

**CURRICULUM VITAE ABREVIADO (CVA)**

**Part A. PERSONAL INFORMATION**

First name	Jaime Fernando		
Family name	Cuevas Rodríguez		
CATEGORÍA	Profesor Titular de Universidad		
e-mail/professional			
Open Researcher and Contributor ID (ORCID) (*)	orcid.org/0000-0001-6327-1404		

(\*) *Mandatory*

**A.1. Current position**

Position	Associate Professor		
Initial date	26/07/2002		
Institution	Autonomous University of Madrid		
Department/Center	Dept	Geology and Geochemistry	
Country	Spain	Teleph. number	
Key words	Geochemistry, Mineralogy, Environmental Applications, Waste Management		

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

Period	Position/Institution/Country/Interruption cause
1987-1988	Part time associate professor
1988-1993	Assistant professor
1994-2002	Full time Assistant professor

**A.3. Education**

PhD, Licensed, Graduate	University/Country	Year
PhD	Autonomous University of Madrid/Spain	1990

(Include all the necessary rows)

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

Dr. Jaime F. Cuevas, an associate professor since 2002 and accredited as full professor in November 2024, served as Head of the Department of Geology and Geochemistry from 2019 to 2022. He is part of a research team specializing in mineralogy and geochemistry of surface environments, with over 25 years of experience focusing on clay minerals and their interaction with engineered geomaterials, particularly cementitious materials. Since 2018, he has belonged to the Clays for Environmental Control group. His expertise includes microstructural characterization using electron and optical microscopy, as well as geochemical analysis of major and trace elements, stable C and O isotopes, and thermochemical approaches. He has investigated processes such as concrete–clay–steel interaction in geochemical barriers, biogeochemical degradation of clayey landfill liners, and geochemical controls on the formation of carbonate–sepiolite lacustrine sediments.

Dr. Cuevas has led more than 15 national and international research projects. At the national level, he directed The Diffusion of Pollutants in Urban Landfill Barriers (2007–2010) and Geo- and Bio-inspired Synthesis Routes for Sepiolite Formation (2009–2011). Internationally, he coordinated UAM's participation in Long-term Performance of Engineered Barrier Systems (2010–2014), Cement-based Materials, Properties, Evolution, Barrier Functions (2015–2019), and contributed to EURAD-1 (2020–2024) and EURAD-2 (2024–2029), guiding research on clay–concrete interactions for low- and medium-level radioactive waste surface covers. He has



also directed applied research projects on thermochemical conversion of asbestos-containing waste and participated in the FEBEX experiment simulating deep geological disposal.

He has authored 88 research papers (59 in Q1 journals and 30 in D1), holds an H-index of 31, and has contributed to over 100 conference presentations. He has supervised 13 Ph.D. and 13 master's theses. From 2018 to 2024, he founded and directed the master's program in Waste Management and Wastewater for Resource Recovery. Now it is directed by assistant professor from the same research group.

Dr. Cuevas is active in scientific societies. He has served as President of the Spanish Clay Society (SEA) since June 2022, organized the SEA's 24th Scientific Meeting in 2016, and chaired a session at the 16th International Clay Conference (2017). He has delivered keynote lectures at EUROCLAY 2023 (Bari) and the 18th ICC (Dublin). He is a council member of AIPEA and the appointed Chair for organizing the first ICC Clay meeting in Madrid in 2027.

Beyond research, he promotes Circular Economy initiatives at the university and collaborates with industry stakeholders such as ENRESA, ECOEMBES, SIGNUS, and SIGAUS. Since 2024, he has served as Head of the Autonomous University of Madrid–Community of Madrid Chair in Circular Economy.

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

### **C.1. Publications** (*see instructions*)

Ruiz, A.I., Fernández, R., Sánchez, N., Rodríguez Rastrero, M., Regadío, M., de Soto, I., Cuevas, J. (2012). Improvement of attenuation functions of a clayey sandstone for landfill leachate containment by bentonite addition. *Science of the Total Environment*. 419, 2012.

Regadío, M., Ruiz, A.I., de Soto, I.S., Rodríguez Rastrero, M., Sánchez, N., Gismera, M.J., Sevilla, M.T., Da Silva, P., Rodríguez Procopio, J., Cuevas, J. (2012). Pollution profiles and physicochemical parameters in old uncontrolled landfills. *Waste Management*, 32, 482- 497.

Cuevas, J., Ruiz, A.I., Fernández, R., Torres, E., Escribano, A., Regadío, Turrero, M. J. (2016). Lime mortar-compacted bentonite-magnetite interfaces: An experimental study focused on the understanding of the EBS long-term performance for high-level nuclear waste isolation DGR concept. *Applied Clay Science*.124-125, 79-93.

