.jece.2024.114527
4. Lomba-Fernández B., Fdez-Sanromán A., Pazos M., Sanromán M.A., Rosales E. (2024) Iron metal-organic framework nanofiber membrane for the integration of electro-Fenton and effective continuous treatment of pharmaceuticals in water, *Chemosphere*, 10.1016/j.chemosphere.2024.143447

5. Tesnim D., Díez A.M., Amor Hédi B., Sanroman M.Á., Pazos M. (2024) Sustainable removal of antipyrine from wastewater via an Eco-Friendly heterogeneous Electro-Fenton-like process employing Zero-Valent iron nanoparticles loaded activated carbon, *Chemical Engineering Journal*, 10.1016/j.cej.2024.152494
6. Cruz del Álamo A., Puga A., Pariente M.I., Rosales E., Molina R., Pazos M., Martínez F., Sanromán M.A. (2023) Activity and stability of bifunctional perovskite/carbon-based electrodes for the removal of antipyrine by electro-Fenton process, *Chemosphere*, 10.1016/j.chemosphere.2023.138858
7. Escudero-Curiel S., Pazos M., Sanromán A. (2023) Facile one-step synthesis of a versatile nitrogen-doped hydrochar from olive oil production waste, “alperujo”, for removing pharmaceuticals from wastewater, *Environmental Pollution*, 10.1016/j.envpol.2023.121751
8. Puga A., Mejjide J., Pazos M., Rosales E., Sanromán M.A. (2022) Electric field as a useful tool to improve the poor adsorption affinity of pollutants on carbonaceous aerogel pellets, *Journal of Molecular Liquids*, 10.1016/j.molliq.2022.120269
9. Balci E., Rosales E., Pazos M., Sofuoglu A., Sanroman M.A. (2022) Continuous treatment of diethyl hexyl and dibutyl phthalates by fixed-bed reactor: Comparison of two esterase bionanocomposites, *Bioresource Technology*, 10.1016/j.biortech.2022.127990
10. Ouiriemmi I., Escudero-Curiel S., Pazos M., Angeles Sanromán M. (2022) On-site regeneration by ultrasound activated persulfate of iron-rich Antipyrine-loaded biochar, *Journal of Environmental Chemical Engineering*, 10.1016/j.jece.2022.108400

**C.2. Congress**, indicating the modality of their participation (invited conference, oral presentation, poster)

Prof Sanromán has been member of the international committees (14 conferences in the last 5 years) such as 5th International Environmental Chemistry Congress (EnviroChem). October 30 - November 2, 2023, Antalya, Turkey; 5th Iberoamerican Conference on Advanced Oxidation Technologies, November 7-11, 2022, Cuzco, Peru; 11th International Conference on Environmental Engineering and Management (ICEEM11). September 8 – 10, 2021, Muttentz, Switzerland, 3rd International Conference on Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability. May 17 - 19, 2021. 5th Workshop of the E3TECH Network and 1st Ibero-American Remote Workshop E3TECH, October 28-31, 2020, Virtual; ELO.Watr International Workshop on Advanced Electrochemical Oxidation for Water Reuse, September 15-17, 2020, Virtual or International Conference on Sustainable Waste Treatment and Management (SWTM-2019). Yangling, China. May 6-9, 2019.

Over the past five years, she has actively participated in a total of 60 conferences, comprising 45 international and 15 national events. During these conferences, they have presented 136 communications, of which approximately 30% were distinguished as plenary sessions, keynote lectures, or oral presentations. Notably, several presentations have been awarded for their excellence, such as the best oral presentation at the Reunión Ibérica de Adsorción 41RIA-IBA3, and the best poster at the 3rd International Congress of Chemical Engineering, the XXXIX Electrochemical Group (RSEQ) Meeting, and the 3rd 3E-Mediterranean Symposium.

**C.3. Research projects**, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

**National call:**

1. Title: "Reduccion del impacto ambiental y sanitario de efluentes hospitalarios mediante oxidacion avanzada: innovacion en el ecodiseño de catalizadores y electrodos multifuncionales (ResiHOSP-AOP)". Ministerio de Ciencia e Innovación. From: 01/09/2021 until: 30/08/2024. Grant money: 242.000€. IPs: Marta Pazos and **M<sup>a</sup> A. Sanromán**. Reference: PID2020-113667GB-I00
2. Title: "Un enfoque práctico y próximo a la realidad de mercado en la detección y el tratamiento de compuestos farmacéuticos (HIBRITEC+)". Ministerio de Ciencia e Innovación. From: 01/12/2021 until: 30/05/2024. Grant money: 138.000€ **IPs: M<sup>a</sup> Angeles Sanromán** and Marta Pazos. Reference: PDC2021-121394-I00
3. Title: "Propuestas de contaminacion cero para la protección del Medioambiente de sustancias persistentes, móviles y tóxicas". Ministerio de Ciencia e Innovación. From: 01/12/2021 until: 30/05/2024. Grant money: 184.000€. IP: Emilio Rosales. Reference: TED2021-129590A-I00.
4. Title: "Advancing Toward a Greener Future: Integration of Environmentally Friendly Materials for Water Purification and Renewable Energy Initiatives (G-Free)" Ministry of Science, Innovation and Universities (Spain) Ministerio de Ciencia e Innovación. From: 01/09/2024 until: 30/08/2027. Grant money: 275.000€. IPs: Marta Pazos and **M<sup>a</sup> A. Sanromán**. Reference: PID2023-146133NB-I00

