CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	ENRIQUE		
Family name	SERRANO CAÑADAS		
Gender (*)	Man	Birth date (dd/mm/yyyy)	18/05/1962
ID number	05250342V		
e-mail	e.serrano@uva.es	URL Web: https://www5.uva.es/gir_pangea/	
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-9760-3876		

(*) Mandatory

A.1. Current position

Position	Professor (Catedrático de Universidad)		
Initial date	February 2000		
Institution	University of Valladolid		
Department/Center	Geography		
Country	Spain	Teleph. number	+34 983186589
Key words	Geomorfology, Mountains, Cryosphere, natural heritage.		

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

Period	Position/Institution/Country/Interruption cause
1994-2000	Lecturer (Profesor Titular de Universidad), Universidad de Cantabria, Spain
1992-1994	Assistant (Profesor Ayudante doctor), Universidad de Cantabria, Spain
1990-1992	Assistant (Profesor Ayudante), Universidad de Cantabria, Spain
1987-1989	Predoctoral Research. Universidad Autónoma de Madrid, Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Geography	Universidad Autónoma de Madrid, Spain	1991
Pedagogic Aptitude Certificate Postgraduate course (CAP)	Universidad Autónoma de Madrid, Spain	1987
Lcdo. Geography and History	Universidad Autónoma de Madrid, Spain	1986

(Include all the necessary rows)

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

I am a Physical Geographer in the Department of Geography. I have worked mainly in the Physical Geography of mountains environments since 1989. My research interests include Geomorphology, Quaternary, glacial and periglacial landforms and processes, including the cryosphere, permafrost and glaciers, landscape and Geomorphological heritage. I have worked with several techniques such as geomorphological mapping, remote sensing, geomatic (TLS, GNSS, and photogrammetry) and geophysics (GPR, SEV) techniques applied to the study of permafrost, glaciers, periglacial processes, and geomorphological heritage. I have dedicated an important portion of my professional life to the study of active rock glaciers and permafrost in the Pyrenees, Alps, Andes, Arctic and Antarctica. During my professional life I have been Main Researcher of ten competitive Research Projects (25 years) and I am the Coordinator of the Pangea Research Group (Natural Heritage and Applied Geography). I have written more than 160 papers, 90 of them in JCR Reviews and 11 books on Geography. I have worked in 16 fieldwork or scientific expeditions on the cryosphere in polar and high mountain environments (Andes, Alaska, Greenland, Svalbard, Siberia, Himalaya, and Antarctica), collaborating with national and international research groups (Norwegian, French, USA, Italian, BAS, Brazil) and I have been as Visiting Scholar in the Universities of Cambridge (Scott Polar Research Institute, UK), Magallanes (GAIA Center on Antarctica Research, Chile), Lisbon

(CEOT, Portugal) and Nantes (Inst. Géographie, France). I have directed 11 doctoral thesis, and I have been Head of the Doctorate Program in Geography and vice-chair of the Doctorate School of the University of Valladolid. I have been fellow during the last 35 years, teaching Physical Geography, attending to more than 13 fieldtrip and fieldworks with students in the Pyrenees, the Iberian Range, the Alps (Switzerland), the Scottish Mountains (UK), Tatra (Slovaquia), Atlas (Morocco), and Britain (France).

H-index: Web of Science: **34** Scopus: **32** Google Scholar H-index: **34**
i-10 Index: Web of Science: **75** Nº sexenios de investigación: 5 (1989-2022).

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

C.1. Publications *(see instructions)*

1.Scientific paper: (1/3) ENRIQUE SERRANO; MARÍA JOSÉ GONZÁLEZ AMUCHÁSTEGUI; ROSA MARÍA RUIZ PEDROSA. 2025. Geomorphosites and geomorphological maps applied to public use, tourism and natural heritage management in the Rio Lobos Natural Park (Spain). **Geomorphology**. 471, DOI: 10.1016/j.geomorph.2024.109573.

2.Scientific paper: (1/3) REVUELTO, J., IZAGIRRE, E., RICO, I., RIO, L., SERRANO, E., VIDALLER, I., ROJAS-HEREDIA, LÓPEZ-MORENO. I. (2025). The last years of Infiernos Glacier and its transition to a new paraglacial stage. **Journal of Glaciology**. https://doi.org/10.1017/JOG.2025.22

3.Scientific paper: (1/5) ENRIQUE SERRANO, JOSÉ JUAN DE SANJOSÉ, MANUEL GÓMEZ-LENDE, MANUEL SÁNCHEZ, ALVARO GÓMEZ. 2024. Coastal retreat and sea-cliff dynamic on the North Atlantic coast (Gerra Beach, Cantabrian Coast, Spain). **Environmental Earth Sciences**, 83, 3. https://doi.org/10.1007/s12665-023-11385-1.

