



### CURRICULUM VITAE (CVA)

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

#### Part A. PERSONAL INFORMATION

CV date	April 2022
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First name	Agustín		
Family name	Merino García		
Gender (*)	Male	Birth date (dd/mm/yyyy)	21/07/1964
Social Security, Passport, ID number	[REDACTED]		
e-mail	Agustin.merino@usc.es	URL Web	<a href="https://www.uxafores.com/">https://www.uxafores.com/</a>
Open Researcher and Contributor ID (ORCID) (*)	0000-0003-3866-7006		

(\*) Mandatory

#### A.1. Current position

Position	Full Professor		
Initial date	2018		
Institution	Universidad de Santiago de Compostela		
Department/Center	Soil Science and Agricultural Chemistry	Escuela Politécnica Superior de Ingeniería	
Country	España	Teleph. number	[REDACTED]
Key words	Agri-food waste, Soil organic matter, Soil GHG emissions, Soil restoration, Phosphorus		

#### A.2. Previous positions (research activity interruptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
1994-1995	Human Capital Mobil. Researcher/Un. Göttingen/ Germany
1996- 1998	Assistant teacher/USC/Spain
1998-2020	Professor
2020-	Full Professor

#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate in Biology	University of Santiago de Compostela	1988
PhD Soil Science	Uni. Santiago de Compostela +Uni. Göttingen	1993

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

##### General indicators of quality of scientific production

Number of six-year terms (sexenios): 4 (Last one in 2016)

Number of "Transfer" six-year terms: 1 (1998-2003)

Thesis supervision: 10 (PhD), 20 (Master), 35 (Degree)



Scopus Author ID: 7203082676 h-index: 29  
Number of publications JCR: 85

**Research areas:** soil restoration, capture of C in ecosystems, advanced techniques for studying organic matter and phosphorus.

**Experience in implementation of circular economy:** Responsible for the biomass ash valorization program for the sustainability of forest plantations, carried out with more than 6 Spanish national companies (FINSA, ENCE, NORVETO, AGMI, TABLICIA, TAFIBER) under a Circular Bioeconomy. 3 National project and 3 contracts funded.

**Research projects as coordinator:** National: 12 projects. UE projects: 4. EU fellowship: 1 Human Capital and Mobility Fellowship (Post-doctoral stay)

**Knowledge transfer:** More than 30 contracts with companies (Sologas, FINSA, ENCE, ENDESA, NORVENTO, XILOGA, Xunta de Galicia, CIS MADERA).  
Member of the Biomass and Agroenergy Network.

### **Management experience**

Former Deputy Vice-Chancellor for Research (USC)  
Former Vice-Rector of International Relations (USC)  
Member of the Spanish Ministry, as Bolonian Team Expert (2011-2012)  
Coordinator of the International Doctorate Program in Agriculture and Environment.  
Subject editor (soil and nutrition) in the European Journal of Forest Research (Q1)