### **International call:**

1. Title: “Sustainable and Safe Water Management in Agriculture: Increasing the Efficiency of Water Reuse for Crop Growth While Protecting Ecosystems, Services, and Citizens’ Welfare” (REWATER). ERA-NET Cofund WaterWorks2015. Duration: From 01/04/2017 to 31/03/2020. Funding: €555,960. Project Coordinator: Cristina Delerue Matos. Spanish Principal Investigator (IP): M<sup>a</sup> Ángeles Sanromán.
2. Title: BioReset – Biodiversity Restoration and Conservation of Inland Water Ecosystems for Environmental and Human Well-being. BiodivRestore Cofund 2020. Duration: From 2022 to 2025. Funding: €1430,745. Project Coordinator: Cristina Delerue Matos. Spanish Principal Investigator (IP): M<sup>a</sup> Ángeles Sanromán.

### **Member of National networks:**

1. Title: “Red Temática de Excelencia: Aplicaciones medioambientales y energéticas de la tecnología electroquímica”. Ministerio de Ciencia, Innovación y Universidades. (2018-2020) CTQ2017-90659-REDT. Grant money: 20.000€. IP: Manuel Andrés Rodrigo Rodrigo.
2. Title: “Red Temática de Excelencia: Aplicaciones medioambientales y energéticas de la tecnología electroquímica frente a los retos del nexo agua-energía” Ministerio de Ciencia e Innovación. (2023-2024) RED2022-134552-T. Grant money: 20.390€. IP: Manuel Andrés Rodrigo Rodrigo.

### **C.4. Contracts, technological or transfer merits,**

#### **Contracts PI M<sup>a</sup> Angeles Sanromán (last 5 years):**

- Estudio de la actividad biocida de aceros tras diversos tratamientos (Fase 1). Company: AIMEN-CENTRO APLICACIONES LASER. subcontratación dentro del Proyecto MATCHING: Materials and technologies for performance improvement of cooling systems in power plants, GA: 686031 H2020 del topic.
- Estudio del cultivo en fed-batch de la microalga *Cryptocodinium cohnii*. Company: CARBIOTECH, S.L. 2017. I
- Diseño de un proceso sostenible para el cultivo de una especie de microalgas autóctona y enriquecimiento en el compuesto de interés – CRYPTHA. Company: CARBALLO BIOMETANIZACIÓN, S.L. 2018-2019.

#### **Patents:**

- Moldes, D., Sanromán, A. y Fernández, M. “Procedimiento para dotar de hidrofobicidad materiales de madera”. Ref: P201300587; Priority country: Spain; 2015. Universidad de Vigo
- Deive, F.J., Alvarez, M.S., Moscoso, F., Rodríguez, A., Sanromán, A. “Procedimiento para la eliminación de compuestos orgánicos presentes en aguas residuales”. Ref: P201301068; Priority country: Spain; 2015. Universidad de Vigo
- Fernández-Costas, C., Sanromán M.A., Moldes D. “Procedimiento enzimático para conferir a la madera y productos derivados resistencia frente a agentes de origen biótico”. Ref: P201600325; Priority country: Spain; 2017. Universidad de Vigo
- Moldes D., Domínguez, A., Othman, A.M., Sanromán M.A. “Procedimiento para la unión estable de retardantes de llama a productos madereros mediante catálisis enzimática”. Ref: P201600924; Priority country: Spain; 2018. Universidad de Vigo
- Deive, F.J. Gutiérrez-Arnillas, E., Rodríguez, A., Sanromán, M.A. “Procedimiento para el incremento de producción de lipasa en cultivos de *Halomonas* mediante inducción química y biológica”. Ref: P201700078; Priority country: Spain; 2018. Universidad de Vigo

### **Other merits**

- Director of the CINTECX Research Center since May 2024
- Member of Chemical Technology of ANEP: 2007-2013.
- Member of AEI (Spanish Agency of Investigation) in the scientific area of
  - o Technology Transfer of Technology Transfer (2015-2018)
  - o Materials Energy and Environmental (2019- 2022).
- Member of Evaluator panel of ERC Consolidator Grant 2022 and 2024
- Expert Evaluator of PF7, WaterJPI, OCEANS, PICA and other international agencies.
- Associate Editor of Bioresource Technology (2010-2023).
- Member of the Engineering and Architecture Committee of Andalusian Agency for Knowledge (DEVA-AAC) from 2016.