CURRICULUM VITAE (CVA)

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

CV date	05-05-2022

Part A. PERSONAL INFORMATION

First name	María Estela		
Family name	Nadal Romero		
Gender (*)	Female	Birth date (dd/mm/yyyy)	11/06/1981
Social Security, Passport, ID number	29129135A		
e-mail	estelanr@ipe.csic.es	URL Web	
Open Research and Contributor ID (ORCID)(*)		0000-0002-4651-7828	

(*) Mandatory

A.1. Current position

Position	Researcher		
Initial date	01/08/2018		
Institution	Agencia Consejo Superior de Investigaciones Científicas (CSIC)		
Departament/Center	Instituto Pirenaico de Ecología		
Country	Spain	Teleph. number	616719157
Key words	Global change, hydrology, landscape, land abandonment, erosion		

A.2. Previous positions (research activity interruptions, art. 45.2.c))

Period	Position/Institution/Country/Interruption cause
Sep. 2015-July 2018	Ramón y Cajal Researcher/ Univ. Zaragoza/ Spain
April 2014- August 2015	Marie Curie Postdoctoral Researcher/ Univ. Amsterdam/ The Netherlands
Feb. 2014-March 2014.	Postdoctoral position based on HIDROCAES project/ Univ. Zaragoza/ Spain
Jan. 2011-Dec. 2013	Juan de la Cierva Postdoctoral contract/ Univ. Zaragoza/Spain
Jan. 2009-Dec. 2010	Postdoctoral position FECYT/ Katholieke Universiteit Leuven/ Belgium
Jan. 2008-Dec. 2008	Research contract based on RESEL project/ Pyrenean Institute of Ecology (IPE-CSIC)/ Spain
Jan. 2004-Dec. 2007	I3P PhD contract/ Pyrenean Institute of Ecology (IPE-CSIC)/ Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
PhD Geography	University of Zaragoza	2008
Bachelor Geography	University of Zaragoza	2003

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

During the last 12 years, Dr. Estela Nadal Romero has developed an accomplished, independent research career, being PI of international and national R&D projects (€900,000 as PI). Dr. Nadal Romero's research has been devoted to the integration of interdisciplinary knowledge derived from the geomorphological, hydrological, climatology, soil science and ecological disciplines for the study of Mediterranean mountain areas. In these fields, Dr. Nadal-Romero has more than 100 peer-review publications, including 90 indexed in WOS, books and book chapters. She has also made more than 100 contributions to national and international conferences, being frequently invited to present her ongoing activity as a distinguished researcher. Dr. Nadal Romero is actively involved in several international research and policy networks and it should be highlighted that she is Co-Chair of the Badlands Working International group (International Association of Geomorphology).

Dr. Nadal Romero's initial research was concerned with the study of geomorphological and hydrological processes in humid badlands, using a combined approach of field and laboratory experiments. She was the responsible for the monitoring and maintenance of the Araguás research catchment (Central Pyrenees). Significant contributions arising from this research are: (i) an in-depth characterization of physical and chemical weathering processes, (ii) a detailed analysis of the hydrological response, erosion processes and sediment transport, (iii) an investigation to establish the relationships between erosion and vegetation dynamics, and (iv) a global approach to badland dynamics in Mediterranean areas by applying large-scale. The final result has been the edition of the Book "Badland Dynamics in the Context of Global Change" (Elsevier, 2018). Nevertheless, it is noteworthy that not only badlands are her main research topic. She diversified her hydrological and geomorphological research area by incorporating the study of different land uses and land covers. She expanded her research topics in her postdoctoral positions. This first stage allowed her to analyze piping erosion processes in laboratory and field studies. Further investigation into soil erosion was related to: (i) the effect of extraordinary events on erosion and the time compression of erosion processes, and (ii) the relationship between weather types, runoff and erosion in the Mediterranean. To do that she has collected and jointed different research groups and combine different soil erosion databases with the WTs classification. At the same time, she has contributed to the monitoring of a new research catchment in the Pyrenees, characterized by the presence of afforested pines, whose hydrological response can be compared with neighboring forest catchments. During the last 5 years, she has studied the effects of land use changes and land abandonment in soil properties and soil carbon dynamics. She leaded the Marie Curie Project (MED-AFFOREST) carried out an interdisciplinary approach for understanding the effect of afforestation in hydrological, and geomorphological dynamics, soil properties and carbon sequestration. Finally, she is leading two international projects: the first one related to the geomorphological and sediment dynamics of river catchments (SEDILAND), and the second one related to mid-mountain adaptation to climate change through land management (MIDMACC); and the MANMOUNT project (PID2019-105983RB-I00/AEI/10.13039/501100011033) based on Mediterranean mid-mountain adaptation to Global Change: land use/land cover management as strategy for enhancing regulation ecosystem services (soil and water).