## **Part C. RELEVANT MERITS**

### **C.1. Publications**

1. Rey-Salgueiro, L.; Omil, B.; Merino, A.; Martínez-Carballo, E.; Simal-Gandara, J. (2016). Organic pollutants profiling of wood ashes from biomass power plants linked to the ash characteristics. *The Science of Total Environment*, 544, 535-543.
2. Campo J.; Merino A. (2016). Variations in soil carbon sequestration and their determinants along a precipitation gradient in seasonally dry tropical forest ecosystems. *Global Change Biology*, 22, 1942-1956.
3. Merino, A.; Omil B.; Hidalgo C; Etchevers JD, Balboa MA (2017). Characterization of the organic matter in fly ash and mixed wood ash to assess its recalcitrance in agricultural applications. *Land Degradation and Development*, 28, 2166–2175.
4. Santín C., Doerr, S.H., Merino, A.; Bucheli T. D.; Bryant, R.; Ascough, P.; Gao X.; Masiello, C. A. (2017). Carbon sequestration potential and physicochemical properties differ between wildfire charcoals and slow-pyrolysis biochars. *Scientific Reports*, 7, 11233.
5. Rey-Salgueiro, L.; Martínez-Carballo, E.; Merino, A.; Vega, J.A.; Fonturbel, M.T.; Simal-Gandara, J. (2017). Polycyclic aromatic hydrocarbons in soil organic horizons depending on the soil burnt severity and type of ecosystem. *Land Degradation and Development*, 29, 2112-2123.
6. Merino A.; Jiménez E.; Fernández, C.; Fontúrbel, M. T.; Campo, J.; Vega, J.A. (2019). Soil organic matter and phosphorus dynamics after low intensity prescribed burning in woodlands and shrublands. *Journal of Environmental Management*, 234, 214–225.
7. Hidalgo, C.; Merino, A.; Osorio-Hernández, V.; Etchevers, J.; Figueroa, B.; Limon, A.; Aguirre, E. (2019). Physical and chemical processes determining soil organic matter dynamics in managed Vertisols in semi-arid areas. *Soil & Tillage Research*, 194, 104348.
8. Kurganova, I.; Merino, A.; Lopes de Gerenyu, V.; Barros, N.; Kuzyakov, Y. (2019). Climate dependent mechanisms of carbon sequestration and stabilization by restoration of arable soils after abandonment. *Geoderma*, 354, 113882.
9. Campos, P., Miller, A. Z., Knicker, H., Costa-Pereira, M. F., Merino, A., & De la Rosa, J. M. (2020). Chemical, physical and morphological properties of biochars produced from agricultural residues: Implications for their use as soil amendment. *Waste Management*, 105, 256-267.



10. Albuquerque, A. R., Angélica, R. S., Merino, A., & Paz, S. P. (2021). Chemical and mineralogical characterization and potential use of ash from Amazonian biomasses as an agricultural fertilizer and for soil amendment. *Journal of Cleaner Production*, 295, 126472.

## **C.2. Congress**

### **Congress organized**

1. Managed forests in future landscapes. Coordinador. Internacional. Santiago, may 2011
2. Ecological restoration: education, training, communication and opportunities for employability. Coordinator. SERE 2018 Restoration in the Era of Climate Change. Reykjavik, 09/2018.
3. Encuentro iberoamericano de formadores en ciencias agrícolas y medioambientales. Funding: Xunta de Galicia. 10/2014.
4. Landcare for the future: the meeting point for educators and students-Summer Course. Funding: Erasmus + and USC. 2018.
5. Cambio Climático e Investigación. Funding: Gobierno de Guatemala. 10/2015. PI: A. Merino. 10.000 Eu

### **C.3. Research projects**

1. Estudio de la estabilización del carbono en suelos agrícolas reforestados (AGL2009-13400-C05-04). Funding: Min. Sci. & Inn. 01/01/2010 31/12/2012. PI: A. Merino. 58.080 Eu.
2. Gestión y Producción Sostenible de Biorrecursos- Agrupación estratégica BioReDes (ED431E 2018/09). Funding: Xunta de Galicia. 2018- 2020. PI: P. Martínez. 405.759 Eu
3. Biochar y cenizas de biomasa. Estrategias de mitigación y adaptación de masas forestales al cambio climático (RTA20012-00048-00-00). Funding: INIA. 1/05/13-30/04/15. PI: N. Gartzia-Bengoetxea (NEIKER). 110.922 Eu
4. Stock de carbono en los suelos de España: respuesta al cambio climático y al cambio de uso (CGL2015-71958-REDT). Funding: Min. Sci. & Inn (“redes de excelencia”). PI: Pere Rovira 2012-2014. Centre tecnologic forestal de Catalunya. 30.000 Eu.
5. Carbono, nutrimentos edáficos, bienes ecosistémicos asociados y modelos de simulación en sistemas agroforestales de Veracruz, México. Funding: Universidad Autónoma de Chapingo, México. 2012-2014. PI: E. Valdés (Un. Aut. Chapingo). 35.000 euros
6. Construcción de suelos artificiales a partir de la reutilización de residuos generados por la ciudad de México como una alternativa urbana Sostenible. Funding: Ciudad de México. 1/08/2016-1/07/ 2017. PI: Bruno Chavez-Vergara (UNAM, México). 50.000euros
7. C-in and C-outputs, rates and mechanisms of C-sequestration and C-stabilization of post-agrogenic soils – exemplified by Luvisol chronosequences of Russia. Funding: German Research Foundation (DFG 652 Research Projects 171/27-1). 2016-2019. PI: Irina Kurganova (Russian Science Academy and J. Kuzyakov (Un. Göttingen, Germany). 215.000 Eu
8. Climate smart use of Norwegian Organic soils (MYR) (no.281109). Funding: Resarch Council of Norway. 2017-2022. PI: Hanna Silvennoinen (NIBIO). 300.000 Eu.
9. Carbon sequestration from wildfires? Quantifying the role of pyrogenic carbon (RPG-2014-095). Funding: The Leverhulme Trust. 5/2014-5/2019. PI: Stefan Doerr (Swansea University, UK). 297.701 Eu
10. Vulnerabilidad integral de los sistemas forestales frente a incendios: implicaciones en las herramientas de gestión forestal “VIS4FIRE” (RTA2017-00042-C05-01). Subproyecto 2. Funding: INIA. 1/01/2018-31/12/2020. PI: M.T. Fonturbel (CIF Lourizán). 121.000 euros