4.Scientific paper: (2/8) MARTÍNEZ-FERNÁNDEZ, A.; SERRANO, E.; DE SANJOSÉ, J.J.; GÓMEZ-LENDE, M.; SÁNCHEZ-FERNÁNDEZ, M.; LÓPEZ-MORENO, J.I.; RICO, I.; PISABARRO, A.2023. The final countdown? Monitoring the rapid shrinkage of the Maladeta glacier (2010-2020), Southern Pyrenees. **Land Degradation and Development**. John Wiley & Sons Ltd. pp.5905-5922. ISSN 1085-3278. https://doi.org/10.1002/ldr.4886

5.Scientific book chapter. (1/1) SERRANO, E. 2021. The existing glaciers of the Iberian Peninsula: The Central Pyrenees. En: M. Oliva, D. Palacios, J.M. Fernández (Eds.). **Iberia, Land of Glaciers**. How The Mountains Were Shaped by Glaciers. Elsevier, Amsterdam, pp. 525-553. https://doi.org/10.1016/B978-0-12-821941-6.00008-6

6.Scientific paper: (1/7) SERRANO, E., LÓPEZ-MORENO, J.I., GÓMEZ-LENDE, M., PISABARRO, A., MARTÍN-MORENO, R., RICO, I., ALONSO-GONZÁLEZ, E. (2020). Frozen ground and periglacial processes relationship in temperate high mountains: a case study at Monte Perdido-Tucarroya area (The Pyrenees, Spain). **Journal of Mountain Science**, 17(5), 1013-1031, DOI:10.1007/s11629-019-5614-5

7.Scientific paper: (1/2) SERRANO, E., GONZÁLEZ AMUCHASTEGUI, M.J. (2020). Cultural Heritage, landforms and integrated territorial heritage. The close relationship between tufas, cultural remains and landscape in the Upper Ebro Basin (Cantabrian Mountains, Spain). **Geoheritage**, 12, 86. https://doi.org/10.1007/s12371-020-00513-z

8.Scientific paper: (1/6) SERRANO, E.; GÓMEZ-LENDE, M.; LÓPEZ-MORENO, J.I.; DE SANJOSÉ, J.J.; PISABARRO, A.; MARTÍNEZ-FERNÁNDEZ, A. 2019. Periglacial environments and frozen ground in the central Pyrenean high mountain area: Ground thermal regime and distribution of landforms and processes. **Permafrost and Periglacial Processes**. John Wiley & Sons Ltd. 30, pp.292-309. ISSN 1045-6740. https://doi.org/10.1002/ppp.2032

9.Scientific paper: (2/4) DE SANJOSÉ, J.J.; SERRANO, E.; GÓMEZ-GUTIÉRREZ, A.; GÓMEZ-LENDE, M.2019. Surface movement and cascade processes on debris cones. Picos de Europa high mountain. (northern Spain). **Science of Total Environment**. Elsevier. 649, pp.1323-1337. ISSN 0048-9697. https://doi.org/10.1016/j.scitotenv.2018.08.405

10.Scientific paper: (1/5) Serrano E, Oliva M, González-García M, López-Moreno JI, González-Trueba JJ, Martín-Moreno R, Gómez-Lende M, Martín-Díaz J, Nofre J, Palma P. (2018). Post-little ice age paraglacial processes and landforms in the high Iberian mountains: a review. **Land Degradation and Development**, 29 (11) :4186-4208. DOI: 101002/ldr3171

11.Scientific paper: (1/5) Serrano, E., J.J. Sanjosé, Á. Gómez-Gutiérrez, M. Gómez-Lende (2018). Surface movement and cascade processes on debris cones in temperate high mountain (Picos de Europa, Northern Spain). **Science of the Total Environment** (STOTEN), 649 (2019), 1323-1337. https://doi.org/10.1016/j.scitotenv.2018.08.405
12.Scientific paper: (2/4) GÓMEZ-LENDE, M.; SERRANO, E.; JORDÁ BORDERHORE, L.; SANDOVAL, S.2016. The role of GPR in determining ice cave properties: Peña Castil ice cave, Picos de Europa. **Earth Surface Processes and Landforms**. 41, pp.2177-2190. ISSN 0197-9337. https://doi.org/10.1002/esp.3976

