

## Parte A. DATOS PERSONALES

Fecha del CVA

november/22

Nombre y apellidos	Luis Francisco Fernández Pozo		
DNI/NIE/pasaporte	***972***	Age	62
	Open Researcher and Contributor ID (ORCID**)	0000-0002-1249-287X	
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(\*) Recomendable

(\*\*) Obligatorio

### A.1. Situación profesional actual

Organismo	UNIVERSIDAD DE EXTREMADURA		
Dpto./Centro	BIOLOGÍA VEGETAL, ECOLOGÍA Y CIENCIAS DE LA TIERRA		
Dirección	AVDA. DE ELVAS S/N		
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Categoría profesional	TITULAR DE UNIVERSIDAD	Fecha inicio	1993
Palabras clave	Manejo de suelos; Relación suelo-medioambiente; Conservación y recuperación de suelos		
Palabras clave inglés	Soil management; soil-environmental relationships; Soil conservation and remediation		

### A.2. Formación académica (título, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Dr. en CIENCIAS (BIOLOGÍA)	EXTREMADURA	1990

### A.3. Thesis supervised

- Development of a predictive model using NIRs technology to determine the extractions of triticale with double aptitude (forage and grain). F. Galea. 2015. Faculty of Sciences. Universidad de Extremadura. Sb. *cum laude*

- Sustainable Urban Planning: Analysis of Critical Factors for Territorial Success. A. Castanho. 2017. Faculty of Sciences. Universidad de Extremadura. Sb. *cum laude*

- Methodological proposal for the management of protected areas in Ecuador. A. Onofa. 2017. Faculty of Sciences. Universidad de Extremadura. Sb. *cum laude*

- Pedodiversity and spatial variability of organic carbon in soils in the southwest of the Iberian Peninsula. B. Ramírez. 2018. Faculty of Sciences. Universidad de Extremadura. Sb. *cum laude*

## Part B. CV SUMMARY

The researcher has extensive experience in research applied to sustainable management, conservation and recovery of Natural Ecosystems (environment: water, soil, fauna, flora...), Land Use Planning, Environmental Impact, Remote Sensing and Geographic Information Systems, as well as in Cartographic Modelling and Spatial Data Infrastructure (SDI), aspects that are fundamentally oriented towards the conservation of transboundary Mediterranean ecosystems and their sustainability. These projects have focused on the development of geographic models of environmental and territorial management for rural areas with low population density. They define environmental and territorial management strategies through the implementation of methodologies and instruments for a better and more coherent management of the territory.

These areas of great environmental sensitivity are subject to processes of anthropogenic and natural degradation, which is why the researcher has worked on studies related to climate

aggressiveness as a consequence of climate change. In this sense, the development of a Climate Aggressivity index, in the process of validation, shows the areas most susceptible to degradation processes. Another tool, as an indicator of sustainability, are the studies of phytosociology using indices of potential of vegetation to assess the degree of conservation of the landscape.

On the other hand, it is participating in the recovery of natural areas subject to heavy metal pollution processes as a consequence of old mining activities. Along these lines, phytoremediation techniques are being tested as a non-aggressive and highly effective practice.

We are exploring the use of remote sensing techniques (NIR and LIDAR) in the evolution of the structure of the landscape in rural areas and protected areas, and their relationship with the phytosociological of the area of application.

