CURRICULUM VITAE ABREVIADO (CVA)

Part A. PERSONAL INFORMATION

First name	José			
Family name	Ruiz López			
Gender (*)			Birth date	
ID number				
e-mail	jruiz@um.es	URL Web	https://www.um.es/qcqo/jruiz.htm	
Open Researcher and Contributor ID (ORCID) (*)			0000-0002-0834-337X	

A.1. Current position

Position	Full Professor		
Initial date	29/10/2007		
Institution	University of Murcia		
Department/Center	Dept. Inorganic Chemistry	Facultad de Química	
Country	Spain	Teleph. number	+34868887455
Key words	Metallodrugs, Theranostic, Medicinal chemistry, Photodynamic therapy, Bioinorganic chemistry, Cancer, Iridium, Ruthenium		

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

Period	Position/Institution/Country/Interruption cause
08/05/1988 to 28/10/2007	Lecturer of Inorganic Chemistry, University of Murcia/Spain
08/10/1984 to 31/08/1986	Postdoctoral researcher/University of Sheffield/U.K.

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Licensed in Chemistry	University of Murcia/Spain	1982
PhD in Chemistry	University of Murcia/Spain	1984

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

Prof José Ruiz earned his degree in Chemistry with honours at the University of Murcia (UMU), and received the National Extraordinary Bachelor's Degree Award by the Spanish Ministry of Education. He completed his PhD in Chemistry at UMU in 1984. Later, he worked as a postdoc at the Sheffield University, UK, for 2 years under Prof P.M. Maitlis, working in transition metal hydrides. In 1987, he got a permanent position as a Lecturer at UMU. Since 2002, he started his independent career and drove his interest towards the field of Medicinal Inorganic Chemistry. In 2007, he became Full Professor at UMU and founded the Metallodrugs Discovery Group. He heads also the Non Conventional Anticancer Metallodrugs Group at the Murcian Institute of Biosanitary Research.

Scientific achievements. Dr Ruiz's transition from fundamental chemistry to biomedical applications started in 2002. A seminal work published in *ChemComm* 2013 on the synthesis of novel benzimidazole-based complexes provided insights into the design of potential metal-based anticancer agents and contributed to many other subsequent high-impact studies (*J Med Chem* 2015, *Inorg. Chem. Front.* 2021, *ChemCommun.* 2020, *J. Med. Chem.* 2021, *Chem Sci* 2023). The paper published in *Angew Chem* 2019, dealing with the synthesis of photodynamic therapy agents with absorption in the biocompatible region, was highlighted in *ChemistryViews* magazine and has received over 150 cites (WoS).
Prof Ruiz's research also focuses the design of theranostic agents based on d^6 luminescent Ir(III) and Re(I) complexes (Kasparkova *J Med Chem* 2024, Marco *J. Med. Chem.* 2024), including conjugates with receptor-binding peptides (*Chem. Comm.* 2017).

Impact and Recognition. Prof Ruiz's research has gained international visibility, with over 4,800 citations in WoS across > 135 peer-reviewed papers (**h-index** = **41**). Since 2013 he

secured over 750k € in funded research grants. In the last six years (2018-2024), he has published more than 35 accepted publications. Of these, 30 out of 35 were in Q1 journals. Additionally, 34 out of 35 publications list him as the corresponding and/or last author. His research spans the areas of *Inorganic*, *Medicinal*, and *Multidisciplinary Chemistry*. Notable journals where his work has appeared include 1× *Angew Chem,* 1× *Chem Sci,* 6 × *J Med Chem*, 1× *ACS Appl. Mater. Interfaces*, 2 × *Coord Chem Rev*, 6 × *Chem Commun*, 5 × *Inorg Chem Front*, 4 × *Chem Eur J*, 1 × *Eur J Med Chem*, 1 × *Biomacromolecules,* 1 × *Cell. Mol Life Sci* and 6 × *Inorg Chem*. Prof. Ruiz has developed numerous international collaborations with research groups such as those headed by Brabec (Czech Academy of Science), Janiak (U. Düsseldorf), Ott (U. Braunschweig), Marchán (U. Barcelona), Barone (U. Palermo), Glazer (U. Kentucky), and Gasser (PSL University, Paris). Dr Ruiz has been the President of the Spanish Association of Bioinorganic Chemistry (AEBIN, period 2017-2022).
Dr Ruiz's expertise has led to invitations to speak at international conferences. He regularly receives invitations to these conferences and serve as an expert evaluator for various research agencies (Dutch Research Council; French Research Agency ANR; Deutsche Forschungsgemeinschaft; Israel Science Foundation; Spanish State Research Agency AEI (both at the level of remote projects and in the annual evaluation panel), and the Yorkshire Cancer Research. He has participated in promotion committees for professorships and scientific staff of Universities & research institutes (Vienna & Mumbai, 2024). Dr Ruiz is a regular evaluator of scientific journals (*Adv Mater*, *JACS*, *Chem Sci*, *Chem Rev*, *Chem Soc Rev, Adv Funct Mater, ACS Nano, ACS App Mat Interf, Biomaterials, J. Med. Chem,*…).

Mentorship. Committed to training new scientists, Prof Ruiz has supervised 13 doctoral theses. In the past decade alone, he has supervised 7 PhD theses. Currently, he is actively supervising 5 PhD students. Former PhD students V. Rodríguez and C. Vicente are members of the Metallodrugs Lab at UMU. A. Zamora is currently working as CMC scientist for all stages of the drug development cycle at "**Argenx"** (Belgium). G. Vigueras is currently MCSA postdoctoral fellowship at PSL University (Paris) and E. Ortega is currently JdC at the IQS School of Engineering (Barcelona). Former postdoct G. Yellol is currently Assistant General Manager at Emcure Pharmaceuticals Limited (Pune, India).

Societal impact. Dr Ruiz collaborates with the company Ecopol Tech, S.L. (*Biomacromolecules* 2022; *ACS Appl. Mater. Interfaces*, **2024**). He currently holds the position of President of the Territorial Section of Murcia of the RSEQ. Prof Ruiz is also dedicated to science outreach, organizing *the "Local Phase of the Chemistry Olympiad"* and the quiz "Crystallization at School" uninterruptedly since 2018. In 2024 has served as member of the "verification and validation committee" of the 37th edition of the *"*National Phase of the Chemistry Olympiad*".*

Part C. RELEVANT MERITS *(sorted by typology)*
C.1. Publications *(10 selected contributions, for a full list here or check the ORCID profile or the WoS ResearcherID: B-8271-2008. References to impact factor have been removed)*
1. J. Bonelli, E. Ortega-Forte, G. Vigueras,…,**J. Ruiz** (15/16),* V. Marchán*. A nanoencapsulated Ir(III)-phthalocyanine conjugate as a promising photodynamic therapy anticancer agent. *ACS Appl. Mater. Interfaces*, **2024**,16, 38916. (link). Citations: 4.
2. A. Marco, P. Ashoo, S. Hernández-García,..., F. Gandía-Herrero,* **J.Ruiz** (10/10).* Novel Re(I) Complexes as Potential Selective Theranostic Agents in Cancer Cells and In Vivo in *Caenorhabditis elegans* Tumoral Strains. *J. Med. Chem.* **2024**, 67, 7891–7910 (link). Highlighted as a Front cover. Citations: 4.
3. J. Kaparskova, A. Hernández-García, H. Kostrhunova,…V. Brabec,* **J. Ruiz** (10/10).* Novel 2-(5-arylthiophen-2-yl)-benzoazole cyclometalated Iridium(III) dppz complexes exhibit selective phototoxicity in cancer cells by lysosomal damage and oncosis. *J. Med. Chem.* **2024**, 67, 691–708 (link). Citations: 10.
4. V. Novohradsky, A. Marco, L. Markova, …, **J. Ruiz** (5/6),* V. Brabec,* Ir(III) Compounds Containing a Terdentate Ligand Are Potent Inhibitors of Proliferation and Effective Antimetastatic Agents in Aggressive Triple-Negative Breast Cancer Cells. *J. Med. Chem.* **2023**, 66, 9766-9783 (link). Citations: 6.

5. E. Ortega, A. Rovira, M. López-Corrales,…, **J. Ruiz** (11/13),* V. Marchán,* G. Gasser*. *A near-infrared light-activatable Ru(II)-coumarin photosensitizer active under hypoxic conditions*. *Chem. Sci.* **2023**, 14, 7170 (link). #ChemSciMostPopular. Citations: 26.
6. A. Rovira, E. Ortega, C. Hally,…, **J. Ruiz** (10/11),* V. Marchán*. *Exploring structure–activity relationships in photodynamic therapy anticancer agents based on Ir(III)-COUPY conjugates*. *J. Med. Chem.* **2023**, 66, 7849–7867 (link). Citations: 14.
7. J. Bonelli, E. Ortega,G. Vigueras,..., N. Cutillas, **J. Ruiz** (7/8),* V. Marchán.* Polyurethane-polyurea hybrid nanocapsules as efficient delivery systems of anticancer Ir(III) metallodrugs. *Inorg. Chem. Front.* **2022**. *9*, 2123 (link). Highlighted as a Front cover. Citations: 13.
8. G. Vigueras, L. Markova, V. Novohradsky,..., **J.Ruiz** (8/9),* V. Brabec.* A Photoactivated Ir(III) complex targets cancer stem cells and induces secretion of damage-associated molecular patterns in melamoma cells characteristic of immunogenic cell death. *Inorg. Chem. Front.* **2021**, *8*, 4696-4711 (link). Highlighted as a Hot article. Citations: 41.
9. V. Novohradsky, A. Rovira, C. Hally, …, **J. Ruiz*** (13/15) , …, V. Marchán*****. Towards Novel Photodynamic Anticancer Agents Generating Superoxide Anion Radicals: Cyclometalated Ir(III) Complex Conjugated to a Far-Red Emitting Coumarin. *Angew. Chem. Int. Ed. Engl.* **2019**, *58*, 6311-6315 (link). Highlighted in *ChemistryViews magazine.* Citations: 156.
10. V. Novohradsky, G. Vigueras, J. Pracharova, ..., **J. Ruiz*** (8/9), J. Kasparkova.* Molecular superoxide radical photogeneration in cancer cells by dipyridophenazine iridium(III) complexes. *Inorg. Chem. Front.* **2019**, *6*, 2500-2513 (link). Citations: 43.

C.2. Conferences *(10 selected contributions)*
1) Invited talk. AsBIC11 (Guangxi Normal University), Guilin (China), 5th December 2024.
2) Invited talk. Satellite Symposium of AsBIC11 (Sun Yat-Sen University), Guangzhou (China), 30th November 2024.
3) Plenary talk. IX LaBIC, La Habana (Cuba), 8th November 2024
4) Keynote Speaker, SIFB Italian Society of Photobiology. XXXV Anual Conference – Mediterranean Edition, Messina, Italy. September 2024.
5) Invited talk. 4th Frontiers in Photochemistry Conference, Lisbon, Portugal. July 2024.
6) Discussion Leader, Metals in Medicine GRC, June 2024. Andover, USA. Topic: Stimuli-Responsive Metallodrugs as Emerging Therapeutics.
7) Invited talk. CulturChem Conference Sorbonne University. Paris, February 2022.
8) Plenary talk. Workshop "Anticancer Metal Drugs: New Developments and Future Perspectives, - 1st Ed.", Jerusalem, 13-15 June 2022.
9) Invited talk. 14th Eur. Biol. Inorganic Chemistry Conference-EuroBIC Birmingham. 2018.
10) Invited talk. 23rd International Conference on Coordination Chemistry (ICCC2018), 30 Jul-4 Aug 2018, Sendai (Japan).

C.3. Research projects *(10 selected)*
1. PID2021-122850NB-I00: Novel designs of multifunctional metal complexes for light-based therapy of cancer stem cells. Ministry of Science, Innovation and Universities/AEI. September 2022-August 2025 – **PI.** *Funding:* 193k € + PhD fellowship.
2. 21989/PI/22: Diseño de fotosensibilizadores de platino, rutenio e iridio para el tratamiento de tumores hipóxicos. Seneca Foundation (Murcia). January: 2023-December 2025 **PI**, 95k €.
3. RED2018-102471-T: MultiMetDrugs network "Multifunctional Metallodrugs in Diagnosis and Therapy" Funding entity: Spanish Ministry of Science and Innovation. Coordinator: **M. Concepción Gimeno** from the ISQCH, CSIC – Zaragoza University (constituted by ten research groups; **J. Ruiz** from Murcia group). 2020 – 2022. 20k €.
4. "New proteosynthesis metal inhibitors and their application for the cancer treatment (20857/PI/18)". Seneca Foundation (Murcia, Spain). Start-End date: 2019–2022. **PI**: **J. Ruiz** *Funding:* 83k €.
5. RTI2018-096891-B-I00: Design and Development of New Luminescent Precious Metal Complexes for Multi-Action Therapy and Phototherapy of Drug-Resistant Cancers. Spanish Ministry of Science and Innovation. 2019 –2022. **PI**: **J. Ruiz** (UMU). *Funding:* 149k €.
6. "Congenital dyskeratosis. New models, new molecular keys and new treatments". Ramon Areces Foundation Research Projects 2016. **PI**: **M. L. Cayuela** (IMIB; **J. Ruiz** as member of the research team). Start-End date: 2017 – 2020. *Funding:* 94k €.

