MINISTERIO DE CIENCIA E INNOVACIÓN

AGENCIA ESTATAL DE INVESTIGACIÓN

CV date	12/3/2025

Part A. PERSONAL INFORMATION

First name	Jose Miguel		
Family name	Nieto Liñán		
Gender	Male	Birth date	
ID number			
e-mail	jmnieto@uhu.es	Web	http://www.uhu.es/rensma/presentacion-mga/
Open Researcher and Contributor ID (ORCID)		0000-0002-0086-252X	
WoS Researcher ID K-1935-2014		Scopus Author ID 7103128879	

A.1. Current position

Position	Full Professor/Catedrático de Universidad		
Initial date	10/04/2018		
Institution	Universidad de Huelva		
Department/Center	Departamento de Ciencias de la Tierra		
Country	Spain	Tel. number	+34 959219811
Key words	Mineralogy, Environmental Geochemistry, Transport and Fate of Pollutants in the Environment, Acid Mine Drainage		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
1989-1991	Becario Iniciación Investigación/CSIC/Spain
1992-1995	Becario Investigación MEC/Universidad de Granada/Spain
1996-1996	Becario Posdoctoral MEC/Max-Planck-Institut für Chemie/Germany
1997-1998	Marie Curie Posdoctoral Fellow/Max-Planck-Institut für Chemie/Germany
1999-2003	Profesor Asociado/Universidad de Huelva/Spain
2003-2018	Profesor Titular de Universidad/Universidad de Huelva/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licensed (BSc) in Geology	Universidad de Granada/Spain	1991
PhD in Geological Sciences	Universidad de Granada/Spain	1996

Part B. CV SUMMARY

Jose Miguel Nieto is Full Professor of Mineralogy in the Department of Earth Sciences at the University of Huelva. BSc (Hons) in Geology (1991) and PhD in Geochemistry (1996) from the University of Granada, he received the First National Award Honours Degree and the Doctoral Award. He was Postdoctoral Researcher at the Max-Planck Institute for Chemistry (Germany) supported by the Spanish Ministry of Education and Science (1996) and the European Union (EU) Marie Curie Postdoctoral Fellow Programme (1997-1998). Since arriving at the University of Huelva in 1999, where he leads the Environmental Mineralogy and Geochemistry Group (http://bit.ly/EnviMinGeo), Dr. Nieto's research has been focused on the mineralogy and geochemistry of acid mine drainage with particular emphasis on the Iberian Pyrite Belt. He has been working on the environmental impact of mining activities from a multi and interdisciplinary approach, and from laboratory to landscape scales. The most relevant outcome of his R&D work could probably be his key role in the development and full-scale implementation, in the framework of a LIFE project, of a passive treatment system for metal-rich acid mine drainage, a mine water remediation option that right now is the most efficient and sustainable treatment system for the restoration of watersheds polluted by mining activities.

He has directed and collaborated on numerous research projects including serving as principal investigator (PI) for 13 projects financed by the Spanish Government and 11 projects financed by the European Union, and is the author of more than 150 papers published in peer-reviewed