C.2. Congress, indicating the modality of their participation
1. Enrique Serrano Cañadas. Permafrost de montaña. Respuestas al cambio climático. FORO INTERNACIONAL AGUA Y TERRITORIOS ANDINOS. OPORTUNIDADES Y DESAFÍOS PARA LA GESTIÓN DE RECURSOS HÍDRICOS. Tacna (Perú) julio de 2024. Ponencia Invitada.
2. Enrique Serrano, Marc Oliva, Xosé L. Otero, Sergi Pla-Rabes, Santago Giralt, Dermot Antoniades and Juan Ignacio López-Moreno Distributon and characteristics of periglacial landforms in Central-West ice-free Greenland, 6th EUROPEAN CONFERENCE ON PERMAFROST. Puigcerdà (Spain). 118-22 June 2023.
3. E. Serrano, J.J. Sanjosé, M. Gómez-Lende, A. Pisabarro, M. Sánchez Periglacial environments and frozen ground in the central Pyrenean high mountain area: Ground thermal regime and distribution of landforms and processes X INTERNATIONAL CONFERENCE ON GEOMORPHOLOGY 2022. International Association of Geomorphologist. Coimbra, Portugal.2022.
4. Martínez-Fernández, A., E. Serrano, J.J. Sanjosé, M. Gómez-Lende, A. Pisabarro, M. Sánchez. Geomatic methods applied to the change study of the La Paúl Rock Glacier, Spanish Pyrenees. ISPRS GEOSPATIAL WEEK 2019.International Society for Photogrammetry and Remote Sensing. Enschede, Paises Bajos. 2019.
5. Enrique Serrano, Juan Ignacio López Moreno, Raúl Martín-Moreno, Manuel Gómez-Lende, Alfonso Pisabarro, María González-García, Ibai Rico, Esteban Alonso-González. Frozen ground, periglacial processes and mountain permafrost in the Monte Perdido-Tucarroya massif (The Pyrenees). 5TH EUROPEAN CONFERENCE ON PERMAFROST. Internatinal Permafrost Association. Chamonix, Francia, 2018
6. M. Oliva, M. Žebre, M. Guglielmin, A. Çiner, G. Vieira, X. Bodin, N. Andrés, R.R. Colucci, C. García-Hernández, P. Hughes, C. Mora, J. Nofre, D. Palacios, A. Pérez-Alberti, A. Ribolini, J. Ruiz-Fernández, M.A. Sarıkaya, E. Serrano, P. Urdea, M. Valcárcel, J. Woodward, C. Yıldırım. The existence of permafrost conditions in the Mediterranean basin since the Last Glaciation. 5TH EUROPEAN CONFERENCE ON PERMAFROST. Internatinal Permafrost Association. Chamonix, Francia 2018
7. M. Gómez-Lende, E. Serrano. Ice morphologies classification in ice caves of Picos de Europa (northern Spain). International Workshop on Ice Caves. International Union of Speleology. Potes (España). 2018
5. M. Gómez-Lende, E. Serrano.Ice caves inventory in Cantabrian Mountains (Northern Spain). International Workshop on Ice Caves. International Union of Speleology. Potes (España). 2018
6. M. Gómez-Lende, E. Serrano. Ice motions in ice caves of Picos de Europa (Northern Spain).. INTERNATIONAL WORKSHOP ON ICE CAVES. International Union of Speleology. Potes (España). 2018
7. Thomas Schmid, Stéphane Guillaso, Jerónimo López-Martínez, Ana Nieto, Sandra Mink, Magaly Koch, Enrique Serrano. An integrated approach to map ice-free areas of the Antarctic Peninsula region. XXXV SCAR BIENNIAL MEETINGS POLAR 2018. Davos, Suiza. 2018
8.Serrano, E. Geodiversity in mountain environments: A nice label or an efficient tool. INTERNATIONAL CONFERENCE MANAGING MEDITERRANEAN MOUNTAIN GEOHERITAGE. UNESCO Aspiring Global Geopark Manteigas, Portugal, 6-7 May 2017. Ponencia invitada.
9. López-Moreno, J.I.; Rene, P.; Rico, I., Serrano, E., Gascoin, S.The study of the recent evolution of the Pyrenean Glaciers. EGU GENERAL ASSAMBLY, Viena, 2017

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

1 Proyect. Dinámica, evolución reciente y modelización de la Criosfera en ambientes templados y tropicales. Glaciares, glaciares rocosos, permafrost y cuevas heladas en el Norte de España y Sur del Perú (CRISP). IV Plan Nacional de Investigación Científica; Ministerio de Ciencia e Innovación. **IP. Enrique Serrano** (Universidad de Valladolid). 01/09/2021-31/08/2025. 43.560 €.