7. CTQ2015-64319-R: Metallodrugs for cancer treatment and strategies for their vehiculization. Spanish Ministry Economy and Competitiveness. 2016 –2019. **PI**: **J. Ruiz**. *Funding:* 121k €.
8. COST Action CM1105: "Functional metal complexes that bind to biomolecules".
Funding entity: European Cooperation in Science and Technology. Coordinator: **J. Müller** from Univ. of Münster (**J. Ruiz** from Murcia group (WG 4)). May 2012– May 2016. *Funding:* 156k €.
9. SAF2011-26611: Unconventional Anticancer Metallo-Drug Design and Action with Biological and Molecular Carriers. Spanish Ministry of Science and Innovation. **PI: J. Ruiz** (2012–2014. *Funding:* 109k €.
10. COST Action CA22131 - Supramolecular Luminescent Chemosensors for Environmental Security (LUCES) **2023.**

C.5. Academic Supervisions at the University of Murcia (2017-present)

1) A. Zamora "Non-conventional metallodrugs of Pt(II), Ru(II) and Ir(III). Synthesis, antitumor activity and mechanism of action studies", 17 March 2017. Cum Laude, International PhD.
2) J. Yellol, "Synthesis and development of novel metallodrugs based on benzimidazole with therapeutic activity towards cancer and Alzheimer's Disease", 1 June 2017. Cum Laude.
3) S. A. Pérez-Henarejos, "Cytotoxicity studies, cell localization and interaction with biomacromolecules of anticancer metallodrugs", 20 July 2017. Cum Laude.
4) G. Vigueras, "Phosphorescent heteroleptic iridium(III) complexes: applications for therapy and photodynamic therapy of cancer", 22 October 2021. Cum Laude, European PhD.
5) F. Ballester, "Design and synthesis of new complexes of Ru(II) and Os(II) with potential application in chemotherapy and phototherapy of cancer", 19 July 2022. Cum Laude.
6) E. Ortega-Forte, "Development of novel coumarin- and ruthenium-based photodynamic therapy anticancer agents", 10 November 2023. Cum Laude, European PhD.
7) A. Marco, "Organometallic complexes of Re(I), Ir(III), Ru(II) and Rh(III) with applications in medicine". 10 May 2024. Cum Laude.

Ongoing Thesis supervised/co-supervised*:*

1) A. Hernández, "*Organometallic Complexes of Ru(II), Os(II), and Ir(III) for Cancer Chemotherapy and Photodynamic Therapy*" *(expected March 2025*).
2) A. Linero, "Design and development of platinum and iridium complexes for (photo)therapy and diagnosis of cancer" (*expected June 2025*).
3) P. Ashoo, "Study of the mode of action of anticancer drugs at both molecular and cellular levels" (*expected June 2025*).
4) I. Romero, "Synthesis and characterization of new luminescent cyclometalated Ir(III) complexes as phototherapeutic agents against drug-resistant cancers" *(expected February 2027)*..
5) M. Goicuría, "Development of novel metal complexes as photosensitizers for photodynamic therapy" *(expected November 2027)*.

Supervision of Posdoctoral Researchers.

1) Dr María José Piernas (Juan de la Cierva-incorporation for 2022-2024; previously, Saavedra Fajardo researcher in our lab since June 2020).
2) Dr. Gorakh Yellol (Marie-Curie researcher; European Union Seventh Framework Programme–Marie Curie COFUND (FP7/2007-2013). April 2012-March 2014).

C.6. Scientific Difusion Activities

- President of the Spanish Society of Bioinorganic Chemistry (2017-2022).
- President of the of Sección Territorial de Murcia of the Spanish Royal Society of Chemistry (RSEQ, 2018-2024)

C.7. Achievements and Awards

2023 Inorganic Chemistry Frontiers outstanding peer reviewer (here)

C.8. Conference Organization

BioMadrid 2022. XII AEBIN. 11-13 June 2022.

CURRICULUM VITAE ABREVIADO (CVA)

Fecha del CVA	9/01/25

Parte A. DATOS PERSONALES

Nombre	María Purificación		
Apellidos	Sánchez Sánchez		
Sexo	Mujer	Fecha de nacimiento (dd/mm/yyyy)	
DNI, NIE, pasaporte			
Dirección email	mpsansan@ugr.es	URL Web	
Open Researcher and Contributor ID (ORCID)		0000-0003-1758-2222	

A.1. Situación profesional actual

Puesto	Titular de Universidad		
Fecha inicio	07/11/1987		
Organismo/ Institución	Universidad de Granada		
Departamento/ Centro	Química Inorgánica		
País	España	Teléfono	958248096
Palabras clave	Química de la Coordinación, Química Bioinorgánica, Nanopartículas metálicas, Odontología		

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora, de acuerdo con lo indicado en la convocatoria, indicar meses totales)

Periodo	Puesto/ Institución/ País / Motivo interrupción
10/82-9/83	Becaria Proyecto de Investigación (CAYCIT) (0925/81. Universidad Granada
10/83-9/87	Profesora Ayudante. Universidad de Granada
10/87-11/87	Profesora Titular Interina. Uniiversidad de Granada

A.3. Formación Académica

Grado/Master/Tesis	Universidad/Pais	Año
Licenciatura en Químicas	Universidad de Granada	1980
Doctorado en Químicas	Universidad de Granada	1984

Parte B. RESUMEN DEL CV *(máx. 5.000 caracteres, incluyendo espacios):*

En el año 1980 comienza mi labor investigadora con la tesina de licenciatura, que se encuadra en la línea de investigación de la Química de la Coordinación del Departamento de Química Inorgánica de la Universidad de Granada.

Me inicié en las técnicas radiométricas de datación por C-14 con una beca (Proyecto de Investigación (CAYCIT) (0925/81) desarrollando mi actividad durante siete años en los laboratorios de datación por C-14 de la Universidad de Granada, Centre de Datations et d'Analyses Isotopiques (Université Claud Bernard Lyon, France) y el Centre de Recherches Geodynamiques de Université Pierre et Marie Curie, Thonon-les-Bains (1986).

La Tesis Doctoral la realicé también en el Departamento de Química Inorgánica de dicha Universidad, con el título "Complejos de tioderivados pirimidínicos y de la 2-tioxantina" obteniendo Premio Extraordinario Tesis Doctoral concedido por la Universidad de Granada. (1984) y el Premio Extraordinario de Tesis Doctoral concedido por la Compañía Sevillana de Electricidad (curso 1985-86). La tesis se enmarca en una de las principales líneas de

investigación en las que he trabajado, concretamente en el estudio de la interacción de los cationes metálicos con heterociclos nitrogenados derivados o relacionados con las bases púricas o pirimidínicas, estudios centrados fundamentalmente en los aspectos estructurales en estado sólido y en la actividad biológica frente a microorganismos y células tumorales, dentro del grupo “Química de la Coordinación y Análisis Estructural FQM-195”. En esta línea se enmarca una tesis doctoral dirigida y cinco tesinas de licenciatura.

En 2005 continué la investigación en los grupos de “Bionanopartículas Metálicas FQM-368”, en y en el grupo “Biomateriales en Odontología y Odontopediatría CT-8592”. En estas líneas se enmarcan tres tesis doctorales dirigidas.
Durante más de veinte años he dirigido más de 25 trabajos de investigación, trabajos fin de Master, dirigido becas de iniciación a la investigación, de colaboración etc., algunos de los estudiantes han continuado con trabajos de tesis doctoral y conseguido trabajo en empresas y/o en la Universidad. He participado como investigadora en 30 proyectos de investigación de forma ininterrumpida desde1985 hasta la actualidad, financiados por programas nacionales (Ministerio de Ciencia e Innovación, proyectos de Excelencia de la Junta de Andalucía, Acción Integrada de proyectos de la DGICYT, la CAICYT, Agencia Española de Cooperación Internacional AECI, proyectos GREIB Campus CEIBiotic) y como IP de una petición de Infraestructura con fondos FEDER) y soy miembro del grupo de investigación FQM-195 “Química de la Coordinación” desde su fundación en 1998.
Los resultados de la actividad científica se han visto reflejados en un total de setenta publicaciones, tanto en revistas de Química como especializadas del área de Química Inorgánica y Química de Materiales. De los trabajos de los últimos 10 años el 50% están dentro del primer tercil (34% en el primer cuartil (Q1).
Premio “Universidad de Granada” a Trabajos de Investigación de Excelencia 2011 por el trabajo: “Comparative Structural and Chemical Studies of Ferritin Cores with gradual Removal of their Iron Contents" concedido por la UGR.- Premio Unilever Hatton Competition and Awards. IADR (International Association Dental Research) al trabajo " Efectos microquímicos y de superficie del peróxido de hidrógeno y del ácido fosfórico" extraído de la tesis doctoral con mención europea de Dña Carolina Torres Rodríguez (2010) que ha codirigido.

- Cinco sexenios de investigación (último 01/01/2023)
- Seis tramos docentes.
- Cinco tramos autonómicos.
Mi aportación a la sociedad se centra en actividades de divulgación, participando a demás en 12 proyectos de innovación docente (algunos como coordinadora).
- Acción formativa Plan FIDO de la UGR Ref: 22-114. “Orientación académica, profesional y personal en los estudios de Química.
- Participación en el proyecto “Ciencia y Sociedad”. Facultad Ciencias (2010-11)
- Participación en talleres de Química “La Química en nuestro entorno” 2011-2012.
- Participación, como investigador/a, en las “Jornadas de puertas abiertas, Parque de las Ciencias”, 2010.
- Participación en la jornada organizada por el Parque de las Ciencias en colaboración con IES: “Cada vez más cerca” 2011.
- Participación en las actividades de la “Semana de la Ciencia” organizadas por la Facultad de Ciencias desde el curso 2007 hasta la actualidad.
- Participación en las actividades “Café con Ciencia. Facultad de Ciencias” 2012-2022.
- Participación y organizadora en el Festival Solidario Facultad de Ciencias. Años 2020-24.
- Participación en Aula Permanente de Formación Abierta en sedes de Baza, Motril, Melilla y Granada (2019-24).
- Participación en la Noche de los Investigadores desde 2012 hasta la actualidad.

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias.

1. Oscar E. Pecho, Pedro Alvarez-Lloret , Ana M. Ionescu , Juan C. Cardona , Razvan Ghinea, **Purificacion Sánchez-Sánchez ,** María M. Pérez , Alvaro Della Bona. Influence of microstructure on optical properties of CAD-CAM lithium disilicate glass-ceramics.*Dental Materials 40 (11), 1927-1936 (2024)*

2. L. González, J. D. Martín-Romera, **P. Sánchez-Sánchez**, J. A. R. Navarro, E. Barea, C. R. Maldonado (AC), F. J. Carmona (AC). Oxime@Zirconium-Metal-Organic Framework Hybrid Material as a Potential Antidote for Organophosphate Poisoning. *Inorg. Chem., 2023, 62, 5049-5053. DOI: 10.1021/acs.inorgchem.3c00121*

3. Alejandro B. Rodríguez-Navarro (AC), Christian Grenier, Antonio G. Checa, Concepción Jiménez-López**, Purificación Sánchez-Sánchez**, Diego Bertone, and Nelson A. Lagos. Role of the Organic Matter in the Structural Organization of Giant Barnacle Austromegabalanus Psittacus Shell from the Micro- to Nanoscale*; Crystal Growth Desing, 2021, 357−365; https://dx.doi.org/10.1021/acs.cgd.0c01222*

4. Nuria A. Illán-Cabeza, Sonia B. Jiménez-Pulido, Francisco Hueso-Ureña, María J. Ramirez-Expósito, **Purificación Sánchez-Sánchez**, José M. Martínez-Martos, Miguel N. Moreno-Carretero (AC), "Effects on estrogen-dependent and triple negative breast cancer cells growth of Ni(II), Zn(II) and Cd(II) complexes with the schiff base derived from pyridine-2-carboxaldehyde and 5,6-diamino-1,3-dimethyluracil explored through the reninangiotensin system (ras)-regulating aminopeptidases". *Journal of Inorganic Biochemistry 185,52-62 (2018). https://doi.org/10.1016/j.jinorgbio.2018.04.022*

5. Francisco J. Carmona, Sara Rojas, **Purificación Sánchez**, Hélia Jeremias, Ana R. Marques, Carlos C. Romão, Duane Choquesillo-Lazarte, Jorge A. R. Navarro, Carmen R. Maldonado (AC), and Elisa Barea (AC); Cation Exchange Strategy for the Encapsulation of a Photoactive COReleasing Organometallic Molecule into Anionic Porous Frameworks.
Inorg. Chem. 2016, 55, 6525−6531; DOI: 10.1021/acs.inorgchem.6b00674
Trabajo elegido como ACS Editors' Choice.

6. Jiménez S.; Illán-cabeza N.A.; Hueso-Ureña F.; Rodríguez-Maldonado C.; **Sánchez-Sánchez P.**; Fernández-Liencres M.P.; Fernández-Gómez M.; Moreno-Carretero M.N. (AC), "A combined experimental and dft investigation on the structure and co-releasing properties of mono and binuclear fac-Re $(CO)_3$ complexes with 5-pyridin-2-ylmethylene-amino uracils"; *7*

7. Jurado, R.; Fraczek, P. Droetto, M.; **Sánchez, P.;** Valero, E.; Domínguez-Vera; J.M; Gálvez, N. (AC), "Apomaghemite as a doxorubicin carrier for anticancer drug delivery". *Journal of inorganic biochemistry 157, 46-51 (2016). https://doi.org/10.1016/j.jinorgbio.2016.01.018*

C.2. Congresos

Participación en más de 75 congresos tanto nacionales como internacionales. Miembro del comité organizador de la XXVIII Reunión Bienal de la RSEQ Granada 2022. Miembro del comité organizador de la 11th European Biological Inorganic Chemistry Conference 2012. Granada. Miembro del comité organizador de 5th Euchems Conference on Nitrogen Ligands 2011. Granada. Miembro del comité organizador "13ª Reunión Científica Plenaria de Química Inorgánica, 7ª Reunión Científica Plenaria de Química de Estado Sólido. 2008 Almuñécar, Granada. Miembro del comité organizador "Reunión Bioinorgánica 01-01-2001. Granada.