Fernández, R., Ruiz, A.I., García-Delgado, C., González-Santamaría, D.E., Antón-Herrero, R., Yunta, F., Poyo, C., Hernández, A., Eymar, E., Cuevas, J. (2018). Stevensite-based geofilter for the retention of tetracycline from water. *Science of the Total Environment*, 645, 146-155.

Daniel E. González-Santamaría, Raúl Fernández, Ana.I. Ruiz, Almudena Ortega, Jaime Cuevas (2020). High-pH/low pH ordinary Portland cement mortars impacts on compacted bentonite surfaces: Application to clay barriers performance. *Applied Clay Science*, 193,105672.

Tijero, M., Valdepeñas, L., González Yélamos, J., Cuevas Rodríguez, J., (2023). Ammonium concentration in stream sediments resulting from decades of discharge from a wastewater treatment plant. *Heliyon*, 9, e21860, <https://doi.org/10.1016/j.heliyon.2023.e21860>.

Rodríguez-Rastrero, M., Suarez, C.E., Ortega, A., Cuevas, J., Fernández, R. (2023). Geochemical Anomalies in Soils and Surface Waters in an Area Adjacent to a Long-Used Controlled Municipal Landfill. *Sustainability*. 15, 16280. <https://doi.org/10.3390/su152316280>.



Villar, M.V., Cuevas, J., Zabala, A.B., Ortega, A., Melón, A.M., Ruiz, A.I., Iglesias R.J. (2023). Mineralogy and geochemistry of a bentonite pellets column heated for 10 years. *Clays and Clay Minerals* 71: 166-190. <https://doi.org/10.1007/s42860-023-00238-4>

Villar, M.V., Cuevas, J.F. Idiart, A., Coene, E., Ana B. Zabala, A.B., Ruiz, A.I., Ortega, A., Iglesias, R. Melón, A.M. Heino, V. (2025). Five-year thermo-hydro-mechanical and chemical evolution of compacted bentonite: Physical and mineralogical analysis, *Applied Clay Science*, 276, 107931. <https://doi.org/10.1016/j.clay.2025.107931>.

Mota-Heredia, C., Cuevas, J., Fernández, R. (2025). Evolution of steel-bentonite interactions under hydrothermal gradients: Mineralogical and geochemical implications for nuclear waste disposal. *Applied Clay Science*, 281, DOI: 10.1016/j.clay.2025.108084.

**C.2. Congress**, indicating the modality of their participation (invited conference, oral presentation, poster)

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

**Título del proyecto:** Proyecto I+D A113/2007/3-02.6, “Estudio de la Difusión de Contaminantes en los Materiales que forman las Barreras de Vertederos Urbanos y su Evolución en el tiempo”. En Colaboración con Geotecnia y Cimientos S.A.

**Entidad financiadora:** Ministerio de Medioambiente, **Entidades participantes:** GEOCISA, UAM, **desde:** 2007, **hasta:** 2010; **Cuantía de la subvención:** 394.035 euros. **Investigador principal UAM:** Jaime Cuevas. **Número de investigadores participantes:** 12.

**Título del proyecto:** Proyecto CGL2008-03183/BTE, “Experimentación en rutas de síntesis Geo- y Bioinspiradas para la formación de sepiolita”.

**Entidad financiadora:** Ministerio de Ciencia e Innovación, **Entidades participantes:** UAM **desde:** 01/01/2009, **hasta:** 31/12/2011 **Cuantía de la subvención:** 64.372,00 euros. **Investigador principal:** Jaime Cuevas, **Número de investigadores participantes:** 6

**Título del proyecto:** Long-term performance of Engineered Barrier Systems (EBS).PEBS. Fission-2009-1.1.1. grant agreement FP7 249681. Task 2.3 Experimentation on key THM-C processes and parameters. Subtask 2.3.2 THM and THMC tests aimed at the understanding of key processes taking place at the interfaces. **Entidad financiadora:** European Commission.

**Entidades participantes:** Bundesanstalt für Geowissenschaften und Rohstoffe (BGR, Germany (coordinador) y 16 entidades participantes, **desde:** 2010, **hasta:** 2014, **Cuantía de la subvención:** 72,750 euros. **Investigador principal UAM:** Jaime Cuevas **Número de investigadores participantes:** 7 en la UAM.

**Título del proyecto:** Cement-based materials, properties, evolution, barrier functions (Cebama, Horizon 2020, Call: NFRP-2014-2015, Topic: NFRP-06-2014, Type of action: RIA Proposal number: 662147). **Entidad financiadora** European Commission. **Entidades participantes:** Karlsruher Institut fuer Technologie (KIT) y 27 instituciones participantes,

**desde:** 1/06/2016 **hasta:** 31/06/2019, **Cuantía de la subvención:** 145307.5 €, **Investigador principal UAM:** Jaime Cuevas, **Número de investigadores participantes:** 5

**Título del proyecto:** “European Joint Programme on Radioactive Waste Management” (Activity NFRP-2018-6; Call: NFRP-2018; Type of action: COFUND-EJP; Proposal number: 847593), con el acrónimo EURAD.