Since Dr. Nadal-Romero joined the Pyrenean Institute of Ecology (IPE-CSIC) in 2018, she is creating a small research group, currently consisting of 2 postdoc (Juan de la Cierva and Marie Curie postdoc), 2 PhD students and 1 assistant research. One of the PhD student will present his PhD in February 2022, and he has already a postdoctoral contract in the Centro de Investigaciones sobre Desertificación (CIDE-CSIC). She has also supervised 11 master thesis and 6 bachelor thesis in national and international universities. During the last five years, Dr. Nadal-Romero has been nominated as a panel evaluator of the COST actions panels (European Commission, 2022), as well as Juan de la Cierva Postdoc program (2018), Plan Estatal I+D+I (2021), and regional Junta de Andalucía Postdoc program (2020). Finally, it should be highlighted that she has been Editor in Chief of Catena journal (Elsevier, 2014-2018) and she is currently Editor in Chief of Pirineos journal, associated editor of Boletín de la Asociación de Geógrafos Españoles, Spanish Journal of Soil Science, and Soil (Copernicus) and advisory board of Earth Surface Processes and Landforms and Geographical Research Letters.

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

C.1. Publications *(see instructions)*

1. **Nadal Romero, E.,** Rubio, P., Kremyda, V., Cammeraat, E., Jansen, B., Lasanta, T., 2021. Effects of land abandonment on soil organic carbon and nitrogen stocks and composition of soil organic matter in the Central Spanish Pyrenees. Catena 205, 105441. IF 5.198 Q1 (12/98 Water Resources)
2. **Nadal-Romero, E**., Rodríguez-Caballero, E., Chamizo, S., Juez, C., Cantón, Y., García-Ruiz, J.M., 2021. Mediterranean badlands: their driving processes and climate change futures. Earth Surface Processes and Landforms. DOI. 10.1002/ESP.5088. IF 4.133 Q1 (46/199 Geosciences). 1 cite
3. Juez, C., **Nadal-Romero, E.,** 2021. Long-term temporal structure of catchment sediment response to precipitation in a humid mountain badland area. Journal of Hydrology, 597, 125723. IF 5.722 Q1 D1 (18/199 Geosciences, Multidisciplinary). 3 cites
4. Khorchani, M., **Nadal-Romero, E**., Tague, C., Lasanta, T., Zabalza, J., Lana-Renault, N., Domínguez-Castro, F., Choate, J., 2020. Effects of active and passive land use management after cropland abandonment on water and vegetation dynamics in the Central Spanish Pyrenees. Science of the Total Environment 717, 137160. IF 7.963 Q1 D1 (25/274 Environmental Sci.). 17 cites
5. **Nadal-Romero, E.,** Peña-Angulo, D., Regüés, D., 2018. Rainfall, run-off, and sediment transport dynamics in a humid mountain badland area: Long-term results from a small catchment. Hydrological Processes 32, 1588-1606. IF 3.189 Q1 (16/91 Water resources). 20 cites
6. **Nadal-Romero, E**., Otal-Laín, I., Lasanta, T., Sánchez-Navarrete, P., Errea, P., Cammeraat, E. 2018. Woody encroachment and soil carbon stocks in subalpine areas in the Central Spanish Pyrenees. Science of the Total Environment 636, 727-736. IF: 4.610. Q1 (27/241 Environmental Sci.). 17 cites
7. **Nadal-Romero, E**., Cammeraat, E., Pérez-Cardiel, E., Lasanta, T., 2016. Effects of secondary succession and afforestation practices on soil properties after cropland abandonment in humid Mediterranean mountain areas. Agriculture, Ecosystems, Environment 228, 91-100. IF 3.564, Q1 D1 (1/56, Agriculture, Multidisciplinary). 71 cites
8. **Nadal-Romero, E**., Cammeraat, E., Serrano-Muela, MP., Lana-Renault, N., Regüés, D., 2016. Hydrological response of an afforested catchment in a Mediterranean humid mountain area: a comparative study with a natural forest. Hydrological Processes 30, 2717-2733. IF 2.768 Q1 (11/88 water resources). 32 cites
9. García-Ruiz, J.M., Beguería, S., **Nadal-Romero, E.,** González-Hidalgo, J.C., Lana-Renault, N., Sanjuán, Y., 2015. A meta-analysis of soil erosion rates across the world. Geomorphology 239, 160-173. IF: 2.813. Q1 (34/183 Geosciences, Mult.). 244 cites
10. **Nadal-Romero, E**., González-Hidalgo, J.C., Cortesi, N., et al. (1/18), 2015. Relationship of runoff, erosion and sediment yield to weather types in the Iberian Peninsula. Geomorphology 228, 372-381. IF: 2.813. Q1 (34/183 Geosciences, Mult.). 29 cites