Carmen R. Maldonado, Francisco J. Carmona, Sara Rojas, **Purificación Sánchez**, Helia Jeremías, Ana R. Marques, Carlos C. Romão, Duane Choquesillo-Lazarte, Jorge A. R. Navarro, Elisa Barea
TÍTULO: Sílices mesoporosas funcionalizadas para la liberación de monóxido de carbono con fines terapéuticos
TIPO DE PARTICIPACIÓN: Oral
CONGRESO: X Reunión Científica de Bioinorgánica
LUGAR DE CELEBRACIÓN: Bilbao, España
AÑO: 2017

C.3. Proyectos o líneas de investigación en los que ha participado

TÍTULO DEL PROYECTO: Reactive crystal surfaces of metal-organic assemblies (PID2023-147972OB-I00 30B245F102)
ENTIDAD FINANCIADORA: Ministerio de Innovación y Ciencia
DURACIÓN DESDE: 1 de septiembre de 2024 HASTA: 31 de diciembre de 2027
INVESTIGADOR/A PRINCIPAL: Jorge A. Rodríguez Navarro y Elisa Barea
CUANTÍA TOTAL: 240.000,00 €
TIPO DE PARTICIPACIÓN: Investigadora

TÍTULO DEL PROYECTO: Separación de Gases de Interés Medioambiental con Materiales Porosos Avanzados (TED2021-129886B-C41)
ENTIDAD FINANCIADORA: Ministerio de Innovación y Ciencia (Proyectos Estratégicos Orientados a la Transición Ecológica y a la Transición Digital. 2021)
DURACIÓN DESDE: 1 de diciembre de 2022 HASTA: 31 de noviembre de 2024
INVESTIGADOR/A PRINCIPAL: Jorge A. Rodríguez Navarro y Elisa Barea
CUANTÍA TOTAL: 290.000,00 €
TIPO DE PARTICIPACIÓN: Investigadora

TÍTULO DEL PROYECTO: Materiales metal-orgánicos porosos para la descontaminación y detoxificación de compuestos de fósforo (DetoxMOF) (PID2020-113608RB-I00)
ENTIDAD FINANCIADORA: Ministerio de Innovación y Ciencia (Programa Estatal de I+D+i Orientada a los Retos de la Sociedad)
DURACIÓN DESDE: 1 de septiembre de 2021 HASTA: 31 de agosto de 2024
INVESTIGADOR/A PRINCIPAL: Jorge A. Rodríguez Navarro y Elisa Barea
CUANTÍA TOTAL: 204.000,00 € + beca FPI
TIPO DE PARTICIPACIÓN: Investigadora

TÍTULO DEL PROYECTO: Materiales Inorgánicos Basados en Redes Metalorgánicas para Aplicaciones en Agricultura (P20_00672)
ENTIDAD FINANCIADORA: Proyectos I+D+i Junta de Andalucia 2020
DURACIÓN DESDE: 1 de enero de 2021 HASTA: 30 de junio de 2023
INVESTIGADOR/A PRINCIPAL: Elisa Barea
CUANTÍA TOTAL: 85.000,00 €
TIPO DE PARTICIPACIÓN: Investigadora

TÍTULO DEL PROYECTO: Materiales Híbridos Basados en Redes Metalorgánicas para Aplicaciones en Agricultura (B-FQM-364-UGR18)
ENTIDAD FINANCIADORA: Universidad de Granada (Programa Operativo FEDER Andalucía 2014-2020)
DURACIÓN DESDE: 1 de enero de 2020 HASTA: 30 de junio de 2022
INVESTIGADOR/A PRINCIPAL: Elisa Barea y Carmen R. Maldonado
CUANTÍA TOTAL: 25.400,00 €
TIPO DE PARTICIPACIÓN: Investigadora

C.4. Participación en actividades de transferencia de tecnología/conocimiento y explotación de resultados

Soy una de las inventoras de una patente P200931148 (2009) con solicitud PCT(ES 2010/000519) (Fecha publicación internacional 16/06/2011), habiendo sido aprobada una oferta Tecnológica de la convocatoria de ayudas para el programa de Innocash 2010 por la Fundación Genoma de España (MICINN).
Nanoestructuras vectorizadas multifuncionales capaces de ser utilizadas como agentes de diagnosis trimodal (MRI, OI Y SPECT). DomÍnguez Vera, José Manuel; Gálvez Rodríguez, Natividad; Valero Romero, Elsa y Sánchez Sánchez, Purificación.
https://consultas2.oepm.es/InvenesWeb/detalle?referencia=P200931148

CURRICULUM VITAE (CVA)

Part A. PERSONAL INFORMATION

CV date	7/01/2025

First and Family name	Enrique Emilio Colacio Rodríguez	
Researcher numbers	Researcher ID	L-6020-2014
	Orcid code	0000-0002-6745-9241

A.1. Current position

Name of University/Institution	University of Granada			
Department	Department of Inorganic Chemistry			
Address and Country	Avda. de Fuentenueva s/n 18071, Granada			
Phone number	+34958243236	E-mail	ecolacio@ugr.es	
Current position	Full Professor of Inorganic Chemistry		From	13/09/2000
Espec. cód. UNESCO	230307			
Palabras clave	Coordination Chemistry, Molecular Magnetic Materials, Multifunctional Materials, Molecular Nanomagnets, Hybrid Materials, Nanoparticles			

(*) Mandatory

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

Period	Position/Institution/Country/Interruption cause
1980-1983	University of Granada, PhD fellowship
1982-1985	Assistant Professor
1986-2000	Associate Professor
2000-	Full Professor

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate	University of Granada, Spain	1979
PhD	University of Granada, Spain	1983

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

Degree in Chemistry (1979), University of Granada (UGR), pre-doctoral grant (Spanish Ministry of Education, MEC), PhD Thesis (1983, UGR)) Post-Doctoral grant MEC, Laboratoire de Chimie de Coordination, Toulouse, Francia (1985). Associated Professor Inorganic Chemistry, UGR (1986) and Full Professor of Inorganic Chemistry, UGR (2000). During the pre-doctoral (1979-1983) and post-doctoral (1984-1985) periods my research interest focused on Bioinorganic Chemistry. Specifically, on coordination compounds of purine and pyrimidine bases ligands with metal ions of biological interest and the study of their potential antitumor properties. After finishing my post-doctoral research in 1985, I returned to UGR and started a new line of research in the area of Molecular Magnetism based on coordination compounds. During more than 15 years, my research work focused on the design, preparation and magneto-structural characterization of homo- and heteropolynuclear complexes with multiatom bridging groups. The main aim of this work was the understanding of the structural factors governing the magnetic exchange coupling in these kinds of systems. The results of this work led to the rationalization (from experimental magneto-structural data) of the magnetic exchange interactions between metal ions in polynuclear complexes mediated by syn-anti and anti-anti carboxylate bridging groups, as well as,oximate and imidazalote bridging groups. Moreover, we reported some of the first examples of heterometallic imidazolate-bridged complexes. Several papers concerning these results have received a high number of citations (between 100 and 250). From 2000 to 2010, my research work focused on the preparation of extended homo-and heterometallic complexes with cyanide and tetrazolate bridging ligands exhibiting long-range magnetic ordering (molecular magnets). We successfully prepared some of the first examples of molecular magnets based on this type of compounds (ferro-, ferrimagnets and weak ferromagnets or spin-canted antiferromagnets). Some of the papers dealing with these results have received more than 100 citations. In the last decade, my research interest directed toward Single-Molecule Magnets (SMMs) based on 3d, either 3d-4f or 4f metal ions. Our aim was not only to obtain this kind of nanomagnets, but also to understand the main factors improving the SMM behaviour. Besides this, we were also interested in adding to these compounds other physical properties to attain multifunctional material. The

main achievements in this area were the preparation and study of some of the first examples of: (i) mononuclear Dy^{3+} SMMs (also called SIMs) with two relaxation magnetization processes with crystallographically equivalents metal ions, (ii) Electrostatic rational design of Zn-Dy-Zn SMMs with high temperature magnetic relaxation, (iii) Dilution triggered SMMs behaviour at zero-field in Zn_2Ln_2 complexes (iv) ZnLn, Zn_2Ln y Zn_2Ln_2 SMMs with luminescence properties in the visible and near IR areas (bifunctional materials), (iv) field induced Co^{II} SIMs with in plane magnetic anisotropy, (v) Dy3 and Dy4 complexes with Single-Molecule Toroic behaviour (SMT), (vi) Nanorefrigerants and (vii) Trigonal prismatic Co(II) complexes with large easy-axis axial anisotropy and slow relaxation at zero-field. In spite of his relatively recent publication of some of the papers corresponding to these results, they have received a high number of citations (60-272).

In the short to medium term, my research interest focuses on the design, preparation and study of functional and multifunctional molecular materials based on coordination compounds (molecular magnets, SMMs, SIMs, STMs, spin crossover complexes, molecular magnetic refrigerants, luminescent materials, chiral magnets, luminescent chiral magnets with circularly polarized luminescence). In addition, we are also interested in processing these materials on different supports (SiO_2 and Au nanoparticles, polymeric thin-films, mesoporous silica matrix, surfaces and so on). Some results already obtained along these lines, have received a large number of citations (between 60 and 130).

Author of 300 scientific papers (>230 in Q1). Number of Citations: 9929 (without self-citations 9128), h index = 54 Average citations in the latter 5 years (without including the current year): 540.Publications in the last ten years = 95. 4 articles with more than 200 citations and 16 with more than 100 citations. 7 periods of six-years on research work (sexenios) recognized by the Spanish Ministry of Education and Science (last six-years period recognized in 2021). PhD Theses supervised in the latter 10 years: 6.

Part C. RELEVANT MERITS

C.1. Publications *(Selected Publications in the last 10 years)*

1. Gabbani A, Poncet M, Pescitelli G, Carbonaro L, Krzystek J, Colacio E, Piguet C, Pineider F, Di Bari L, Jiménez JR, Zinna F. Magnetic circularly polarized luminescence from spin-flip transitions in a molecular ruby. *Chemical Science.* **2024**;15(41):17217–23 (1 citations).

2. A. Landart, M. Mar Quesada-Moreno, M. Palacios , Y. Li , M. Ozerov, J. Krzystek , E. Colacio, Control of the geometry and anisotropy driven by the combination of steric and anion coordination effects in Co II complexes with N 6 -tripodal ligands: The impact of the size of the ligand on the magnetization relaxation time, *Dalton Trans.*, **2024**,53, 12876-1289

3. Zabala Lekuona, A., Landart Gereka, A.,Quesada Moreno, M. M., Mota Ávila, A. J. Díaz Ortega, I. F., Nojiri, H. Krzystek, J., Seco Botana, J. M., Colacio, E., Zero-Field SMM Behavior Triggered by Magnetic Exchange Interactions and a Collinear Arrangement of Local Anisotropy Axes in a Linear Co3 II Complex, *Inorganic Chemistry* **2023**, 62, 20030–20041 (5 citations)

4. A. Landart-Gereka, M. M. Quesada-Moreno, M. A. Palacios, I. F. Dìaz-Ortega, H. Nojiri, Mykhaylo Ozerov, J. Krzystek , E. Colacio, Pushing up the easy-axis magnetic anisotropy and relaxation times in trigonal prismatic Co-II mononuclear SMMs by molecular structure design. *Chemical Communications*, **2023**, 59, 952 (10 citations)

5. A. Landart-Gereka, M. M. Quesada-Moreno, I. F. Díaz-Ortega, H. Nojiri, M. Ozerov, J. Krzystek, M. A. Palacios, E. Colacio, Large easy-axis magnetic anisotropy in a series of trigonal prismatic mononuclear cobalt(ii) complexes with zero-field hidden single-molecule magnet behaviour: the important role of the distortion of the coordination sphere and intermolecular interactions in the slow relaxation, *Inorganic Chemistry Frontiers*., **2022**, 9, 2810-2831 (35 citations).

6. Zabala-Lekuona, A.; Seco, J. M.l; Colacio, E., Single-Molecule Magnets: From Mn12-ac to dysprosium metallocenes, a travel in time Coordination Chemistry Reviews **2021**, 441, 213984 (231 citations).

7. Diaz-Ortega, I. F.; Herrera, J. M.; Dey, S.; Nojiri, H.; Rajaraman, G.; Colacio, E., The effect of the electronic structure and flexibility of the counteranions on magnetization relaxation in $[Dy(L)_2(H_2O)_5]^{3+}$ (L = phosphine oxide derivative) pentagonal bipyramidal SIM. Inorganic Chemistry Frontiers, **2020**, 7, 684 (24 citations).

8. Diaz-Ortega, I. F.; Herrera, J. M.; Aravena, D.; Ruiz, E.; Gupta, T.; Rajaraman, G.; Nojiri, H.; Colacio, E.. Designing a Dy-2 Single-Molecule Magnet with Two Well Differentiated Relaxation Processes by Using a Nonsymmetric Bisbidentate Bipyrimidine-N-Oxide Ligand: A Comparison with Mononuclear Counterparts. *Inorganic Chemistry*, **2018**, 57 .6362 – 6375 (56 citations).

9. Palacios, M. A.; Nehrkorn, J.; Suturina, E A.; Ruiz, E.; Gomez-Coca, S. Holldack, K.; Schnegg, A.; Krzystek, J.; Moreno, J. M.; Colacio, E., Analysis of Magnetic Anisotropy and the Role of Magnetic Dilution in Triggering Single-

Molecule Magnet (SMM) Behavior in a Family of (CoY^{III}) Dinuclear Complexes with Easy-Plane Anisotropy, *Chemistry - A European Journal* **2017**, 23 ,48, pp. 11649 - 11661(52 citations).

10. Costes, J. P.; Titos-Padilla, S.; Oyarzabal, I.; Gupta, T.; Duhayon, C.; Rajaraman, G.; Colacio, E. Effect of Ligand Substitution around the DyIII on the SMM Properties of Dual-Luminescent Zn-Dy and Zn-Dy-Zn Complexes with Large Anisotropy Energy Barriers: A Combined Theoretical and Experimental Magnetostructural Study, *Inorganic Chemistry* **2016**, 55(9), 4428-4440 (85 citations).

11. J.M. Herrera, S. Titos-Padilla, S. J. A. Pope, I. Berlanga, F. Zamora, J. J. Delgado, K. V. Kamenev, X. Wang, A. Prescimone, E. K. Brechin, E. Colacio. Studies on bifunctional Fe(II)-triazole spin crossover nanoparticles: time-dependent luminescence, surface grafting and the effect of a silica shell and hydrostatic pressure on the magnetic properties, *J. Mater. Chem. C,* **2015**, 3, 7819-7829 (61 citations).

