



CURRICULUM VITAE (CVA)

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Part A. PERSONAL INFORMATION

CV date

04/10/2023

First name	Juan Francisco		
Family name	Martínez-Murillo		
Gender (*)	Male	Birth date (dd/mm/yyyy)	25/06/1978
Social Security, Passport, ID number	53686616Q		
e-mail	jfmmurillo@uma.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-8963-0505	

(*) Mandatory

A.1. Current position

Position	Full Professor in Physical Geography / Catedrático de Geografía Física		
Initial date	28/06/2021		
Institution	Universidad de Málaga		
Department/Center	Laboratorio de Geomorfología y Suelos	Edificio de Investigación Ada Byron / Universidad de Málaga.	
	Departamento de Geografía	Universidad de Málaga.	
Country	Spain	Teleph.	+34 952 951 973
Key words	Physical Geography, Geomorphology, Soil, Soil erosion, Mapping, Landscape.		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
2012-2021	Associate Professor (civil servant/Universidad de Málaga/Spain
2011-2012	Associate Professor (not civil servant) /Universidad de Málaga/Spain
2010-2011	Assistant Professor/Universidad de Málaga/Spain
2009-2010	Postdoctorate holder grant/Katholieke Universiteit Leuven/Belgium
2007-2009	Teaching Assistant/Universidad de Málaga/Spain
2006-2007	Senior technical officer/Universidad de Málaga/Spain
2002-2006	PhD. student/Universidad de Málaga/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Ph.D in Geography	Universidad de Málaga	2006
MsC. in Environmental Science and Technology	Universidad de Granada	2005
BsC in Geography	Universidad de Málaga	2001

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

Since my doctorate in 2006, my main research topics have been the study of the ecogeomorphological system and the soil-water-plant-geomorphic processes relationships in Mediterranean mountain environments under different climatic conditions. In this period, with other colleagues of the 'Physical Geography and Land-RNM279' Research Team and 'Laboratorio de Geomorfología y Suelos' at the Universidad de Málaga, I have achieved a broad experience in field, laboratory, and mapping techniques to shed light on: i) relevance of soil surface conditions, ii) soil-water-plant spatial and temporal relationships, iii) geomorphic

processes leading to soil degradation and erosion, specifically, runoff generation and sediment movements at different spatial and temporal scales. Also, I have collaborated in studies dealing with strategies to recover soils and vegetation cover. These investigations have been mainly conducted in relevant Mediterranean mountains environments threatened by Global Change (abandoned and burned lands, areas of high biodiversity, gullied and badland areas). As my main contribution to the knowledge I can point out the fact that the ecogeomorphological system and the geomorphic processes in Mediterranean mountains with such as environments is extremely dependent on climatic conditions as well as human pressure, previously and subsequently to the impact of degradational processes: a sharp threshold separate system heading to conservation/recovery conditions from others to degradation of ecosystem services, especially those related to soils.

This accumulated knowledge about these key issues for achieving sustainable land management is the result of leading as well as collaborating in many research projects in Spain and abroad, with colleagues from Universidad de Málaga (Spain), IPE-CSIC (Zaragoza, Spain), Katholieke Universiteit Leuven (Belgium), Mykolas Romeris Universitetas (Lithuania), Universidad de La Habana (Cuba), Universidade de Aveiro (Portugal), and Bar Ilan University (Israel), Basel University (Switzerland), University of Triër (Germany), among others. Since 2002, I have been involved in more than 12 scientific projects closely related to those topics and financially supported by national and international institutions (Hydrosur-I, Hydrosur-II, REME, INDALO, ERIC, Glomedland, SWOS, Urbangaia, EGeoland, GEOCOMES, and PALEONIEVES). Currently, I am leading 2 projects focused on the ecogeomorphology and the past and current driving factors to investigate the geomorphic processes related to water erosion and effects on soils to sustain biodiversity from gullied areas in Mediterranean high mountains. As result, I have published 59-JCR articles and submitted more than 150 oral communications and posters to national and international scientific meetings.