## **Part C. RELEVANT MERITS**

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

- Fernández-Pozo L. & Espejo, A.. 2011. Medio Ambiente. Tomo 10 colección “Extremadura más de 20 años de progreso con Europa”. Coord. M. López Martínez. ISBN: 978-84-692-9565-6 (O.C.).
- T. Batista; P. Mendes; C. Vila-Viçosa; M. Veigas; J. Cavaco; J. Cabezas; L. Fernández-Pozo; N. Arancibia; R. Paiva-Ferreira; C. Pinto-Gomes. 2012 Contribution to local landscape units definition in OTALEX II. *Acta Botanica Gallica*, 159: 2, 169-175.
- T. Batista; J. Cavaco; P. Mendes; C. Vila-Viçosa; A. Penas; S. del Río; J. Cabezas; L. Fernández-Pozo; N. Arancibia; C. Pinto-Gomes. 2012. Conservation status of vegetation in the North and Central area of padiela river basin (Évora, Portugal). *Acta Botanica Gallica*, 159: 2, 177-185.
- B. Ramírez, L. Fernández-Pozo, J. Cabezas, A. Jiménez, P. Mendes, Vila-Viçosa, C., T. Batista, C. Pinto-Gomes. 2013. Bioclimatologia, Biogeografia e Vegetação Potencial na área OTALEX C. Ceballos, F., M. Puerto, T. Batista e C. Carriço (Coord. Ed.). 2013 OTALEX C: Resultados del Proyecto. DGTOTU. Consejería de Fomento, Vivienda, Ordenación del Territorio y Turismo. Junta de Extremadura. ISBN:978-84-695-9132-1: 73-82.
- Batista T., C. Caballero, F. Ceballos, C. Carriço, J. Mateus, H. Lopes, P. Vivas, J. Cabezas, L. Fernández and C. Pinto-Gomes. 2013. The First Crossborder SDI between Portugal and Spain: Background and Development. *Journal of Earth Science and Engineering* 3 (6): 393-400.
- Ramos M.V., B. Ramírez, L. Fernández, J. Cabezas, C. Pinto-Gomes, C. Vila-Viçosa y T. Batista. 2013. Análise Da Fragmentação De Áreas Agrícolas No Território OTALEX C. Ceballos, F., M. Puerto, T. Batista e C. Carriço (Coord. Ed.). 2013 OTALEX C: Resultados del Proyecto. DGTOTU. Consejería de Fomento, Vivienda, Ordenación del Territorio y Turismo. Junta de Extremadura. ISBN:978-84-695-9132-1: 113-136. 2013.
- R.A. Castanho, L. Loures, J. Cabezas, L. Fernández-Pozo. 2017. Cross-Border Cooperation (CBC) in Southern Europe—An Iberian Case Study. *The Eurocity Elvas-Badajoz. Sustainability*, 9(3), 360; doi: 10.3390/su9030360
- R.A. Castanho, A. Vulevic, J. Cabezas, L. Fernández-Pozo, J. M. Naranjo, L. Loures. 2017. Accessibility and connectivity – Movement between cities, as a critical factor to achieve success on cross-border cooperation (CBC) projects. *A European analysis. Sustainable Cities and Society*. (32), 181-190.

- R.A. Castanho, A. Vulevic, J. Cabezas, L. Fernández-Pozo, L. Loures. 2017. Facing Climate Challanges – Contributors from Cross-Border Cooperation (CBC). In: Environment to Europe. Conference proceedings, Belgrade 2017. Ed. Dunja Prokic. 65-71. ISBN: 978-86-89961-06-5.
- Batista, T., Ceballos, F., Caballero, C., Carriço, C., Mendes, P., Pinto-Gomes, C., Cabezas, J. Fernández-Pozo, L., Vivas, P. 2017. Luso-Extremadurensse crossborder cooperation in Territory, environment and GIS: the OTALEXC case. I Congresso Luso-Extremadurensse de Ciências e Tecnologia. Pinto, Araújo, Bezzeghoud & Carapau Eds. Universidade de Évora. Évora. ISBN: 978-989-8550-45-3.
- Castanho, R., Cabezas, J., Fernández-Pozo, L., Vulevic, A., Gómez, J., Martín Gallardo, J. & Loures, L. 2018. Estrategias de Desarrollo Regional Común en Territorio Ibérico. Enfocando Nuevos Horizontes: Post 2020. Enfoques en la Planificación Territorial y Urbanística. pp. 2-26. Ed.: Thomson Reuters. ISBN: 978-84-9177-670-3
- R.A. Castanho, L. Loures, J. Cabezas, L. Fernández. 2018. Identifying critical factors for success in Cross Border Cooperation (CBC) development projects. Habitat International, 72: 92-99. doi:10.1016/j.habitatint.2016.10.004.
- Loures, A.; Castanho, R.A.; Naranjo, J.M.; Vulevic, A.; Cabezas, J.; Fenández Pozo, L.. 2018. The Multivariated Effect of City Cooperation in Land Use Planning and Decision-Making Processes: A European Analysis. Urban Agglomeration. pp. 41 - 48. INTECH, 21/03/2018. ISBN 978-953-51-3897-6.
- Oropesa AL, Gala JA, Fernández-Pozo L, Cabezas J, Soler F. 2019. Lead content in soils and native plants near an abandoned mine in a protected area of south-western Spain: an approach to determining the environmental risk to wildlife and livestock. Environmental Science and Pollution Research 26: 30386– 30398.
- Garrido I, Ortega A, Hernández M, Fernández-Pozo L, Cabezas J, Espinosa F. 2021. Effect of antimony in soils of an Sb mine on the photosynthetic pigments and antioxidant system of *Dittrichia viscosa* leaves. Environ. Geochem. Health. 43: 1367-1383.
- Ibáñez JJ, Ramírez-Rosario B, Fernández-Pozo L, Brevik EC. 2020. Exploring the scaling law of geographical space: Gaussian versus Paretian thinking. Eur J Soil Sci. 72 (2):495– 509.
- Ibáñez JJ, Ramírez-Rosario B, Fernández-Pozo L, Brevik EC. 2020. Land system diversity, scaling laws and polygons map analysis. Eur J Soil Sci. 72 (2):656–666.
- Vulevic A, Castanho RA, Naranjo JM, Loures L, Cabezas J, Fernández-Pozo L, Martín Gallardo J. 2020. Accessibility Dynamics and Regional Cross-Border Cooperation (CBC) Perspectives in the Portuguese— Spanish Borderland. Sustainability 12(5): 1978.
- Álvarez-Ayuso E, Murciego A, Rodríguez, MA, Fernández-Pozo L, Cabezas J, Naranjo-Gómez JM, Mosser-Ruck, R. 2021. Antimony distribution and mobility in different types of waste derived from the exploitation of stibnite ore deposits. Science of the Total Environment. <https://doi.org/10.1016/j.scitotenv.2021.151566>.
- González Morales, M., Fernández Pozo, L., Rodríguez González, M.A. 2022. Threats of metal mining on ecosystem services. Conservation proposals. Environmental Research. <https://doi.org/10.1016/j.envres.2022.114036>.