12. Costes, J. P.; Titos-Padilla, S.; Oyarzabal, I.; Gupta, T.; Duhayon, C.; Rajaraman, G.; Colacio, E. Analysis of the Role of Peripheral Ligands Coordinated to ZnII in Enhancing the Energy Barrier in Luminescent Linear Trinuclear Zn-Dy-Zn Single-Molecule Magnets, *Chemistry - A European Journal* **2015**, 21, 44, 15785-96 (84 citations).

14. I. Oyarzabal, J. Ruiz, E. Ruiz, D. Aravena, J. M. Seco, E. Colacio., Increasing the effective energy barrier promoted by the change of a counteranion in a Zn-Dy-Zn SMM: slow relaxation via the second excited state (inside front cover). *Chemical Communications*, **2015**, 51, 12353-12356 (60 citations)

11. Itziar Oyarzabal, José Ruiz, José Manuel Seco, Marco Evangelisti, Agustín Camón, Eliseo Ruiz, Daniel Aravena, Enrique Colacio, Electrostatic Design of Easy-Axis Magnetic Anisotropy in a ZnII-DyIII-ZnII Single-Molecule Magnet with High Energy Barrier (Frontispiece), *Chemistry-An European Journal* **2014**, 20, 14262 - 14269 (94 citations).

C.3. Research projects (Last 10 years).

1.- Multifunctional Single-Molecule Magnets, Ultrabright Lanthanide Nanoparticles and Color tunable Luminescent Spin-Crossover Composites. From Molecules to Hybrid Materials (PID2022-138090NB-C21). Entidad Financiadora: Agencia Estatal de Investigación (MCIN), Entidad participante: UGR. PI: Juan Manuel Herrera, E. ColacioNúmero de investigadores: 5. Cuantía: 1750.000 €. 01/09/2023 - 31/08/2026

2.- Cromóforos basados en el abundante CrIII como fotosensibilizadores sostenibles para dispositivos de conversión de energía, tintas de seguridad quirales y memorias magnéticas (TED2021-129598A-I00). Funding Entity: Agencia Estatal de Investigación (MCIN), Proyectos estratégicos orientados a la transición ecológica y a la transición digital 2021. Participant Entity: UGR. PI: Juan Ramón Jiménez. Number of researchers: 5. Funding: 180.000 €

3.- Materiales fosforescentes derivados de iones Ir(III) y Cr(III) para el desarrollo de dispositivos optoelectrónicos de alta eficiencia (B-FQM-328-UGR20). Funding Entity: Junta de Andalucía, Proyectos I+D+i del Programa FEDER 2020. Participant Entity: UGR. PI: Juan Manuel Herrera Martínez and Enrique Colacio. Number of researchers: 3. Funding: 35000 €.

4.- Imanes unimoleculares funcionales de alta temperatura y estabilidad para su uso en electrónica, espintrónica y fotónica molecular (P20_00692). Funding Entity: Junta de Andalucía, Proyectos de Excelencia. Participant Entity: UGR. PI: Enrique Colacio Rodríguez. Number of researchers: 3. Funding: 42200 €.

5.- Equipo de Medidas de propiedades físicas PPMS Dynacol, Quantum. Funding entity: Consejería de Economía, conocimiento, empresa y Universidades, Junta de Andalucía.
Participant entity: University of Granada. PI: Enrique Colacio Rodríguez. Number of researchers: 30. Star-End dates: 1/1/2020-31/12/2021, Fuding: 600240 €

6.- Materiales moleculares magnéticos basados en compuestos de coordinación de iones lantánidos con propiedades quiroópticas: de las moléculas a los materiales híbridos (A-FQM-172-UGR18). Funding Entity: Junta de Andalucía, Proyectos FEDER. Participant Entity: UGR. PI: Enrique Colacio Rodríguez y Antonio Mota Ávila. Number of researchers: 5. Funding: 32250 €. Start-End Dates: 01/01/2020 - 31/12/2021.

7.- Materiales Magnéticos y/o quiroópticos basados en moléculas imán y sistemas poliméricos metal-orgánicos (PGC2018-102052-B-C21). Funding Entity: Ministerio de Educación, Cultura y Deporte, Proyectos del Plan Nacional I+D+i. Participant Entity: UGR. PI: Enrique Colacio Rodríguez y Antonio Rodríguez Diéguez. Number of researchers: 9. Funding: 118000 €. Start-End Dates: 01/01/2019 - 31/12/2021.

8.- Desarrollo y procesamiento de materiales magnéticos y/o luminiscentes basados en compuestos de coordinación (CTQ2014-56312-P). Funding Entity: MICINN, Proyectos del Plan Nacional I+D+i. Participant Entity: UGR,, Universidad del País Vasco y Universidad de Santiago. PI: Enrique Colacio Rodríguez and Juan Manuel Herrera, Number of researchers: 15. Funding: 116160 €. Start-End Dates: 01/01/2015 - 31/12/2018.

9.- Nanocompuestos multimodales basados en nanopartículas de sílice y oro funcionalizadas con complejos metálicos que presentan propiedades magnéticas, y/o termocrómicas y/o luminiscentes (P11-

FQM-7756). Funding Entity: Junta de Andalucía, Proyectos de Excelencia Motrices. Participant Entity: UGR. PI: Enrique Colacio Rodríguez and Juan Manuel Herrera. Number of researchers: 10. Funding: 190.242 €. Start-End Dates: 01/01/2012 - 31/12/2015.
10.- Espectrofotómetro de luminiscencia (Ayuda a infraestructuras y equipamiento científico 2015). Funding Entity: Secretaría de estado de investigación, tecnología e innovación. Participant Entity: UGR. PI: Enrique Colacio Rodríguez. Number of researchers: 30. Funding: 335497 €. Start-End Dates: 01/01/2017 - 31/12/2018.

C.4. Contracts, technological or transfer merits

1.- Desarrollo de pinturas termocrómicas y/o luminiscentes. Industry: Industrias Kolmer S.A. Participants: Ismael Fco. Díaz Ortega, Enrique Colacio and Juan Manuel Herrera. Funding: 32000 €. Start-End Dates: 01/01/2012 - 31/12/2015.

C. 5 Research stays abroad

University Claude Bernard, Villerbanne, Francia, 2005 (Dominique Luneau's group), School of Chemistry, University of Edinburgh, UK , 2010 and 2012 (Euan K. Brechin's group) ; Department of Chemistry, University of Jyväskyla, 2013 (Reijo Sillanpää's group) Departement de Chimie, University of Bretagne Occidental, Brest, France, 2006 and 2017 (Smail Triki's group).

C.6 National and International Lectures

- 1st French-Spanish Workshop on Magnetism and Molecular Electronic, Valencia (1997), EuCheMS Conference on Nitrogen Ligands, Granada, Spain (2011), QIES 14, Gerona, Spain (2012),
- Invited conferences in Universities: Bretagne Occidental, France (2006), University Claude Bernard, France (2005), Jaen, Spain (2010), Valencia, Spain (2010 y 2014), Barcelona, Spain 2015,ICIQ-Tarragona, Spain, 2016.

C.7 Assessment activity

- Referee for Angew. Chem. Int. Ed., J. Am. Chem. Soc., Chemical Science, Chem. Eur. J., Chem. Commun., Dalton Trans., Inorg. Chem., J. Mat. Chem. Polyhedron, J. of Solid State Chemistry, European J. of Inorganic Chemistry, Magnetochemistry, Inorganic Chemistry Frontiers, etc.
- Evaluator for Spain, France, Switzerland and USA funding agencies.

C.8 Organization of Scientific Meeting and Conferences

- National Organizing committee (QUIES 12, Granada, Spain,2008,QIES 14, Almería, Spain, 2014;QIES 16, Torremolinos, Málaga, Spain, 2016, 5th EuCheMS Conference on Nitrogen Legends, Granada, Spain, 2011).
- National Scientific Committee (40th International Conference on Coordination Chemistry, Valencia, 2012; 5th European Conference on Molecular Magnets, Zaragoza, 2015, Spain)

C.9 Other merits

- Supervisor: 7 Master Thesis, 4 degree Thesis.
- Teaching innovation projects: 3
- Scientific responsible for the SQUID and PPMS of the CIC, University of Granada.
- 7 Five-years teaching periods recognized by the University of Granada (quinquenios) and 5 Regional teaching/research recognized by Junta de Andalucía.
- Member of the editorial board of the Journal Magnetochemistry
- Board member of the Spanish group of solid state and Inorganic Chemistry of the Spanish Royal Society of Chemistry (since 2013-2018).

CURRICULUM VITAE ABREVIADO (CVA)

AVISO IMPORTANTE – El *Curriculum Vitae* abreviado no podrá exceder de 4 páginas. Para rellenar correctamente este documento, lea detenidamente las instrucciones disponibles en la web de la convocatoria.

Fecha del CVA	09/01/2025

Parte A. DATOS PERSONALES

Nombre	Laura		
Apellidos	Lechuga Gómez		
Sexo (*)	Mujer		
Dirección email	Laura.lechuga@icn2.cat	URL Web	Nanob2a.icn2.cat
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-5187-5358		

A.1. Situación profesional actual

Puesto	Profesora de Investigación CSIC		
Fecha inicio	19/07/2008		
Organismo/ Institución	Consejo Superior de Investigaciones Científicas (CSIC) e Instituto Catalán de Nanociencia y Nanotecnología (ICN2)		
Departamento/ Centro	Grupo de Nanobiosensores y Aplicaciones Bioanalíticas		
País	España	Teléfono	646832383
Palabras clave	Biosensores ópticos. Plasmónica. Fotónica de Silicio. Dispositivos Lab-on-chip & Point-of-Care. Biofuncionalización de superficies. Diagnóstico clínico y medioambiental.		

A.2. Situación profesional anterior

Periodo	**Puesto/ Institución/ País / Motivo interrupción**
Junio 86-Dic 87	Becaria PFPI. Junta de Andalucía, Universidad de Cádiz
Enero 88-Dic 91	Becaria PFPI. Ministerio de Educación y Ciencia (MEC). Centro Nacional de Microelectrónica (CSIC)
Mayo 92-Oct. 92	Contratada laboral. Centro Nacional de Microelectrónica CSIC)
Oct. 92- Oct. 94	Becaria Postdoctoral. University of Twente (NL)
Nov.94- Abril 95	Investigador Contratado (Programa de Reincorporación de Doctores)
Abril 1995 -Mayo 2007	Científica Titular. Inst. de Microelectrónica de Madrid CSIC)
2002-2004	Directora Dpto. Instituto de Microelectrónica de Madrid CSIC)
Mayo 2007 - Julio 2008	Investigadora Científica. Inst. de Microelectrónica de Madrid (CSIC)

A.3. Formación Académica

Grado/Master/Tesis	**Universidad/Pais**	**Año**
Ciencias Químicas	Facultad de Ciencias. Universidad de Cádiz	1980-1985
Titulada con Grado	Facultad de Ciencias. Universidad de Cádiz	1986
Ciencias Químicas	Facultad de Químicas. Universidad Complutens Madrid	1992

Part B. RESUMEN DEL CV

Indicadores principales

Publicaciones: sobre 300 publications
Índice h: 64; citas: +14300 (*Google Scholar*)
Patents: 8 familias de patentes, 4 secretos industriales y 2 empresas spin-offs
Sexenios: 6 (+ uno en tech transfer)
Formación de personal cientifico: 24 PhD (+3 en ejecución); 40 Postdocs; TFM y TFG (más de 70)

She has been at the forefront of the Photonic Biosensor area for more than twenty years, making key contributions and opening new horizons in this scientific and technological field. Among her multiple works related to the design and fabrication of new sensor devices, she has pioneering developments in photonics biosensors at international level as the integrated interferometers, the magnetoplasmonic sensor, the nanostructured plasmonic sensors or the optical microcantilever device, together with the demonstration of the utility of these biosensor technologies for real bioanalytical applications (clinical diagnosis and environmental control mainly). Since many years, her Group is considered as a **world reference** in the field of Photonic Biosensors. Her research work is summarized in around **300 publications**, which have received over 13.800 citations with an overall **h-index of 62** (source: Google Scholar). Her multidisciplinary publications are in high-ranked journals as Phy. Rev. Lett.; J. Appl. Phy.; Langmuir; Biosens&Bioelec.; Nucleid Acid Research; Laser&Photonics Reviews; Nanotechnology; TRAC; ACS Nano; Nanotoday; Angewandte Chemie; Optics Express; Optics Lett.; J. Lightwave Tech. Moreover, she is co-inventor of several licensed patents and trade secrets, co-founder of **three spin-offs** companies and has mentored a high number of PhD, postdoc, and master students. She participates in diverse SAB of national and international institutions and in high-level international Review panels (including **Panel Chair** of **Advanced ERC Grants**).

She has delivered Plenary, Keynote and Invited presentations at the most prestigious international conferences in her field of research and accounts with an impressive track record of more than **500 invited presentations** at the worldwide level. She has also been the Chairperson of the EUROPTRODE Conference (major conference in her field), Director of a NATO Advanced Research Workshop, co-chairman of many symposiums in major conferences (as MRS, CLEO, LAOP). She has been invited to serve on more of 100 Scientific Committees of Conferences, including the top ones in her field. Currently Associate Editor of Analytical Chemistry (ACS) (RSC) and was Associate editor of the IEEE Photonics J., J. Optics and Laser Technology (Elsevier) and Analyst (RSC). The quality of her research has been recognized by numerous distinctions and awards, as the election as **OSA Fellow** in 2014, the **Physics, Innovation and Technology Prize** from the Spanish Royal Physics Society (RSEF) and BBVA Foundation in 2016, the **Ada Byron Prize 2020**, and the two more prestiguos scientific prizes in Spain: the **King Jaume I** award in New Technologies and the **Spanish National Research Prize** "Juan de la Cierva" in Tech Transfer (*first women even*). From 2021 to 2023, she has been awarded with the **XVIII Burdinola Research Prize**, the **XVII Medal of the International Foundation Olof Palme,** the **Doctorate Honoris Causa** by the **University of Cádiz**, **the Lung Ambition Alliance Prize** from ASTRAZENECA, the **National Prize in Nanotechnology**, and the **Doctorate Honoris Causa** by the **University of León** in 2024 among others.