Other leading responsibilities have been the following: academic coordinator in the Degree in Geography and Land Management Bsc (2018-2023), scientific coordinator for the European Topic Centre (2013-2021) (an organism dependent on the European Environment Agency, hold by the UMA), and associate editor of *Catena*, a journal from Elsevier editorial, since 2016. My expertise in techniques and analysis of soils and geomorphic processes in the framework of the ecogeomorphological system have been focussed on proposals to improve lands threatens by the Global Change with regards water and soil resources. To do this, I have been closely involved in the learning process of my bachelor and master students to disseminate my knowledge and experience as well as hiring and promoting professionals involving in some of my research contracts. In addition, I have been very active participating in dissemination activities to society, e.g. organizing courses and congresses, lectures and giving environmental support and advice to organism involved in the management of natural protected areas (Sierra de las Nieves Natural Park, Sierras Subbéticas Natural Park and Geopark).

Part C. RELEVANT MERITS

C.1. Publications

Menjíbar-Romero, M., Remond, R., & **Martínez-Murillo, J. F.** (2023). Assessment of landscape visual fragility in the Natural Protected Area Sierra de las Nieves (southern Spain). *Investigaciones Geográficas*, (80), 57-79. <https://doi.org/10.14198/INGEO.25021> Cite Score 1.2; SJR 0,210 (Q3); SNIP 0.328 (Geography).

Menjíbar Romero, M., Remond, R., & **Martínez Murillo, J. F.** (2023). Las unidades de paisaje del Espacio Natural Protegido de Sierra de las Nieves: caracterización, cambios y métricas. *Revista De Geografía Norte Grande*, (87). JCR-Q3 (Earth Surface Processes); SJR 0.31; Cite Score 1.1 (Geography).

Remond-Noa, R., González-Sousa, R., Cámara-García, F.L., Cabrera, N., Quintana-Cortina, C. & **Martínez-Murillo, J.F.** (2022). Modelling land use changes and impacts on the visual fragility of a UNESCO Landscape Heritage Site (Viñales, Cuba). In P.Pereira, E.Gomes y J. Rocha (eds.), *Mapping and forecasting land use* (pp. 265-298). Amsterdam: Elsevier.

Sillero-Medina, J. A., **Martínez-Murillo, J. F.** & Ruiz-Sinoga, J. D. (2021). Increased rainfall erosivity and its effects on soil loss estimation: A comparison between two watersheds in southern Spain. *Boletín de la Asociación de Geógrafos Españoles*, 89. DOI 10.21138/bage.3077. JCR- IF: 1.182, 75/85, Q4 (Geography).

- Yu, Y., Zhao, W.W., **Martínez-Murillo, J.F.** & Pereira, P. (2020). Loess Plateau: from degradation to restoration. *Science of the Total Environment*, 738. DOI10.1016/j.scitotenv.2020.140206. JCR-IF: 7.963, 25/274, Q1 (Environmental Sciences).
- Martínez-Murillo, J.F.**, Remond, R. & Ruiz-Sinoga, J.D. (2020). Validation of RUSLE K factor using aggregate stability in contrasted Mediterranean eco-geomorphological landscapes (southern Spain). *Environmental Research*, 183. DOI10.1016/j.envres.2020.109160. JCR-IF: 6.498, 36/274, Q1 (Environmental Sciences).
- Sillero-Medina, J.A, Pérez-González, M.E., **Martínez-Murillo, J.F.** & Ruiz-Sinoga, J.D. (2020). Factors affecting eco-geomorphological dynamics in two contrasting Mediterranean environments. *Geomorphology*, 352. DOI10.1016/j.geomorph.2019.106996. JCR-IF: 4.139, 11/50, Q1 (Physical Geography).
- Nadal-Romero, E., Pereira, P. & **Martínez-Murillo, J.F.** (2019). Soil processes in mountain environments. *Science of the Total Environment*, 656: 701-708. DOI: 10.1016/j.scitotenv.2018.11.411. JCR-IF: 7.963, 25/274, Q1 (Environmental Sciences).
- Pereira, P., **Martínez-Murillo, J.F.**, Francos, M. (2019). Environments affected by fire. In P. Pereira (eds.), *Soil Degradation, Restoration and Management in a Global Change Context. Advances in Chemical Pollution, Environmental Management and Protection (Book Series)* (pp. 119-155). Amsterdam: Elsevier.
- Martínez-Murillo, J.F.**, Montorio Llovería, R., Pérez-Cabello, F. (2019). Techniques for mapping the effects of fire on soil. In P. Pereira, J. Mataix-Solera, X. Úbeda, G. Rein, A. Cerdà (Eds.), *Fire effects on soil properties*, (pp. 329-345). Amsterdam: CSIRO Publishing.