C.2. Congress (selection of top-5 conferences)

1. **Nadal-Romero, E**., Khorchani, M., Cortijos-López, M., Sánchez-Navarrete, P., Errea, P., Lasanta, T., 2021. Long-term abandonment of agro-ecosystems in Mediterranean mid-mountain areas: environmental consequences. 12th European Conference on Ecological Restoration. 7-10 September 2021. Alicante (online). Oral presentation.
2. **Nadal-Romero, E**., et al. (2021). Monitoring and modelling water and solid transport during events in Mediterranean mountain areas. Advancing Critical Zone Science. First Ozcar-Tereno International Conference. Strasbourg France. 4-8 October 2021. Invited Conference. Oral presentation.
3. **Nadal-Romero, E.** (2021). Women In Geomorphology. "What is the fate of Mediterranean badlands under a context of Global Change? Online-day workshop "Women in Geomorphology: A Mediterranean

perspective". 8 March 2021. (Organized by Hellenic Committee for Geomorphology and Environment, International Association of Geomorphologists (IAG). (Online). Invited Conference. Oral presentation.
4. **Nadal-Romero, E.** (2019). Rethinking gullies and badlands dynamics: interactions between vegetation, water and soil erosion. 8th International Symposium on Gully Erosion. Townsville (Australia). July 2019. Invited Conference. Oral presentation.
5. **Nadal-Romero, E.,** Sánchez-Navarrete, P., Khorchani, M., Lasanta, T., 2019. Effects of land management after cropland abandonment on soil organic carbon stocks and soil quality in a sub-Mediterranean mountain area: the role of passive and active (shrub clearing and afforestation) practices. Geophysical Research Abstracts Vol. 21, EGU2019-15697. April 2019. Poster.

C.3. Research projects

1. MANMOUNT (PID2019-105983RB-I00/AEI/10.13039/501100011033). Plan Estatal I+D+i Retos. Mediterranean mid-mountain adaptation to Global Change: land use/land cover management as strategy for enhancing regulation ecosystem services (soil and water) (PI Estela Nadal Romero) (72,000€) (2020-2023).
2. Mid-mountain adaptation to climate change. LIFE MIDMACC (July 2019-June 2024). (PI IPE-CSIC: Estela Nadal-Romero) (493.462 €) (Total budget 1.433.525 €) (2019-2024).
3. EGEOLAND. Proyectos de I+D+i Junta de Andalucía. EcoGeografía de Paisajes de Cárcas en Espacios Naturales Protegidos en Andalucía: implicaciones para su Gestión y Puesta en Valor. (PI: Juan Francisco Martínez Murillo) (65,000€) (2021-2023) (Research Team)
SEDILAND (834329, H2020-MSCA-IF-2018). Sediment regime disturbance of river catchments in a changing land cover context: Geoenvironmental and population dynamics. SEDILAND (PI: Estela Nadal-Romero, Carmelo Juez). (160,932.48€) (September 2019-January 2022).
4. ADAPYR OPCC3. INTERREG-POCTEFA. Capitalización, observación, transferencia y apropiación de estrategias de adaptación al cambio climático en los Pirineos en un contexto de cooperación transfronteriza. (IP: Idoia Arauzo (CTP), IPE- Blas Valero-Garcés) (300,000€, Total 2.400.000€). (Research Team) (1 January 2020-30 June 2022).
5. Dinámica y secuestro de carbono orgánico en diferentes usos de suelo en el Pirineo Aragonés: nuevas perspectivas para incentivar algunos servicios ecosistémicos desde los procesos de revegetación. CSIC. (PI Estela Nadal-Romero) (5,000€) (2018-2020).
6. ESPAS 2015-65569-R. Plan Estatal I+D+i Retos. Escenarios de producción de agua y sedimentos a partir de campos de vegetación y usos del suelo: efectos de la gestión activa y pasiva del Territorio. (PI: Teodoro Lasanta) (110,000€) (2016-2019). (Working team)
7. MED-AFFOREST (PIEF-GA-2013-624974). 7th Framework Program, European Commission. Afforestation management in Mediterranean mountain areas: Evaluating the environmental consequences. (PI: E. Nadal Romero, Erik Cammeraat) (176,000€) (2014-2016).
8. CGL2011-27574-C02-01. Plan Estatal I+D+i Retos. Impactos hidrológicos del calentamiento global en España-1. (PI: J.C. González Hidalgo) (2012-2014) (53,000€) (Research team)
9. IDEA-GesPPNN, MAGRAMA. Investigaciones dendrogeomorfológicas aplicadas a la gestión de los riesgos e impactos en la red de parques nacionales (PI: A. Díez Herrero) (45,500€) (2011-2014). (Research team)