Part C. MERITOS RELEVANTES

C.1. Publicaciones

Lista completa: https://scholar.google.es/citations?user=kDbKk6IAAAAJ&hl=es

Publicaciones seleccionadas

1. M.A. Otte, B. Sepúlveda, W. Ni, J. Pérez-Juste, L.M. Liz-Marzan and **L.M. Lechuga**. Identification of the optimal spectral region for plasmonic and nanoplasmonic sensing. **ACS Nano** 4 (1), 349-357 (2010)
2. K.E. Zinoviev, A.B. González-Guerrero, C. Domínguez and **L. M. Lechuga**. Integrated Bimodal Waveguide Interferometric Biosensor for Label-free Analysis. **J. Lightwave Tech.** 29(13), 1926-1930 (2011)
3. M.C. Estevez, M. Álvarez and L.M. Lechuga. Integrated Optical devices for lab-on-a-chip biosensing applications. **Laser & Photonics Reviews** 6(4), 463-487 (2012)
4. M. Soler, P. Mesa-Antúnez, M.C. Estévez, A. J. Ruiz-Sánchez, M. A. Otte, B. Sepúlveda, D. Collado, C. Mayorga, M. J. Torres, E. Perez-Inestrosa and **L.M. Lechuga**. Highly Sensitive Dendrimer-based Nanoplasmonic Biosensor for Drug Allergy Diagnosis. **Biosensors & Bioelectronics** 66, 115-123 (2015)
5. C. S. Huertas, D. Fariña and **L.M. Lechuga.** Direct and label-free quantification of micro-RNA-181a at attomolar level in complex media using a nanophotonic biosensor. **ACS Sensors**, 1, 748−756 (2016)
6. M. Soler, M.-C. Estévez, M.C. Cardenosa-Rubio, A. Astúa, and **L.M. Lechuga.** How nanophotonic label free biosensors can contribute to rapid and massive diagnostics of

respiratory virus infections: COVID-19 case. **ACS Sensors**. 5 (9), 2663-2678 (2020)

C.2. Conferencias invitadas y organización

More than **500 invited presentations** at worldwide level. Plenary, Keynote and Invited Conferences at National and International level. More than 200 Lectures in courses, schools, masters, and seminars. More than 25 Lectures on scientific outreach.
More than 240 regular contributions in Conferences and Workshops. Conferences and Courses Organization: Director, Chairperson, co-chair or co-organiser: 33 Member of Conference Scientific Advisory Committee: >90

C.3. Proyectos de investigación

- Participation in **more than 95** competitive Projects at National, International and EU level, from which **60** as Coordinator or PI.
- Numerous projects with private funding and Industrial contracts.
- Member of the ICN2 team granted with the **"Centre of Excellence Severo Ochoa"** (***three times***) from the Spanish Ministry of Science and Innovation.
- Selected for the Science and **Technology Transfer Program** of the private M. Botín Foundation with a grant of 1.1 M€ (*only 26 top Spanish scientists selected*).

Granted projects (*some examples from last 5 years*)
- **EROICA**: Detección de Biomarcadores Epigenéticos para el Diagnóstico y Pronóstico de Cáncer de Ovario mediante el uso de Plataformas Nanofotónicas Ultrasensibles. Ministerio de Ciencia e Innovación. PID2019-105132RB-I00. 01/06/2020 to 31/05/2023
- **CONVAT**: Combating 2019-nCoV: Advanced Nanobiosensing platforms for POC global diagnostics and surveillance. EU, H2020-EU.3.1.3-Treating and managing disease 101003544. From 10/03/2020 to 09/03/2022. **COORDINATOR**.
- **AMBROSIA:** A Multiplexed Plasmo-Photonic Biosensing Platform for Rapid and Intelligent Sepsis Diagnosis at the Point-of-Care. HORIZON-CL4-2022-DIGITAL-EMERGING-01-03. From 2022 to 2026

C.4. Transferencia de Tecnología y proyectos industriales

Spin-offs
- Main promoter and co-founder of a spin-off (SENSIA, SL, 2004) (CIF: B83932426) (Scientific advisor 2004-2007). One of her main achievements was negotiation and sale of the company to one large Spanish industry.
- Co-founder of the spin-off (BIO OPTICAL DETECTION, SL, (BIOD, SL, 2010) (CIF: B11807567). INNOCASH award in 2009.Closed in 2021.
- Co-founder of the spin-off EROICA Dx in 2024 (in final steps of constitution)

Industrial Collaborations
Since 1990 (PhD period) Prof. Laura M. Lechuga has performed an extensive activity of collaboration with industries and companies through private industrial contracts and national projects with Spanish companies as: Tabacalera, S.A.; Adirondack, SL; AGBAR, SA; CEPSA, S.A., Protein Alt., SL; Mondragón; Biomedal, S.L., PROMAX ELECTRONICA, SL.

Industrial Projects (*selected ones*)
- **URINETEST**: Métodos Rápidos de análisis de péptidos inmunogénicos alimenticios en orina. Programa RETOS-COLABORACIÓN. Ministerio de Economía y Competitividad. (RTC- 2016-5452-1). Biomedal, SL; ICN2; Univ. de Sevilla. De 01/09/2016 a 01/09/2018.
- **DIONISOS**: Desarrollo de Inmunoreactivos y biosensores para el análisis de trazadores en yacimientos petrolíferos. RETOS COLABORACIÓN 2017, Agencia Estatal de Investigación (RTC-2017-6222-5), CEPSA, Univ. Politécnica de Valencia (UPV). 2018- 2021

Patentes
8 families of patents and 4 trade secrets. Patents applications: Spanish (7), PCT (7), European (5), US (4), Japan (4), China (3), Australia (1), and Canada (3). Patents Granted: 12 granted (Spanish, PCT, Europe, US, Japan, China). Patents Licensed: 7 transferred to industry (MECWINDS S.L, SENSIA S.L. PROMAX ELECTRÓNICA, S.A.).

C.5. Distinciones y Premios

2024 **Honorary Academic** of the Young Scientific Academy of Spain
2024 **Doctor Honoris Causa** by the University of León (Spain) (*first women ever*)

2023 **Honorary Athenais** of the Federation of Athenaeums of Andalusia
2023 Award **"Social Involvement in the Public Universities of Andalusia"** Forum of Social Councils of Public Universities of Andalusia (Spain).
2023 Awarded with the **III Edition of the National Nanotechnology Prize** NOB166®
2023 Award in the **4th Edition of Sepsis Code Awards.** Sepsis Code Foundation.
2023 **Honorary Member** of the Spanish Optical Society
2022 1st Prize from **Lung Ambition Alliance (LAA)** and **ASTRAZENECA**
2021 **National Antibiotic Resistance Plan Award**
2021 **Prize Social Involvement** (Graduate category). Social Council Univ. of Cádiz
2021 **Doctor Honoris Causa** by the University of Cádiz (Spain)
2021 **XVII Medal** of the **International Foundation Olof Palme**
2021 **Fellow** of the **Royal Society of Chemistry (RSC)**
2021 **Burdinola Research Prize** in Nanomedicine
2020 **Spanish National Research Prize** in Tech Transfer (*1st women ever*)
2020 **King Jaume I Prize** in New Technologies
2020 **Ada Byron Prize** from Deusto University
2016 **Physics, Innovation and Technology Prize** from the Spanish Royal Physics Society (RSEF) and BBVA Foundation
2016 Nominated for the **Spanish National Selection** of Best Scientists (QUO&CSIC)
2014 **OSA Fellow.** Elected as Fellow of the Optical Society (OSA)
2004 **1st Prize** in the "II Concurso de ideas spin-off "(CAM, Madrid, Spain)

C.6. Scientific Evaluation Tasks

Participation in high level evaluation panels for national and international worldwide agencies: Spanish National Review Panels: Panel member of Electronic and Telecommunication Program (2007), Panel member of National Material Program (2010). Spanish Ministry of Science. Since 2014. Coordinator of the Review Panel of Physics in Explora Call. Spanish Ministry of Science. Panel member: CAM, Junta de Andalucia, Plan Nacional, etc.
European Union Review Panels: More than **42** panel evaluation/high expert panels for the 5th, 6th, 7th and H2020 EU programs (Including: ERC (Starting, Consolidator and Panel member and **Panel Chair** Advanced **ERC**), ICT, FET-Open, NMP, GROWTH, Marie-Curie, NEST…
International and other European Review Panels: SNF (Switzerland); SFI (Ireland), NSF (USA); FSnano (Argentina); FPS (Poland); Vinnova (Sweden); Academy of Finland; FWO (Belgium). Remote Evaluation for public/private organizations in Canada, France, Netherlands, UK, Ireland, Sweden, Argentina, Hungary, Italy, Israel, Switzerland, Poland, etc

C.8.Science dissemination and mass media

She has been one of the **pioneers at national level** of science dissemination since 2000. She has participated or have been the subject of more than **250** TV, radio, web programs conferences for public, besides press interviews and reports. She has been interviewed on-line in the most viewed TV and Radio programs in Spain. Her profile is included in the Wikipedia (https://es.wikipedia.org/wiki/Laura_Lechuga). She is the author of the book "*Una cientifica saltando vallas*" (Plataforma Editorial). Científica referente en los **libros de texto** de 3º ESO Física y Química de la **Editorial Anaya** (2024).

Fecha del CVA	20/12/2024

Parte A. DATOS PERSONALES

Nombre	María Isabel		
Apellidos	del Hierro Morales		
Sexo	Mujer	Fecha de Nacimiento	
DNI/NIE/Pasaporte			
URL Web			
Dirección Email	isabel.hierro@urjc.es		
Open Researcher and Contributor ID (ORCID)	0000-0001-9749-098X		

A.1. Situación profesional actual

Puesto	Catedrática de Universidad		
Fecha inicio	2017		
Organismo / Institución	Universidad Rey Juan Carlos		
Departamento / Centro	Biología, Geología, Física y Química Inorgánica / Escuela Superior de Ciencias Experimentales y Tecnología		
País		Teléfono	
Palabras clave	230300 - Química inorgánica		

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES

C.1. Publicaciones más importantes en libros y revistas con "peer review" y conferencias

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores. Si aplica, indique el número de citaciones

1 **Artículo científico**. Isabel del Hierro; Francisco Reyes-Telléz; Raquel Herrera; Javier Lillo; Josefa Ortiz-Bustos; Alberto Polo-Romero; Yolanda Pérez-Cortes; Gonzalo Viñuales-Ferreiro. 2024. Analyzing Lime Mortars from a Historic Construction in Magán (Toledo, Spain): Insights into Mineralogy and Firing Temperatures ❑Journal of Archaeologial Reports. Science Direct.

2 **Artículo científico**. Yolanda Pérez Cortes; Isabel del Hierro; Santiago Gómez Ruiz; Josefa Ortiz-Busots; Helena Pérez del Pulgar. 2024. Efficient Visible-Light-Driven Photocatalysis: Simultaneous Degradation of Multiple Pollutants with Bismuth Oxyhalide Solid Solutions. Environmental Science: Water Research & Technology. Royal Society of Chemistry.

3 **Artículo científico**. Josefa Ortiz-Bustos; Sofia F. Soares; Helena Pérez del Pulgar; Yolanda Pérez; Ana Luisa Da Silva; Isabel del Hierro. 2024. Tuning Adsorption Capacities of Hybrid Mesoporous Silica Nanospheres and Adsorption Mechanism Study for Sulfamethoxazole and Diclofenac Removal from Water. Journal of Molecular Liquids. Elsevier.

4 **Artículo científico**. L; I; Y.; I; F; M; J; M.A. 2023. 2D/2D NiTi-LDH/BiOBr photocatalyst with extraordinary NOx removal under visible light. Chemical Engineering Journal. Elsevier. 470, pp.144088.

5 **Artículo científico**. Yolanda; Helena; Josefa. 2023. Enhanced adsorption–catalysis combination for the removal of sulphur from fuels using polyoxometalates supported on amphipathic hybrid mesoporous silica nanoparticles. Dalton Transactions. Royal Society of Chemistry. 52, pp.10423.

6 **Artículo científico**. Yolanda; Josefa. 2022. Photocatalytic oxidative desulfurization and degradation of organic pollutants under visible light using TiO2 nanoparticles modified with iron and sulphate ions. Ceramics International. Science Direct. 48, pp.6905-6916.

7 **Artículo científico**. Josefa Ortiz-Bustos; Paula Cruz; Yolanda Pérez; Isabel del Hierro. 2022. Prolinate-based heterogeneous catalyst for Knoevenagel condensation reaction: Insights into mechanism reaction using solid-state electrochemical studies. Molecular Catalysis. Science Direct. 524, pp.112328.

8 **Artículo científico**. Josefa; Yolanda; Isabel. 2021. Structure, stability, electrochemical and catalytic properties of polyoxometalates immobilized on choline-based hybrid mesoporous silica. MICROPOROUS AND MESOPOROUS MATERIALS. ELSEVIER. 321, pp.111128.

9 **Artículo científico**. Josefa Ortiz-Bustos; (2/5) Isabel del Hierro; Antonio Sánchez Ruiz; Joaquin C. García Martinez; Yolanda Pérez. 2021. Tuning of type-I and type-II mechanisms for visible light degradation in tris(styryl)benzene-sensitized TiO2 nanoparticles. Dyes and Pigments. Elsevier. 184, pp.108802-108902.

10 **Artículo científico**. Josefa Ortiz-Bustos; Santiago Gómez Ruiz; Jaime Mazario; Marcelo E. Domine; (5/6) Isabel del Hierro Morales (AC); Yolanda Pérez Cortes. 2020. Copper and sulphur co-doped titanium oxide nanoparticles with enhanced catalytic and photocatalytic properties†. Catalysis Science & Technology. Royal Society of Chemistry. https://doi.org/10.1039/D0CY01041C

11 **Artículo científico**. Diana Díaz; Perla R.Ardiles; Miguel Diaz-Sanchez; et al; Santiago Gómez-Ruiz; (5/9) Isabel del Hierro. 2020. Copper-functionalized nanostructured silica-based systems: Study of the antimicrobial applications and ROS generation against gram positive and gram negative bacteria. JOURNAL OF INORGANIC BIOCHEMISTRY. Elsevier. 238-Artículo 110912, pp.1-14. ISSN 0162-0134.