### **C.4. Contracts, technological or transfer merits (Registered Software):**

1. Realización de un estudio de mercado asociado a la valorización y a la comercialización de cenizas combustión de plantas de transformación de biomasa forestal (2011-CE408) Funding: Norvento S.L and Xunta de Galicia. 22/12/2011 a 31/01/2011. PI: A. Merino. 25.440 Eu.
2. Revalorización de cenizas de biomasa forestal mediante la instalación de una planta piloto para la elaboración de fertilizantes específicos de alta calidade (2012-CE062) Entidad



- financiadora: Norvento S. L and Xunta de Galicia. 01/01/2012 a 31/10/2013. PI: A. Merino. 27.538 EU.
3. Aplicación de los residuos de la industria del papel y de neumáticos fuera de uso para la construcción de terraplenes ecológicos aligerados y otros materiales de construcción-PANTERA (2013-CE118). Funding: ENCE, XILOGA + CYE + CDTI- MINECO- Feder-Interconecta). 22/10/2013 a 31/12/2014. PI: A. Merino. 94.001 Eu.
  4. Generación de fertilizantes a partir de cenizas de biomasa. Funding: ENCE; FEADER-Xunta de Galicia. 1-9-2013/31-08-2015. PI: A. Merino. 124.455 euros
  5. Elaboración de informes de canteras para planificar la restauración mediante la aplicación de tecnosuelos (2015-CE143). PI: A. Merino. Funding: XILOGA. 12/2014-/06/2015. 16.000 Eu.
  6. Sistema portátil de generación termoeléctrica por gasificación de biomasa (pyrogaz). Funding: Norvento, S.L. + Allarluz CONECTA PEME. 07/2016-/03/2019. 33.150 Eu.
  7. Biorestaura: Proyecto de optimización del proceso de elaboración de substratos orgánicos para la restauración de terrenos marginales (2016-CE291). Funding: Feder-Interconecta + Xiloga.. 15/08/2016- 31/10/2017. PI: A. Merino 45000 Eu.
  8. Investigación nos parques naturais sobre captación de CO2 e NO2 por diferentes cultivos para contribuir a mitigar o Cambio Climático (2017-CP089) Funding: Xunta de Galicia. 10/08/2017-01/12/2017. PI: A. Merino. 41.322 Eu.
  9. Convenio de colaboración para el desarrollo del proyecto de formación medioambiental en la escombrera de As Pontes (2017-CL003) Funding ENDESA. 03/05/2017-31/12/2017. PI: A. Merino. 33.275 Eu.
  10. Composición química de los purines de diferentes explotaciones de ganado bovino y porcino de las comarcas de Deza y Terra Chá. 1/21-12/2021. Funding SOLOGAS-FEUGA. PI: A. Merino. 23.000 Eu.