C.2. Congresses

- Menjíbar-Romero, M., Remond, R. & **Martínez-Murillo, J.F.** (2023). Vulnerabilidad de los paisajes del Espacio Protegido Sierra de las Nieves (Provincia de Málaga) en un escenario territorial de cambio climático. XVIII Congreso de la Asociación Española de Geografía, Logroño, 12-14 September 2023. Participación: oral communication.
- Perales Vallejo, M., **Martínez-Murillo, J.F.** & Ruiz Sinoga, J.D. (2023). Evolución reciente de la superficie quemada por el incendio de Sierra Bermeja de 2021 (sur de España). XVIII Congreso de la Asociación Española de Geografía, Logroño, 12-14 September 2023. Participación: oral communication.
- Menjíbar-Romero, M., Remond, R. & **Martínez-Murillo, J.F.** (2023). Cambios de uso y dinámica ecogeomorfológica en las unidades de paisaje del Parque Natural y Geoparque Sierras Subbéticas (Provincia de Córdoba). XVIII Congreso de la Asociación Española de Geografía, Logroño, 12-14 September 2023. Participación: oral communication.
- Gómez Gutiérrez, A., Menjíbar-Romero, M., Nadal Romero, E. & **Martínez-Murillo, J.F.** (2023). Dinámica geomorfológica reciente en los pastos de alta montaña del Parque Nacional Sierra de las Nieves (Málaga, España). XVI Congreso de la Sociedad Española de Geomorfología, Zaragoza, 6-8 September 2023. Participación: oral communication.
- Menjíbar-Romero, M., Carruana, D. & **Martínez-Murillo, J.F.** (2023). Rasgos ecogeomorfológicos de una depresión en el sector de alta montaña del Parque Nacional Sierra de las Nieves. XVI Congreso de la Sociedad Española de Geomorfología, Zaragoza, 6-8 September 2023. Participación: oral communication.
- Menjíbar-Romero, M. & **Martínez-Murillo, J.F.** (2023). Rasgos geomorfológicos de los paisajes del Parque Natural y Geoparque Sierras Subbéticas: morfologías de relieve y geositos. XVI Congreso de la Sociedad Española de Geomorfología, Zaragoza, 6-8 September 2023. Participación: poster.
- García-Jiménez, A., Menjíbar-Romero, M., & **Martínez-Murillo, J.F.** (2023) An approach to the geomorphology of the landscape units in the Sierras Subbéticas Geopark (Spain). 10th International Conference on Global Geoparks of the UN body, Marrakech (Morocco), 6-8 September 2023. Participation: poster.
- Menjíbar-Romero, M., & **Martínez-Murillo, J.F.** (2023). Characterization of soil properties and soil ecosystem services in meadows from a high Mediterranean mountain (Sierra de las Nieves National Park, southern Spain). European Union Assembly, Viena (Austria), April 2023. Participation: poster.
- Menjíbar-Romero, M., & **Martínez-Murillo, J.F.** (2023). Differences in the superficial storage of organic carbon in soils from different olive orchard cultivation systems and ecosystem