12 **Artículo científico**. Diana Díaz García; Lucia Sommerova; Andrea Martisova; et al; Santiago Gómez Ruiz; (8/10) Victor Kanicky. 2020. Mesoporous silica nanoparticles functionalized with a dialkoxide diorganotin(IV) compound: In search of more selective systems against cancer cells. MICROPOROUS AND MESOPOROUS MATERIALS. ELSEVIER. 300, pp.110154.

13 **Artículo científico**. Paula Cruz; Mariano Fajardo; (3/4) Isabel del Hierro (AC); Yolanda Pérez. 2019. Selective oxidation of thioanisole by titanium complexes immobilized on mesoporous silica nanoparticles: elucidating the environment of titanium(IV) species. CATALYSIS SCIENCE & TECHNOLOGY. Royal Society of Chemistry. ISSN 2044-4753.

14 **Artículo científico**. Yolanda Pérez; Isabel del Hierro; Mariano Fajardo; (4/5) Elizabeth Granados (AC); Paula Cruz. 2019. Heterogeneousoxidativedesulfurizationcatalysedbytitaniumgrafted mesoporoussilicananoparticlescontainingtetheredhydrophobicionic liquid:Adualactivationmechanism. Applied Catalysis A, General. Science Direct. 587-117241, pp.1-11. ISSN 0926-860X.

15 **Artículo científico**. Daniel González-Muñoz; Antonio Casado-Sánchez; (3/6) Isabel del Hierro; Santiago Gómez-Ruiz; Silvia Cabrera; José Alemán. 2019. Size-selective mesoporous silica-based Pt(II) complex as efficient and reusable photocatalytic material. Journal of Catalysis. Elsevier. 373, pp.374-383.

C.3. Proyectos o líneas de investigación

1 **Proyecto**. PID2022-136417NB-I00, Agentes generadores de ROS basados en materiales nanoestructurados multiFUNcionales para aplicaciones ambientales y terapéuticas. Ministerio de Ciencia, Innovación y Universidades. Santiago Gómez Ruiz. (Universidad Rey Juan Carlos). 01/09/2023-30/11/2025. Miembro de equipo.

2 **Proyecto**. Red Temática METALBIO: Metales e iones metálicos en sistemas biológicos. Ministerio de Economía y Competitividad. (Universidad Rey Juan Carlos). 01/01/2023-30/11/2025. Entidades participantes: UVIGO, USC, UJA, UGR, UB, UDC, UAM, UIB, UNEX, URJC Investigador responsable: Dr. Ezequiel Vázquez (UVIGO)

3 **Proyecto**. TED2021-132175B-I00, Nanosistemas versátiles multifuncionales y reutilizables para la reducción de las emisiones mediante captura y valorización de dióxido de carbono y nitrógeno. Agencia Estatal de Investigación. Santiago Gómez Ruiz. (Universidad Rey Juan Carlos). 01/12/2022-30/11/2024. Miembro de equipo.

4 **Proyecto**. Materiales semiconductores con aplicación en fotoelectrocatálisis. Desarrollo de sistemas sinérgicos para la degradación de contaminantes y producción de H2 y/o O2. Universidad Rey Juan Carlos. (Universidad Rey Juan Carlos). 01/01/2023-31/12/2023. Miembro de equipo.

5 **Proyecto**. Multifunctional nanostructured systems with enhanced biomedical, catalytic and photocatalytic (RTI2018-094322-B-I00). Ministerio de Ciencia, Innovación y Universidades. Mariano Fajardo. (Universidad Rey Juan Carlos). 01/01/2019-31/12/2021. 113.861 €. Miembro de equipo.

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CURRICULUM VITAE (CVA)

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

CV date	22/07/2024

Part A. PERSONAL INFORMATION

First name	Félix		
Family name	Zamora Abanades		
Gender (*)	Male		
e-mail	felix.zamora@uam.es	URL Web: nanomater.es	
Open Research and Contributor ID (ORCID)(*)	0000-0001-7529-5120		

A.1. Current position

Position	Full Professor/Catedrático de Universidad		
Initial date	2/10/2020		
Institution	Universidad Autónoma de Madrid (UAM)		
Departament/Center	Departamento de Química Inorgánica		
Country	Spain	Teleph. number	+34914973962
Keywords	covalent organic frameworks, metal-organic frameworks, bidimensional materials, nanomaterials.		

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
1/10/92-30/9/94	Assistant UAM
1/10/94-30/9/97	Assistant Dr. UAM
1/10/97-30/4/99	Lecture Dr. UAM
1/5/99-21/10/02	Associate Dr. UAM
22/10/02-1/10/2020	Asociate Prof. (Titular) UAM
From 1/5/2013-2023	Asociate Research Prof. IMDEA Nanociencia

A.3. Education

PhD	University	Year
PhD in Science	Autónoma de Madrid	1994
Graduate in Chemistry	Autónoma de Madrid	1990

Sexenios: Investigación: 6 (de 6 posibles); Transferencia: 1 (de 1 posible)

Part B. CV SUMMARY: Dr. Felix Zamora (Researcher ID: E-6265-2014; Orcid Code: 0000-0001-7529-5120) is a Full Professor at the Department of Inorganic Chemistry & Vicerrector of Innovation and Transfer at UAM and member of the Condensed Matter Physics Institute Center (IFIMAC; Excelencia Maria de Maeztu). In October 2020, he was appointed as a *distinguished full professor* with the mention of the Excellence Program for University Professors of the CAM. Awarded as finalist managers of the EnerTIC Awards 2022 within the "Training, Research and Technology Transfer" sector, dependent on the Ministry of Economic Affairs and Digital Transformation, Secretary of State for Digitization and Artificial Intelligence. In 2015, he was awarded by the *Spanish Royal Society of Chemistry with Research Excellence*.

At the helm of the Nanomaterials Laboratory (nanomater.es), Dr. Zamora has spearheaded groundbreaking research, resulting in over 257 publications (h-index: 58; Cites: 15701 Google Scholar) in esteemed scientific journals and five book chapters. His scholarly endeavors encompass diverse disciplines, including material science, nanoscience, multidisciplinary chemistry, and inorganic chemistry, with contributions to top-tier journals such as Nature Nanotechnology, Nature Communications, and the Journal of the American Chemical Society,

Angew. Chem, Adv. Mater.,... More than 75 national and international invited talks at Universities and International Conferences. He has also published 10 patents (2 transferred to companies).

His recent research has focused on: i) the preparation and characterization of new nanomaterials with multifunctional properties, including molecular wires based on 1D-coordination polymers and lamellar coordination polymers to produce 2D-polymers and films; ii) Porous materials based on Covalent Organic Frameworks; iii) Alternative 2D materials to graphene ("antimonene" isolation in 2016).

He has spent several periods as a visiting professor at the Nanoscience Laboratory (University of Newcastle; 2 summer periods: 2010/2012, awarded with a Salvador Madariaga - Ministerio de Educación Fellowship), at the Chemistry Department of the National University of Singapore, and at the Singapore Graphene Center (7 summer periods: 2013, 2015-2019, 2024), Universidad de Antofagasta (Chile, 2022). He is a visiting professor of Northwestern Polytechnical University (Xi'an, China 2023-2027).

He is Editor-in-Chief of "Inorganic Materials and Metal-Organic Frameworks" section of Nanomaterials Journal MDPI (2020-currently) and Editor-in-Chief of "Porous Crystalline Frameworks" section of Frontiers in Chemistry (2023-currently). He was in the editorial board of Scientific Reports (Nature Publishing Group) (2013-2021), General Chemistry Journal (2017-currently) and Nanomaterials Journal MDPI (2017-2020).

He has developed I+D projects with several companies Abengoa Research, Nanoinnova Tech., Repsol, and Fourteen Energies.

He is the founder and scientific advisor of the companies Nanoinnova Technologies S.L. (founded in 2008, UAM spin-off company, www.nanoinnova.com), Porous Inks Technologies S.L. (founded in 2020, UAM spin-off company), and Fourteen Energies S.L. (founded in 2019, UAM spin-off company).

In the last 5 years, he has participated as an IP in 16 research projects at European level, National, and Regional as well as in 7 contracts with public and private entities (Abengoa, Iturri S.L., Porous Inks Tech., 2x Nanoinnova Tech. S.L., Fourteen Energies S.L.).

Member of international board of the Reseau déxcellemce ensolides poreux RESPORE (2017-). He is currently at the panel of evaluators of the ANEP (2008-), ANECA (2012-) and evaluator of international agencies Nacional Science Foundation (NSF, USA) (from 2010); ERC program (2009-); Deutsche Forschungsgemeinschaft (2013-); Agencia Nacional de Promoción Científica y Tecnológica Argentina (2012-); Swiss National Science Foundation (SNSF-) (2013-); FNRS Belgium (2017-); Postdoctoral program ETH Zurich (2017-), Austrian SFB-Program for research institutes of excellence (2017), as well as regular reviewer of scientific journals: e.g. Nature PG., ACS, CSR, Wiley-VCH, etc.

Part C. RELEVANT MERITS

C.1. Publications (147 publications from 2013-2024. 70% in Q1; 91% published in Q1 ranked Journals)

Selected Research Articles (last ten years)

1. Laura Merí-Bofí, Sergio Royuela, Félix Zamora, M. Luisa Ruiz-Gonzalez, José L. Segura,* Riansares Muñoz-Olivas,* María José Mancheño*. Thiol Grafted Imine-Based Covalent Organic Framework for Water Remediation Through Selective Removal of Hg(II). J. Mater. Chem. A., 5, 17973-17981 (2017). DOI: 10.1039/c7ta05588a. Q1, IF=10.7, citations= 189
2. P. Albacete, J. I. Martinez, X. Li, A. López-Moreno, S. Mena-Hernando, A.E. Platero-Prats, C. Montoro, K. P. Loh, E.M. Pérez, F. Zamora. J. Am. Chem. Soc. 140, 12922–12929. (2018). Q1, IF=14.7, citations= 140
3. Carlos Franco, David Rodríguez-San-Miguel, Alessandro Sorrenti, Semih Sevim, Ramon Pons, Ana E. Platero-Prats, Marko Pavlovic, Istvan Szilágyi, M. Luisa Ruiz Gonzalez, José M. González-Calbet, Davide Bochicchio, Luca Pesce, Giovanni M. Pavan, Inhar Imaz, Mary Cano-Sarabia, Daniel Maspoch, Salvador Pané, Andrew J. deMello, Felix Zamora*, Josep Puigmartí-Luis*. Biomimetic synthesis of sub-20 nanometer covalent organic frameworks colloids in water. J. Am. Chem. Soc. 2020, 142, 7, 3540-3547. DOI: 10.1021/jacs.9b12389. Q1, IF=14.7, citations= 64

4. Jesús Á. Martín-Illán, David Rodríguez-San-Miguel, Oscar Castillo, Garikoitz Beobide, Javier Perez-Carvajal, Inhar Imaz, Daniel Maspoch*, Felix Zamora*. Macroscopic Ultralight Aerogel Monoliths of Imine-based Covalent Organic Frameworks. Angew. Chem. Int. Ed. 2021, 60, 13969–13977. DOI: 10.1002/anie.202100881. HOT ARTICLE. Q1, IF=16.6, citations=78
5. Jesús Á. Martín-Illán, José Antonio Suárez, Julio Gómez-Herrero, Pablo Ares, Daniel Gallego-Fuente, Youdong Cheng, Dan Zhao, Daniel Maspoch and Félix Zamora*. Ultra-Large Free-Standing Imine-based Covalent Organic Framework Membranes Fabricated via Compression. Adv. Sci. 2022, 2104643. DOI: 10.1002/advs.202104643. Q1, IF= 18.9, citations=29
6. Jesús Á. Martín-Illán, Laura Sierra, Pilar Ocón, Prof. Félix Zamora. Electrochemical Double-Layer Capacitor based on Carbon@ Covalent Organic Framework Aerogels. Angew. Chem. Int. Ed. 61, e202213106 (2022). DOI: 10.1002/anie.202213106. HOT paper. Q1, IF=16.6, citations=15
7. A Guillem-Navajas, JÁ Martín-Illán, E Salagre, EG Michel, D. Rodriguez-San-Miguel, F Zamora. Iron Oxyhydroxide-Covalent Organic Framework Nanocomposite for Efficient As (III) Removal in Water. ACS Applied Materials & Interfaces 2022, 14 (44), 50163-50170. DOI: 10.1021/acsami.2c14744. Q1, IF= 8.3, citations= 8
8. Sergio Royuela, Semih Sevim, Guillermo Hernanz, David Rodríguez-San-Miguel, Carlos Franco, Salvador Pané, Josep Puigmartí-Luis* and Félix Zamora* 3D Printing of Covalent Organic Frameworks: A Microfluidic-Based System to Manufacture Binder-Free Macroscopic Monoliths. Adv. Func. Mater. 2023, 2314634. DOI: 10.1002/adfm.202314634. Q1, IF= 18.5, citations=4
9. J. Á. Martín-Illán, L. Sierra, A. Guillem-Navajas, J. A. Suárez, S. Royuela, D. Rodríguez-San-Miguel, D. Maspoch, P. Ocón, F. Zamora*. β-Ketoenamine-Linked Covalent Organic Frameworks Synthesized via Gel-to-Gel Monomer Exchange Reaction: From Aerogel Monoliths to Electrodes for Supercapacitors. Adv. Func. Mater. 2024, 2403567. DOI: 10.1002/adfm.202403567. Q1, IF= 18.5, citations=0
10. Cristina Arqueros, Lorena Welte, Carmen Montoro* and Félix Zamora*. Imine-based Covalent Organic Framework Gels for Efficient Removal of Fe2+ from contaminated water. J. Mater. Chem. A 2024, Advance Article. DOI: doi.org/10.1039/D4TA00954A. Q1, IF=10.7, citations=0

Selected Reviews: 1) F. Zamora *et al.* Covalent organic frameworks based on Schiff-base chemistry: synthesis, properties and potential applications. Chem. Soc. Rev. 45 (2016) 5635 - 5671. Q1, IF= 40.4, citations= 999; **2)** F. Zamora, Z. Zhu, H.B. Zeng *et al*. Recent progress in 2D group-VA semiconductors: From theory to experiment. Chem. Soc. Rev. 47, 982-1021 (2018). Q1, IF= 40.4, citations= 719; **3)** D. Rodriguez-San-Miguel & F. Zamora. Processing of covalent organic frameworks: an ingredient for a material to succeed. Chem. Soc. Rev., 48, 4375-4386 (2019). Q1, IF: 42.8, citations=138; **4)** F. Zamora *et al.* Covalent organic framework nanosheets: preparation, properties and applications. Chem. Soc. Rev. 49, 2291–2302 (2020). Q1, IF: 40.4, citations=260. **5)** Ke Tian Tan, Samrat Ghosh, Zhiyong Wang, Fuxiang Wen, David Rodríguez-San-Miguel, Jie Feng, Ning Huang, Wei Wang, Felix Zamora, Xinliang Feng, Arne Thomas, Donglin Jiang. Covalent organic frameworks. Nat.Rev. Prim. Meth. 3:1 (2023) DOI: 10.1038/s43586-022-00181-z. Q1, IF: 50.1, citations= 144.