top international journals (> 90% in Q1+Q2) in the fields of Geochemistry, Mineralogy, and Environmental Sciences. The outcomes of his research have had a large impact in the relevant scientific community, having a great number of citations (7.559 times cited WoS, 8.265 Scopus) and an h-index of 51 (WoS) and 52 (Scopus). He has 4 six-year research periods with positive evaluation (last period evaluated 2014-2019), and 1 six-year research-transfer period with positive evaluation (evaluated 2001-2006). He is one of the top-ten highly cited authors of the University of Huelva according to Google Scholar (http://bit.ly/UhuProfile).
His main contributions to society include participation in many national and international R&D transfer projects funded by private companies and public institutions (serving as PI in 24). Most of the technology transfer work he has done is related to the remediation of polluted mine sites and the passive treatment of acid mine drainage in active and abandoned mines mainly in SW Spain, but also in Wales (UK) and Perú. As a result of these technology and innovation activities, he has participated as inventor in 2 patents in relation to the passive treatment of acid mine drainage and the recovery of critical raw materials from mine waters.
He has been actively involved in supervising BSc, MSc and PhD students. Up to know he has supervised 57 Master Theses at the University of Huelva and the International University of Andalusia, and 18 Doctoral Theses at the University of Huelva, some of them co-supervised with international universities (Aalto University in Finland, Univ. Federico II of Naples in Italy, and the University of the Free State in South Africa). He has been appointed as expert reviewer in most of the relevant top journals on his field, and also in several national and international evaluation panels, such as 'Dirección General de Investigación Científica y Técnica' for the evaluation of Research Projects of the 2014 and 2015 calls; 'Agencia Nacional de Evaluación y Prospectiva' for the Evaluating Commission of the Ramón y Cajal Program of the 2013 and 2014 calls; 'Agencia Estatal de Investigación' for the evaluation of Research Projects of the 2021 call; and, among others, Canada Research Chairs, Academy of Finland, and the Italian Ministry of Education, Universities and Research, for the evaluation of Full Professor positions.

Part C. RELEVANT MERITS

C.1. Publications

C.1.1. León R, Macías F, Cánovas CR, Millán R, Romero J & Nieto JM (2024). Origin of rare earth elements in acid mine drainage traced by strontium and neodymium isotopes. Geochimica et Cosmochimica Acta 372, 101-110. https://doi.org/10.1016/j.gca.2024.03.025

C.1.2. Packman H, Little S, Nieto JM, Basallote MD, Pérez-López R, Coles B, Kreissig K, van de Flierdt T & Rehkamper M (2023). Tracing acid mine drainage and estuarine Zn attenuation using Zn and Cd isotopes. Geochimica et Cosmochimica Acta 360, 36-56. https://doi.org/10.1016/j.gca.2023.09.001

C.1.3. Millán-Becerro R, Cánovas CR, Macías F, Roetting T, Siddorn L, Stanley P & Nieto JM (2023). Passive remediation of mine waters from Parys Mountain (Wales): Laboratory column experiments. Journal of Cleaner Production 425, 138872. https://doi.org/10.1016/j.jclepro.2023.138872

C.1.4. Cánovas CR, Basallote MD, Macías F, Olías M, Pérez-López R & Nieto JM (2022). Thallium in environmental compartments affected by acid mine drainage (AMD) from the Iberian Pyrite Belt (IPB): from rocks to the ocean. Earth-Science Reviews 235, 104264. https://doi.org/10.1016/j.earscirev.2022.104264

C.1.5. Carrero S, Fernández-Martínez A, Pérez-López R, Cama J, Dejoie C & Nieto JM (2022). Effects of Aluminum Incorporation on Schwertmannite: Structure and Surface Properties. Environmental Science: Processes & Impacts. 24, 1383-1391 https://doi.org/10.1039/D2EM00029F

C.1.6. Cánovas CR, Basallote MD, Macías F, Olías M, Pérez-López R, Ayora C & Nieto JM (2021). Geochemical behaviour and transport of technology critical metals (TCMs) by the Tinto River (SW Spain) to the Atlantic Ocean. Science of The Total Environment 764, 143796. https://doi.org/10.1016/j.scitotenv.2020.143796

C.1.7. Orden S, Macías F, Cánovas CR, Nieto JM, Pérez-López R & Ayora C (2021). Eco-sustainable passive treatment for mine waters: Full-scale and long-term demonstration.