**Entidad financiadora** European Commission.

**Entidades participantes:** ANDRA (Coordinador) y 52 entidades beneficiarias **desde:** 1/06/2019 **hasta:** 31/06/2024, **Cuantía de la subvención:** 197,750 €, **Investigador principal UAM:** Jaime Cuevas, **Número de investigadores participantes:** 5



**Título del proyecto:** “EUROPEAN PARTNERSHIP ON RADIOACTIVE WASTE MANAGEMENT - EURAD-2”. GA 101166718

**Entidad financiadora:** European Commission.

**Entidades participantes:** ANDRA (Coordinador) y 65 entidades beneficiarias

**desde:** 1/10/2024 **hasta:** 30/09/2029; **Cuantía de la subvención:** 231.187,50€

**Investigador principal 1 UAM:** Jaime Cuevas, **Número de investigadores participantes:** 6

**Título del proyecto:** PRE-DISposal management of radioactive waste - PREDIS

Referencia: GA 945098 Vigencia: 2020-09-01 - 2024-08-31

**Investigadores:** FERNANDEZ MARTIN, RAUL (IP); Cuevas Rodriguez, Jaime Fernando; Ruiz Garcia, Ana Isabel (Investigador/a)

**Entidades participantes:** UAM. Arcillas Y Control Medioambiental (Group); UAM. Facultad de Ciencias. Geología y Geoquímica (University Department). **Cuantía de la subvención:** 231.187,50€. **Número de investigadores participantes:** 4

#### **C.4. Contracts, technological or transfer merits,**

**1. Título del contrato/proyecto:** Conversión termoquímica de residuos con contenido en amianto. **Tipo de contrato:** Contrato convenio. (FUAM 54341). **Empresa/Administración financiadora:** Desamianta S.L., **Entidades participantes:** Departamento de Geología y Geoquímica, UAM, **desde:** 25/11/2014, **hasta:** 25/02/2016. **Investigador responsable:** Jaime Cuevas. **Número de investigadores participantes:** 4, **Precio total del proyecto:** 96427 euros.

**2. Título del contrato/proyecto:** 20237V06 coordinación del grupo técnico de gestión sostenible de residuos universitarios formado por los representantes de las seis universidades públicas de la Comunidad de Madrid (Ref: CM-A/SER-0000020340). **Tipo de contrato:** Contrato menor convenio. (FUAM 54349). **Empresa/Administración financiadora:** Comunidad de Madrid Consejería de Ciencia, Universidades e Innovación, **Entidades participantes:** Departamento de Geología y Geoquímica, UAM, **desde:** 15/09/2021, **hasta:** 28/02/2022. **Investigador responsable:** Jaime Cuevas. **Número de investigadores participantes:** 1, **Precio total del proyecto:** 17958 euros.

**3. Título del contrato/proyecto:** 20237V06 Estudio material inertización depósito de combustibles. **Tipo de contrato:** Contrato menor convenio. (FUAM 54350). **Empresa/Administración financiadora:** DAD/ Mando de Apoyo Logístico del Ejército del Aire, **Entidades participantes:** Departamento de Geología y Geoquímica, UAM, **desde:** 26/10/2023, **hasta:** 31/08/2024. **Investigador responsable:** Jaime Cuevas. **Número de investigadores participantes:** 5, **Precio total del proyecto:** 15558 euros.

**4. Título del contrato/proyecto:** Caracterización de los materiales de cobertera de El Cabril **Tipo de contrato:** Contrato menor convenio. (FUAM 128602). **Empresa/Administración financiadora:** Centro de Investigaciones Energéticas Medioambientales y Tecnológicas (CIEMAT), **Entidades participantes:** Departamento de Geología y Geoquímica, UAM, **desde:** 10/06/2025, **hasta:** 31/01/2026. **Investigador responsable:** Jaime Cuevas y Ana Isabel Ruiz. **Número de investigadores participantes:** 3, **Precio total del proyecto:** 18616 euros.

**5. Título del contrato/proyecto:** Convenio de colaboración para la creación de la Cátedra de Economía Circular. **Tipo de contrato:** Convenio de colaboración. (FUAM 54352). **Empresa/Administración financiadora:** Comunidad de Madrid Consejería de Medio Ambiente, Agricultura e Interior D.G. de Transición Energética y Economía Circular, **Entidades participantes:** Departamento de Geología y Geoquímica, UAM, **desde:** 03/10/2024, **hasta:** 31/12/2026. **Investigador responsable:** Jaime Cuevas **Número de investigadores participantes:** 1, **Precio total del proyecto:** 60000 euros.