C.3. Research projects (>2019): 1) Project Title: Two-dimensional materials with modular properties (MAT2013-46753-C2-1-P, MICINN, 2014-2016), PI: F. Zamora, Budget: 133.347 €; **2)** Project Title: Del diseño a las aplicaciones de materiales porosos avanzados (Network of excellence, CTQ2017-90691-REDT, MICINN, 2019-2022). PI & coordinator: F. Zamora. Budget: 17.000 €; **3)** Project Title: Preparation and characterization of single/few layer antimonene and germanium (PCI2018-093081; ERA NET Graphene Flagship (FLAG–ERA JTC 2017, 2019-2022). PI&coordinator: F. Zamora. Budget: total 499.000€) 174.000 € (subgroup); **4)** Project Title: Materiales bidimensionales con propiedades modulables ii

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(MAT2016-77608-C3-1-P, MICINN, 2016-2019). PI &coordinator: F. Zamora. Budget: 181.500 €. **5)** Doctorado Industrial CAM 2019 (CAM y Calidaire Sociedad de Imasdmasi SL, 2020-2023) PI: F. Zamora, Budget: 90.000 €; **6)** Project Title: Nuevos tejidos profilácticos eficientes contra SARS-COV-2 basados textiles no-tejidos modificados con grafeno y derivados, Banco de Santander CRUE, Fondo Supera COVID-19, 2020-2021). PI &coordinator: F. Zamora. Budget: 160.000 €; **7)** Project Title: Diseño de materiales 2d para aplicaciones de energia: membranas y baterias (PID2019-106268GB-C32, MICINN). PI &coordinator: F. Zamora. Budget: 157.300 €; **8)** Project Title: Doctorado Industrial CAM 2020; CAM & KleinScale SL, 2021-2024). PI & coordinator: F. Zamora. Budget: 90.000 €; **9)** Project Title: Programa de excelencia del profesorado universitario de la CAM (UAM2020-A475CU, 2020-2022). PI: F. Zamora. Budget: 150.000 €; **10)** Project Title: Escalado industrial de tintas basadas en materiales. MICINN, 2021-2023). PI & coordinator: F. Zamora. Budget: 132.250 €; **11)** Project Title: Explorando la interacción entre partículas víricas y materiales: fundamentos y aplicaciones profilácticas (VIRMAT, CAM; 2021-2023). PI: F. Zamora. Budget: 137.261 €; **12)** Project Title: Magnetoelectric 3D printing technology - the revolution of actuatable composites (HORIZON-EIC-2021-PATHFINDEROPEN-01, 2021-2024). PI: F. Zamora. Budget: 124.813 €; **13)** Project Title: Fabricacion aditiva de materiales porosos (PDC2022-133498-I00, MICINN, 2022-2024). PI: F. Zamora. Budget: 143.750 €; **14)** Project Title: Materiales porosos avanzados en separaciones energeticas de baja energia de gases de interes medioambiental (TED2021-129886B-C42, MICINN, 2021-2024). PI: F. Zamora. Budget: 276.000 €; **15)** Project Title: Instituto virtual de materiales avanzados disruptivos para aplicaciones tecnológicas emergentes IVI-MAD (MICINN y CAM, 2022-2024). PI: F. Zamora. Budget: 470.000 €.

C.4. Contracts, technological or transfer merits

Contracts (>2016): 1) Scaling to produce germanium nanosheets. Nanoinnova Tech. S.L. (Programa: 094401. FUAM Ref.: 2017/0089; 2016-2017). IP: F. Zamora; 2) Two-Dimensional Covalent Organic Frameworks functionalized with magnetic nanoparticles as draw solutes in forward osmosis for water desalination. Abengoa Res. (2014-P30M. 2014-2016) IP: F. Zamora; 3) Massive production of Graphene for inks, coatings, composites and membranes. Agengoa Res. (2013-2014) IP: F. Zamora; 4) Scaling-up for the production of germanium nanolayers. Nanoinnova Tech. S.L. Period: 2017. IP: F. Zamora; 5) Batteries based on nanostructured Ge. Fourteen Energies S.L. (2019-20). IP: F. Zamora; 6) Análisis de aplicabilidad de dispersiones micelares de materiales orgánicos porosos (MOF y COF). Porous Inks Tech S.L. (2020-2021). IP: F. Zamora.
Industrial Doctorates: 1) Industrial PhD CAM 2019. Founded by Comunidad de Madrid. Participants: UAM & Calidaire Sociedad de Imasdmasi Sl (2020-2023). Subject: Development of Raman sensor based for air detection contaminants. PI: F. Zamora. Budget: 90.000 €; 2) Industrial PhD CAM 2020. Founded by Comunidad de Madrid. Participants: UAM & KleinScale S.L. (2020-2023). Subject: Removal of cations from contaminated waters using COFs. PI: F. Zamora. Budget: 90.000 €. 3) Industrial PhD CAM 2023. Founded by Comunidad de Madrid. Participants: UAM & NanoInnova Technologies. S.L. Subject: Water treatment based on 2D materials and COFs. PI: F. Zamora. Budget: 90.000 €.
Patents: 1) Estructuras reticulares covalentes orgánicas basadas en heterociclos nitrogenados aromáticos. P201530590. 2) Esferas funcionalizadas de estructuras reticulares covalentes orgánicas funcionalizadas". P201530503. 3) Few-layer alpha-germanium crystal, their preparation processes and uses therof. PCT/ES2019/070052. WO2019149985A1. 4) Nanoreactors for synthesis of porous crystalline materials. EP18179325.8/WO2019243602.
Spin-off/Start-ups Companies: He is the founder and scientific advisor of the companies Nanoinnova Technologies S.L. (founded in 2008, UAM spin-off company, www.nanoinnova.com), Porous Inks Technologies S.L. (founded in 2020, UAM spin-off company), and Fourteen Energies S.L. (founded in 2019, UAM spin-off company).

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CURRICULUM VITAE (CVA)

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

CV date	22/01/2024

Part A. PERSONAL INFORMATION

First name	Natividad		
Family name	GALVEZ RODRIGUEZ		
Gender (*)	Female	Birth date	
ID number			
e-mail	ngalvez@ugr.es	https://wpd.ugr.es/~josema/wordpress/	
Open Research and Contributor ID (ORCID)(*)		0000-0003-4286-6278	

(*) Mandatory

A.1. Current position

Position	Professor of Inorganic Chemistry		
Initial date	10/08/2021		
Institution	Universidad de Granada		
Departament/Center	Química Inorgánica		
Country	Spain	Teleph. number	+34 958 249386
Key words	Biomaterials, Nanoparticles, proteins, Iron oxides, amyloid fibrils		

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

Period	Position/Institution/Country/Interruption cause
2010-2021	Associate Professor of Inorganic Chemistry, University of Granada, Spain
2005-2010	Ramon y Cajal Senior Researcher, University of Granada, Spain
2002-2004	DFG Post-doc, Université Paris VI, Paris (France)
2000-2002	Individual Marie Curie Fellowship Post-doc, Université Pierre et Marie Curie, Paris (France)
1999-2000	TMR Post-doc, Université Pierre et Marie Curie, Paris (France)
1995-1999	PhD researcher, University of Cordoba (Spain)

A.3. Education

PhD Chemistry	Universidad de Córdoba	1999
BSc (Chemistry)	Universidad de Granada	1993

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

Natividad Gálvez obtained her Master's Degree in Chemistry from the University of Granada and her PhD (with honors, Summa Cum Laude) from the University of Córdoba in 1999. Her research focused on the properties of iron oxides prepared in the presence of phosphate, mimicking natural environments. She completed her training with a three-month stay at the Macaulay Land Use Research Institute in Aberdeen, Scotland.

Following her PhD, she was awarded a TMR European postdoctoral fellowship at the Université Paris VI in France for a year. Subsequently, she spent two years (2000-2002) as a Marie Curie Individual postdoctoral scientist at the Université Pierre et Marie Curie-Paris VI, France. In 2003, she worked as a scientific collaborator under a research contract with the DFG (Deutsche Forschungsgemeinschaft) German Research Association at the Universities

Paris VI and Paris-Sud-XI in Paris, France. It was during her postdoctoral training that she was first introduced to the world of Nanoscience and Nanotechnology. The aim of the study was to synthesize isolated nanoparticles (magnetite/maghemite type) in solution to investigate the magnetic properties of a single magnetic nanoparticle using a new technique called micro-SQUID. The study conducted the first measurements of this type for maghemite magnetic nanoparticles.
In 2004, the author returned to Spain and worked as a Marie Curie-ERG scientist at the University of Granada. In 2005, she was awarded the prestigious 5-year Spanish research contract Ramón y Cajal at the University of Granada (2005-2010). Her arrival at the University of Granada allowed the creation of a new research group (BioNanoMet) in collaboration with Professor Jose M. Dominguez Vera, which has been continuously funded to this day.
In 2010, she obtained a permanent position as an Associate Professor at the University of Granada. In 2021, she got to the position of Professor in the Department of Inorganic Chemistry. Her research focuses on synthesising and structuring new nanometric entities. Her group has prepared multifunctional nanostructures, primarily for applications in biomedicine.
Currently, I am researching amyloid protein fibers as a scaffold for preparing bioinorganic hybrid functional materials with biomedical applications.
During my 6-month research stay (mobility aids Salvador de Madariaga) at the Federal Polytechnic School of Zurich, ETH, I had the opportunity to work with Prof. Mezzenga's esteemed group. This experience was highly productive and enabled me to establish a new collaboration and expand my research in the field of bioinorganic hybrid materials.
I have participated in a total of 22 projects, 14 as a researcher and 8 as PI. Of these, 5 were granted through competitive programs of the European Union, 11 through the national R&D plan, and 5 through the Junta de Andalucía.

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

C.1. Publications *(see instructions)*

1. Gold nanoparticle-coated apoferritin conductive nanowires. Pelayo-Punzano, Gloria; Jurado, Rocio; Lopez-Haro, Miguel; Cuesta, Rafael; Calvino, Jose J.; Dominguez-Vera, Jose M.; Galvez, Natividad*.
   ***RSC Advances* 2023, 13(28), 19420-19428**
2. Understanding the Formation of Apoferritin Amyloid Fibrils. Jurado, Rocio; Adamcik, Jozef; Sanchez-Ferrer, Antoni; Bolisetty, Sreenath; Mezzenga, Raffaele; Galvez, Natividad* ***Biomacromolecules 2021***, 22(5), 2057.
3. Probiotic cellulose: Antibiotic-free biomaterials with enhanced antibacterial activity. L. Sabio, A. González, G.B. Ramírez-Rodríguez, J. Gutiérrez-Fernández, O. Bañuelo, M. Olivares, N. Gálvez, J.M. Delgado-López, J.M. Dominguez-Vera*
   Acta Biomaterialia 2021, 124, 244.
4. Apoferritin protein amyloid fibrils with tunable chirality and polymorphism. R. Jurado, J. Adamcik, M. López-Haro, J.A. González-Vera, A. Ruiz-Arias, A. Sánchez-Ferrer, R. Cuesta, J.M. Domínguez-Vera, J.J. Calvino, A. Orte, R. Mezzenga*, N. Gálvez*.
   ***Journal of the American Chemical Society* 2019**, 141, 1606-1613.
5. Hybrid Nanoscopy of Hybrid Nanomaterials
   P. Bondía, R. Jurado, S. Casado, J.M. Domínguez-Vera, N. Gálvez*, Cristina Flors.
   ***Small* 2017**, 13(17), 1603784 (1 de 7).
6. Apoferritin fibers: a new template for 1D fluorescent hybrid nanostructures. R. Jurado, F. Castello, P. Bondia, S. Casado, C. Flors, R. Cuesta, J. M. Domínguez-Vera, A. Orte, N. Gálvez*. ***Nanoscale* 2016**, 8, 9648-9656.
7. Magnetic study on biodistribution and biodegradation of oral magnetic nanostructures in the rat gastrointestinal tract. M. Martín, A. Rodríguez-Nogales, V. Garcés, N. Gálvez, L. Gutiérrez, J. Gálvez, D. Rondón, M. Olivares, J. M. Dominguez-Vera*. ***Nanoscale* 2016**, 8, 15041.

8. Polyoxometalate Material as sensor of Bacterial Activity. A. González, N. Gálvez, M. Clemente-Leon, J.M. Dominguez-Vera*. Electrochromic ***Chemical Communications*** **2015**, 51, 10119-10122.
9. Magnetic Bacteria: Living Magnets at Room Temperature. M. Martín, F. Carmona, R. Cuesta, D. Rondón, N. Gálvez*, J.M. Domínguez-Vera*. Artificial ***Advanced Functional Materials*****, 2014**, 24, 3489-3493.
10. E. Valero, S. Tambalo, P. Marzola, M. Ortega-Munoz, F.J. Lopez-Jaramillo, F. Santoyo-Gonzalez, J. Lopez, J.J. Delgado, J.J. Calvino, R. Cuesta, N. Gálvez*, J.M. Dominguez-Vera*. ***Journal of the American Chemical Society*** **2011**, 133, 4889-4895.