Journal of Environmental Management 280, 111699. https://doi.org/10.1016/j.jenvman.2020.111699

C.1.8. Papaslioti EM, Pérez-López R, Parviainen A, Phan VTH, Marchesi C, Fernández-Martínez A, Garrido CJ, Nieto JM & Charlet L (2020). Effects of redox oscillations on the phosphogypsum waste in an estuarine salt-marsh system. Chemosphere 242, 125174. https://doi.org/10.1016/j.chemosphere.2019.125174

C.1.9. Basallote MD, Cánovas CR, Olías M, Pérez-López R, Macías F, Carrero S, Ayora C & Nieto JM (2019). Mineralogically-induced metal partitioning during the evaporative precipitation of efflorescent sulfate salts from acid mine drainage. Chemical Geology 530, 119339. https://doi.org/10.1016/j.chemgeo.2019.119339

C.1.10. Olías M, Cánovas CR, Basallote MD, Macías F, Pérez-López R, Moreno R, Millán-Becerro R & Nieto JM (2019). Causes and impacts of a mine water spill from an acidic pit lake (Iberian Pyrite Belt). Environmental Pollution 205, 127-136. https://doi.org/10.1016/j.envpol.2019.04.011

C.2. Congress

C.2.1. J.M. Nieto**,** T. Rotting, P. Stanley, L. Siddorn, F. Macías, R. León & R. Millán (2022). Passive treatment of Acid Mine Drainage with DAS technology: experimental results at Parys Mountain (Wales). 12th International Conference of Acid Rock Drainage - ICARD2022 (Brisbane, Australia). Abs. # 32.

C.2.2. J.M. Nieto, F. Macías, R. León, C. Ayora, C.R. Cánovas, M.D. Basallote, R. Pérez-López & M. Olías (2021). Is acid mine drainage a reliable source of REEs? Insights from AMD passive treatment systems in the Iberian Pyrite Belt. 3rd European Mineralogical Conference (Cracow, Poland). Abs. Vol., p. 285.

C.2.3. J.M. Nieto, T. Rotting, P. Stanley, L. Siddorn, F. Macías, J.M. Fuentes, R. León & R. Millán (2021). Passive treatment of Acid Mine Drainage at Parys Mountain (Wales): column experiment results. International Mine Water Association 2021 (Wales, UK). Proceedings of the 14th IMWA Congress, p. 405.

C.2.4. J.M. Nieto, F. Macías, C. Ayora, M. Olías, C.R. Cánovas, M.D. Basallote & R. Pérez-López (2019). State of the art of the passive treatment of Acid Mine Drainage in the Iberian Pyrite Belt (Spain). International Mine Water Association 2019 (Perm, Russia). Abst. Vol., p. 51.

C.2.5. J.M. Nieto (2019). Dispersed Alkaline Systems for the Odiel Basin. MineXcange Conference (Aberystwyth, Wales, UK). Abs. vol., p. 10.

C.3. Research projects

C.3.1. Title: Phosphogypsum Processing to Critical Raw Materials (PG2CRM). Funding institution: ERAMIN–MINECO, Programa Estatal de Investigación, Desarrollo e Innovación Orientado a los Retos de la Sociedad. Acciones de Programación Conjunta Internacional, Ref. PCI2022-132999. Participants: UHU. From-To: 01/02/2022-30/04/2025. Amount granted UHU: 171.800,00 €. PI: Jose Miguel Nieto.

C.3.2. Title: Transfer of metals to the Atlantic Ocean from the Huelva Estuary: Stability of the precipitates from acid mine drainage (TRAMPA). Funding institution: Ministerio de Ciencia e Innovación, Ref. PID2020-119196RB-C21. Participants: UHU, CSIC. From-To: 01/09/2021-31/08/2024. Amount granted UHU: 133.100,00 €. PI2: Jose Miguel Nieto.

C.3.3. Title: Modular recovery process services for hydrometallurgy and water treatment (MORECOVERY). Funding institution: UE, H2020 EIT Raw Materials. Upscaling projects, Prop. Number 18190. Participants: GTK, UHU, CSIC, University of Eastern Finland, Terrafame Group Ltd. From-To: 01/01/2019-31/12/2021. Amount granted UHU: 129.083,00 €. UHU PI: Jose Miguel Nieto.