2 Proyect. VA029G18, Turismo y patrimonio geomorfológico en Castilla y León. Valoración de uso y conservación para propuestas de turismo y desarrollo endógeno en espacios naturales protegidos y su entorno. Consejería de Educación de la Junta de Castilla y León. Apoyo GIR (JCYL). **IP. Enrique Serrano Cañadas.** (Universidad de Valladolid). 01/01/2018-31/12/2020. 12.000 €.

3 Proyect. Interacciones y dinámica de la criosfera en la Montaña Cantábrica y Pirineos: permafrost, glaciares, cuevas heladas y cambio global (CGL2015-68144-R). Ministerio de Economía y Competitividad. **IP. Enrique Serrano Cañadas**. (Universidad de Valladolid). 01/01/2016-31/12/2019. 113.740 €.

4 Proyect. Presencia, distribución y dinámica del permafrost de montaña en el entorno del glaciar de Monte Perdido y circo de Tucarroya (Pirineo Aragonés). (BOPH, 26 noviembre 2015, nº 227). Ayudas a la Investigación al Geoparque de Sobrarbe (Gobierno de Aragón). **IP. Enrique Serrano**. 26/11/2015-01/01/2017. 3.968,2 €. Investigador

5. Proyect. OAPN 844/2013El glaciar de Monte Perdido: monitorización y estudio de su dinámica actual y procesos criosféricos asociados como indicadores de cambio global. Organismo Autónomo Parques Nacionales. MAGRAMA. I.P.: Juan Ignacio López Moreno. 2013-2015. 64.350,55 €.

6 Proyect. OAPN 053/2010, La criosfera y cambio global en espacios naturales protegidos: control de procesos geomorfológicos asociados a la nieve y el hielo como geoindicadores de cambio ambiental en la Parque Nacional de Picos de Europa. Ministerio de Medio Ambiente, Medio Rural y Marino; Organismo Autónomo de Parques Nacionales. **IP. Enrique Serrano**. (Universidad de Valladolid). 27/12/2010-27/12/2014. 27.240,05 €.

7 Proyect. CGL-2010-19729, La criosfera como geoindicadora ambiental y del cambio climático: procesos de ladera asociados al hielo y la nieve en las montañas del norte peninsular (Pirineos-Cantábrica). CRYOMONT. Desarrollo e Innovación Tecnológica 2008-2011. Programa Nacional de Investigación Fundamental. Ministerio de Ciencia e Innovación; VI Plan Nacional de Investigación Científica**. IP Enrique Serrano Cañadas**. (Universidad de Valladolid). 01/10/2011-31/12/2013. 35.090 €.

8 Proyect. OAPN 007/2007, Geoindicadores de alta montaña y cambio global: análisis y control de indicadores geomorfológicos en el Parque Nacional Picos de Europa. Ministerio de Medio Ambiente; Organismo Autónomo de Parques Nacionales (OAPN). **IP. Enrique Serrano**. (Universidad de Valladolid). 01/12/2007-01/12/2010. 33.810 €.

9 Proyect. CGL2007-65295/BTE. Procesos de laderas y cambios climáticos en montaña atlántica y de transición: Cordillera Cantábrica y Pirineos (CRASMONT). Desarrollo e Innovación. Programa Nacional de Investigación Fundamental; IV Plan Nacional de Investigación Científica. **IP. Enrique Serrano.** (Universidad de Valladolid). 01/10/2007-30/09/2010. 59.169,01 €.

10. Proyect. Geomorfología, evolución del relieve, ambiente periglaciar e hidrogeología: cambios e impactos en la región septentrional de la Península Antártica. Plan Nacional de Investigaciones Antárticas. Mº de Ciencia y Tecnología. I.P. Jerónimo López Martínez. 1/12/2011 1/12/2014.