- service implications (Sierras Subbéticas Natural Park, southern Spain). European Union Assembly, Viena (Austria), April 2023. Participation: poster.
- Menjíbar-Romero, M., & **Martínez-Murillo, J.F.** (2023). Situación de aprendizaje: análisis territorial a través del paisaje y los SIG en el Parque Natural y Geoparque Sierras Subbéticas (provincia de Córdoba, España). X Congreso Ibérico de Didáctica de la Geografía, Coimbra (Portugal), January 2023. Participation: oral communication.
- Menjíbar-Romero, M. & **Martínez-Murillo, J.F.** (2022). Ecogeomorphology and human use description of the geosites included in the Andalusian Geoconservation Inventory from the Subbéticas Natural Park and Geopark (Spain). 10th International Conference on Geomorphology, Coimbra, 12-16 September 2022. Participación: poster.
- Martínez-Murillo, J.F.** & Carruana-Herrera, D. (2022). Ecogeomorphological transect approach to evaluate the origin of gullies and badland-shaped morphologies in a high mountain environment: Sierra de las Nieves National Park (South of Spain). 10th International Conference on Geomorphology, Coimbra, 12-16 September 2022. Participación: poster.
- Menjíbar-Romero, M. & **Martínez-Murillo, J.F.** (2022). Aproximación a la dinámica del paisaje y las presiones territoriales en el ámbito del Parque Natural y Geoparque Sierras Subbéticas (provincia de Córdoba). Actas del XVI Coloquio Ibérico en Geografía, Salamanca. Participación: oral communication.
- Carruana-Herrera, D. & **Martínez-Murillo, J.F.** (2022). Delimitación de unidades ecogeográficas originales y comparación con la zonificación del Parque Natural y Geoparque Sierras Subbéticas (provincia de Córdoba). Actas del XVI Coloquio Ibérico en Geografía, Salamanca. Participación: oral communication.
- Martínez-Murillo, J.F.** & Carruana-Herrera, D. (2022). Deciphering age and origin of gullied-shaped landscapes in Sierra de las Nieves National Park (South of Spain). European Geosciences Union Assembly 2022. Participación: poster.

C.3. Research projects

- Project title: Refugios interglaciales y bosques orófilos en el Parque Nacional Sierra de las Nieves: de centinelas de la extinción local a reservorios de biodiversidad frente al cambio global (PALEONIEVES). Role: researcher. Financing entity and financed amount: Ministerio para la Transición Ecológica y el Reto Demográfico-Organismo Autónomo de Parques Nacionales., 96.369,80 €. Duration and state of the project: 01/12/2023- 30/11/2026.
- Project title: Dinámica geomorfológica y conectividad funcional en áreas de montaña mediterránea: influencia sobre los servicios ecosistémicos en el contexto del cambio global (GEOCOMES). Role: researcher. Financing entity and financed amount: Ministerio de Ciencia e Innovación, Plan Nacional, 65.664,00 €. Duration and state of the project: 01/10/2023- 30/09/2027.
- Project title: Aportación a la ordenación y gestión del Parque Natural Sierra de las Nieves desde la caracterización y evaluación de la ecogeografía de sus paisajes y relaciones ecogeomorfoedáficas en el marco del Cambio global. Role: responsible researcher. Financing entity and financed amount: Universidad de Málaga, 5.000€. Duration and state of the project: 19/02/2021 - 19/02/2022.
- Project title: Scientific Infrastructures for Global Change Monitoring and Adaptation in Andalusia (INDALO). Responsible researcher: J.D. Ruiz-Sinoga (Universidad de Málaga). Role: researcher. Financing entity and financed amount: FEDER (Programa Operativo Plurirregional de España 2014-2020 (POPE)) y Documento que Establece las Condiciones de la Ayuda (DECA), 226.000.00€. Duration and state of the project: 01/01/2021 - 31/12/2023, in progress.
- Project title: Environmental Biodiversity Climate Change Lab. (EnBiC2-Lab). Responsible researcher: J.D. Ruiz-Sinoga (Universidad de Málaga). Role: researcher. Financing entity and financed amount: FEDER LIFEWATCH, Ministerio de Ciencia, Innovación y Universidades, 216.000.00€. Duration and state of the project: 01/01/2021 - 31/12/2023, in progress.
- Project title: Incidencia del Cambio Global en Paisajes Mediterráneos contrastados. Escenarios de Futuro-GLOMELAND (CSO2016-75898-P). Responsible researcher: J.D. Ruiz-Sinoga (UMA). Role: researcher. Financing entity and financed amount: Ministerio de Economía y Competitividad, 63.162 EUR. Duration and state of the project: 01/01/2016 - 30/09/2020, closed.