## C.2. Research projects and grants

- Observatorio Territorial y Ambiental Alentejo Extremadura Centro. 0345\_OTALEX\_C\_4\_EOTALEX-C. Programa de Cooperación Transfronteriza España-Portugal POCTEP 2007/15. F. Ceballos.
- Incidence of climate change on the livestock carrying capacity of the dehesa in the province of Badajoz. Diputación de Badajoz. L. Fernández-Pozo.
- Environmental Resources Analysis. Plan Regional, Proyectos y Ayudas. Junta de Extremadura. 2018/21. M.A. Rodríguez.
- Methodological Proposal for the Diagnosis and Phytoremediation of Pb-Zn contaminated areas in Extremadura after the abandonment of mining activities. Plan Regional, Proyectos y Ayudas. Junta de Extremadura 2019/22. M.A. Rodríguez.
- Stabilization/encapsulation techniques for mining waste containing metalloids. Ministerio de Ciencia, Innovación, y Universidades (MCIU), Agencia Estatal de Investigación (AEI) y Fondo de Desarrollo Regional (FEDER). 2019/2021. E. Álvarez-Ayuso.

## C.3. Contracts

- Phytoremediation techniques in Mediterranean Systems. INTERLUN, S.L. 2016.
- Management of slags generated from biomass plant. Recycling LA GRULLA, S.L. 2018.
- Preparation of Technical Report on Contaminated Soils. Recycling LA GRULLA, S.L. 2019.
- Execution of the design, development and monitoring of technosoils for the remediation and landscape restoration of a quarry. EXTENSIVE, S.L. 2020.
- Soil quality evolution in the solar photovoltaic installation project "Puerta del Jerte" (Plasencia). NATURGY RENOVABLES, S.L.U. 2022.
- Study on the identification and characterization of soils of agricultural interest in Extremadura. JUNTA DE EXTREMADURA. 2022.
- Advice on the analysis of vegetation, fauna and livestock carrying capacity of the areas where a solar photovoltaic plant is located. TXT, INGENIERÍA, S.L. 2022.
- Advice on the analysis of the climatic and environmental effects of a solar photovoltaic plant and the design of an efficient and sustainable model for the environmental integration of solar photovoltaic plants in Extremadura. TXT, INGENIERÍA, S.L. 2022.

## C.5. Institutional responsibilities

- Director of the University Office for the Environment (Universidad de Extremadura; 2004-2015)
- Director of the Department of Plant Biology, Ecology and Earth Sciences (Universidad de Extremadura; 2015- actuality)