C.3.4. Title: Geoquímica de Escandio, Itrio y Tierras Raras en Drenajes Ácidos de Mina. Implicaciones económicas. Funding institution: Ministerio de Economía, Industria y Competitividad, Ref. CGL2016-78783-C2-1-R. Participants: UHU, CSIC. From-To: 01/01/2017-31/12/2020. Amount granted UHU: 177.870,00 €. PI: Jose Miguel Nieto.

C.3.5. Title: Extracción de Tierras Raras a partir de Drenajes Ácidos de Mina (AMDREY). Funding institution: ERAMIN–MINECO, Programa Estatal de Investigación, Desarrollo e Innovación Orientado a los Retos de la Sociedad. Acciones de Programación Conjunta Internacional, Ref. PCIN-2015-242. Participants: UHU. From-To: 01/07/2016-30/06/2018. Amount granted UHU: 74.000,00 €. PI: Jose Miguel Nieto.

C.4. Technology/Knowledge transfer

C.4.1. Contract Title: Diseño de un modelo hidrogeoquímico de la cuenca del río Odiel (Ref. OTRI 64/2021). Funding institution/company: Agencia de Medio Ambiente y Agua de Andalucía, Ref. NET970561. Participants: UHU. From-To: 01/10/2021-30/11/2022. Amount granted UHU: 78.650,00 €. PI: José Miguel Nieto.

C.4.2. Contract Title: Estudio y modelización de los aportes difusos de drenaje ácido de mina del Proyecto Riotinto a la cuenca del Odiel para el diseño de futuras medidas de tratamiento (Ref. OTRI 62/2021). Funding institution/company: Atalaya Riotinto Minera. Participants: UHU. From-To: 01/09/2021-31/08/2022. Amount granted UHU: 57.724,12 €. PI: José Miguel Nieto.

C.4.3. Contract Title: Passive Treatment Trials using Dispersed Alkaline Substrate (DAS) at Cwm Rheidol and Parys Mountain mines (Wales, UK) (Ref. OTRI 10/2021). Funding institution/company: Golder Associates Limited UK. Participants: UHU. From-To: 01/01/2021-05/07/2022. Amount granted UHU: 61.836,25 €. PI: José Miguel Nieto.

C.4.4. Contract Title: Optimización de un sistema de tratamiento pasivo de drenajes ácidos de mina en la Mina de Aguas Teñidas (MATSA). Funding institution/company: MATSA (Mubadala & Trafigura Group). Participants: UHU. From-To: 01/05/2019-30/04/2020. Amount granted UHU: 68.134,95 €. PI: José Miguel Nieto.

C.4.5. Contract Title: Investigación y desarrollo de un sistema avanzado para remoción de metales en agua presentes en complejos mineros en condiciones laboratorio y piloto. Funding institution/company: Magtel Operaciones, Soil Tratamiento & Cyclus I+D. Participants: UHU. From-To: 01/05/2017-30/04/2019. Amount granted UHU: 41.140,00 €. UHU PI: José Miguel Nieto.

C.4.6. Patent Inventors: T. Rotting, J. Carrera, J.M. Nieto, C. Ayora, F. Macías, M. Caraballo & H. Sgier. Title: Procedimiento para la depuración de aguas contaminadas por metales e instalación correspondiente. Application # P201301011 Publication # ES2534806. Priority date (*Patente de Invención con examen previo*): 01/03/2016. Publication: BOPI, AÑO CXXX Núm. 4624 Tomo II, 08/03/2016, pag. 10-11. Owner entity: UHU.

C.4.7. Patent Inventors: J.M. Nieto, F. Macías, R. Pérez-López, M. Caraballo & C. Ayora. Title: Procedimiento de obtención de un recurso renovable de metales a partir de aguas ácidas de mina e instalación correspondiente. Application # P201430510. Publication # ES2550526. Priority date (*Patente de Invención sin examen previo*): 11/07/2016. Publication: BOPI, AÑO CXXX Núm. 4714 Tomo II, 18/07/2016, pag. 12-13. Owner entity: UHU (80%) & CSIC (20%).