C.2. Congress

More than 50 international and national congresses both as a guest speaker, oral and poster contributions.

C.3. Research projects

1. AEROGELES BASADOS EN BIOPOLÍMEROS Y NANOPARTÍCULAS METÁLICAS PARA APLICACIONES BIOMÉDICAS. PID2019-111461GB-100
Entidad financiadora: Ministerio de Ciencia e Unnovación
Cantidad financiada: 105.270 €
Duración desde: 01/06/2020 hasta: 28/02/2024
Investigador/a principal: Natividad Gálvez Rodríguez, José Manuel Domínguez Vera
Participants: UGR, ETH Zurich (Suiza), Universidad de Jaén.

2. NANOFIBRAS MAGNÉTICAS PARA LA DETECCIÓN TEMPRANA DE DEPÓSITOS AMILOIDES EN LA ENFERMEDAD DE ALZHEIMER. P18-RT-1373
Entidad financiadora: Junta de Andalucía. Proyectos de Excelencia
Cantidad financiada: 119.800 €
Duración desde: 01/01/2020 hasta: 31/12/2022
Investigador/a principal: Natividad Gálvez Rodríguez, José Manuel Domínguez Vera
Participants: UGR, Universidad de Jaén, University of Verona (Italy).

3. NANOQUIMICA CON BACTERIAS, BIOPOLIMEROS Y BIOFIBRAS. Ref.: CTQ2015-64538-R
Entidad Financiadora: MINECO
Duración: 2016 - 2019 Cuantia: 84.700 €
PI: NATIVIDAD GÁLVEZ RODRÍGUEZ, José M. Domínguez-Vera
Participants: UGR, Universidad de Jaén, RMIT University.

4. NANOPARTICULAS MULTIFUNCIONALES COMO AGENTE DE DIAGNOSTICO MULTIMODAL Y TERAPIAS AVANZADAS EN NANOMEDICINA. Ref.: P11-FQM-8136
Entidad Financiadora: Junta de Andalucía. Proyectos de Excelencia
Duración: 2013 - 2017 Cuantia: 229.065,05 €
PI: NATIVIDAD GÁLVEZ RODRÍGUEZ
Participants: UGR, Universidad de Jaén, Universidad de Cádiz.

5. MAGNETIC-FLUORESCENT BIONANOPARTICLES FOR THERANOSTIC APPLICATIONS. Ref:CTQ2012-32236
Funding: MINECO
Duración: 2013 – 2015 Cuantia: 74.000 €
PI: JOSÉ M. DOMÍNGUEZ VERA
Participants: UGR, UJAEN, University of Verona (Italy).

6. NANOESTRUCTURAS CON APLICACIONES BIOMÉDICAS EN DIAGNOSIS Y TERAPIA. GREIB.PT.2010.05
Entidad financiadora: Campus Excelencia UGR Duracion: 2010- 2011 Cuantía: 20.000 €
PI: NATIVIDAD GÁLVEZ RODRÍGUEZ.
Participants: UGR, Universidad de Jaén, Universidad de Verona (Italia).

7. SISTEMAS MAGNÉTICOS NANOESTRUCTURADOS. RYC-2005-001628
Entidad Financiadora: Ministerio Ciencia y Tecnología. Contratos Ramón y Cajal
Duracion: 2005- 2010 Cuantía: 15.000 €
PI: NATIVIDAD GÁLVEZ RODRÍGUEZ
Participants: UGR

8. MULTIFUNCIONAL METALLIC NANOPARTICLES USING BIOPLATFORMS. BIOMEDICAL APPLICATIONS. Ref.: CTQ2009-09344
Funding: MICINN (2009 – 2012), 100.000 €
PI: JOSÉ M. DOMÍNGUEZ VERA (Universidad de Granada)
Participants: UGR, Universidad de Jaén, University of Verona (Italy)

C.4. Contracts, technological or transfer merits

Contracts as Researcher
1. Nuevo enfoque para la prevención y tratamiento de infecciones vaginales con probióticos.
Company: BIOSEARCH Life SA (2018 – 2020), 115.000 €.

2. Nuevas Estrategias de Innovación Tecnológicas Orientadas a la Salud y el Bienestar Infantil y de la Mujer (CARMENTA).
Company: BIOSEARCH Life SA (2015 – 2017), 55.000 €.

3. "NANOPROB": A new form of iron supplement.
Company: BIOSEARCH Life SA (2014 – 2015), 45.000 €.

4. New applications of probiotics.
Company: BIOSEARCH Life SA (2011 – 2014), 155.000 €.

Patents

1. . J.M. Dominguez-Vera, J.M. Delgado-Lopez, L. Sabio, A. Gonzalez, N. Galvez. BIOMATERIAL COMPRISING BACTERIAL CELLULOSE AND PROBIOTICS AND USES THEREOF. PCT/EP2021/068166.

2. Dominguez-Vera, J.M.; Galvez, N.; Martin, M.; Carmona, F., Rondon, D.; Olivares, M. PROBIOTIC BACTERIA COMPRISING METALS, METAL NANOPARTICLES AND USES THEREOF. PCT/EP2014/063246. **Transferred to BIOSEARCH LIFE SA.**

3. Dominguez-Vera, J.M.; Galvez, N.; Fernandez, B.; Valero, E.; Calvino, J.J. Multifunctional nanostructures as SPECT/MRI bimodal diagnosis agents.
PCT Int. Appl. (2011), CODEN: PIXXD2 WO 2011045454 A2 20110421.

4. Dominguez Vera, J.M.; Galvez, N.; Valero, E.; Sanchez, P. Multifunctional vectorized nanostructures that can be used as contrast imaging agents for optical imaging using MRI, fluorescence OI or scintigraphy for cancer diagnosis.
PCT Int. Appl. (2011), CODEN: PIXXD2 WO 2011070203 A2 20110616.

5. Dominguez-Vera, J.M.; Galvez, N.; Fernandez, B.; Valero, E.; Boschi, F.; Calderan, L.; Marzola, P.; Calvino, J.J.; Hungria, A.B.; Cuesta, R.
Multifunctional nanostructures as trimodal MRI/OI/SPECT diagnosis agents.
PCT Int. Appl. (2011), CODEN: PIXXD2 WO 2011070212 A2 20110616.

CURRICULUM VITAE ABREVIADO (CVA)

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

Part A. PERSONAL INFORMATION

First name	Juan Manuel		
Family name	Herrera Martínez		
Gender (*)	Male	Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail		URL Web	
Open Researcher and Contributor ID (ORCID) (*) 0000-0002-9255-227X			

(*) Mandatory

A.1. Current position

Position	Associate Professor		
Initial date	November 2011		
Institution	University of Granada		
Department/Center	Inorganic Chemistry	Faculty of Sciences	
Country	Spain	Teleph. number	+34958248094
Key words			

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

Period	Position/Institution/Country/Interruption cause
1999-2003	PhD student/ University Paris VI/France
2004-2006	Postdoctoral Researcher/ University of Sheffield/UK
2006-2011	Postdoctoral Researcher/University of Granada/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate	University of Granada, Spain	1999
PhD	Université Pierre et Marie Curie (Paris VI), France	2003

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

Degree in Chemistry (1999, University of Granada). PhD thesis (1999-2003) funded by the European Science Foundation at the University Paris VI (France) under the supervision of Professors Michel Verdaguer and Miguel Julve Olcina. Postdoctoral stage (2004-2006) at the University of Sheffield (UK) in the group of Prof. Michael D. Ward funded by the Spanish Ministry of Science. Since 2006, I develop my research and teaching duties at the University of Granada (Department of Inorganic Chemistry), first thanks to a postdoctoral grant from the regional government of Andalusia and then thanks to the program "Reincorporación de Doctores" of the University of Granada (UGR). Since 2011 I am permanent Assistant Professor at the UGR.

My research interest focuses on the design, synthesis and study of molecular materials and nanostructured composites based on coordination compounds combining interesting magnetic properties (SMMs, Spin-Crossover, etc.), luminescent (Energy transfer, white-light emitters, etc.) and chiroptical (circularly polarized luminescence, chriral-SMMs) properties.

Author of 52 scientific papers (>80 % in Q1) including one editorial (Molecular Magnets, Frontiers in Chemistry, 2019). Total citations: 2623 (1195 since 2018), h-index = 27 (19 since 2018) and 8 articles with more than 100 citations (4 > 200 citations). I have participated as PI in five research projects financed by the Spanish Ministry of Science (CTQ2014-56312-P), the government of Andalusia (P11-FQM 7756 and B-FQM-328-UGR20) and the UGR (GREIB.PYR.2011.13). Currently, I am PI of a national project founded by the Spanish Ministry

of Science (PID2022-138090NB-C21) and a local project founded by the University of Granada (PP2022-30B9251101). I have participated in a contract with Kolmer Industries S.A. for the development of thermochromic paints. I collaborate with editorials ACS, RSC, Elsevier, mdpi and Wiley as referee of peer-reviewed articles. I have supervised 3 PhD students (+ 1 supervision in progress), 7 undergraduate students (+ 1 in progress), 2 Master degree projects and 5 international Erasmus-Master degree projects (3 from France and 2 from UK). I have participated in 3 teaching innovation projects and several outreach activities. I have recognized three six-years periods on research work (last in 2019) from the Spanish Ministry of Science, four five-years periods on teaching from the UGR and 5 regional teaching/research periods by the Government of Andalusia. I am the scientific responsible of the fluorescence equipment at the *Centro de Instrumentación Científica* of the UGR.

Part C. RELEVANT MERITS

C.1. Publications *(Selected Publications in the last 10 years)*

1-Scientific article: Yating Ye, Carlos M. Cruz, Benjamin Doistau, Enrique Colacio, Claude Piguet, Juan Manuel Herrera and Juan Ramón Jiménez. Self-Assembled Tetrahedral $[Cr^{III}_4L_6]^{12+}$ Cage Displaying Near-Infrared Spin-Flip Photoluminescence, *Inorg. Chem.,* **2024**, *63*, 23886-23893.
2-Scientific article: Ismael Francisco Diaz-Ortega, Yating Ye, Jesus Jover, Eliseo Ruiz, Enrique Colacio, Juan Manuel Herrera*.Engineering Mononuclear Ln(III) Complexes with a Pseudo-Macrocyclic Hexadentate N_4O_2 Schiff Base Ligand Exhibiting Slow Magnetic Relaxation**,** *Magnetochemistry*, **2024**, *10,* 104 (DOI: 10.3390/magnetochemistry10120104).
3-Scientific article: Yating Ye, Juan-Ramón Jiménez, Maria Mar Quesada-Moreno, Amparo Navarro, Esther M Ortega-Naranjo, Angel Orte, Juan Manuel Herrera, *Adv. Opt. Mater.,* **2024**, *12*, 2302954.
4-Scientific article: Yating Ye, Pablo Garrido-Barros, Joël Wellauer, Carlos M. Cruz, Rodrigue Lescouëzec, Oliver S. Wenger, Juan Manuel Herrera, Juan Ramón Jiménez, Luminescence and Excited-State Reactivity in an Heteroleptic Tricyanido Fe(III) Complex, *J. Am. Chem. Soc.,* **2024**, *146*, 954-960.
5-Scientific article: Jose Troya, Mª del Mar Moreno-Quesada, Juan Ramón Jiménez, Juan Manuel Herrera*. Unprecedented Ir(III) cationic complexes based on tridentate tetrazolate ligands: synthesis, photophysics and encapsulation in SiO2 nanoparticles. *New J. Chem.,* **2023**,*47*,4577-4585 (DOI: 10.1039/D2NJ06037J).
6-Scientific article: Juan-Ramón Jiménez, Sandra Míguez-Lago, Maxime Poncet, César López Ruiz, Carlos Moreno Cruz, Araceli G. Campaña, Enrique Colacio, Claude Piguet, Juan Manuel Herrera*. Eu^{III} functionalized silica nanoparticles encapsulating chiral Cr^{III} complexes with simultaneous unpolarized red and polarized NIR-I luminescence. *J. Mater. Chem., C* **2023**, *11*, 2582-2590**.**
7-Scientific article: Ismael Francisco Díaz-Ortega, Eva Luz Fernández-Barbosa, Silvia Titos-Padilla, Simon JA Pope, Juan-Ramón Jiménez, Enrique Colacio, Juan Manuel Herrera*. Monitoring spin-crossover phenomena via Re(I) luminescence in hybrid Fe(II) silica coated nanoparticles. *Dalton Trans.,* **2021***, 50*, 16176-16184.
8-Scientific article: Pankaj Kalita, Prakash Nayak, Naushad Ahmed, Juan Manuel Herrera, Krishnan Venkatasubbaiah, Enrique Colacio, Vadapalli Chandrasekhar. Seven-coordinate Ln III complexes assembled from a bulky Mes acacH ligand: their synthesis, structure, photoluminescence and SMM behaviour. *Dalton Trans.,* **2020**, *49*, 15404-15416.
9-Scientific article: Ismael F Díaz-Ortega, Juan Manuel Herrera,* Sourav Dey, Hiroyuki Nojiri, Gopalan Rajaraman, Enrique Colacio. The effect of the electronic structure and flexibility of the counteranions on magnetization relaxation in [Dy(L)2(H2O)5]3+ (L = phosphine oxide derivative) pentagonal bipyramidal SIMs. *Inorganic Chemistry Frontiers*, **2020**, *7*, 689-699.
10-Scientific article: Adam H Day, Samuel J Adams, Laia Gines, Oliver A Williams, Benjamin RG Johnson, Ian A Fallis, E Joel Loveridge, Gurmit S Bahra, Petra CF Oyston, Juan Manuel Herrera, Simon JA Pope. Synthetic routes, characterization and photophysical properties of luminescent, surface functionalized nanodiamonds. *Carbon,* **2019**, *152*, 335-343.
11-Scientific article: Pankaj Kalita, Amit Malakar, Joydeb Goura, Subhashree Nayak, Juan Manuel Herrera, Enrique Colacio, Vadapalli Chandrasekhar. Mononuclear lanthanide

complexes assembled from a tridentate NNO donor ligand: design of a Dy III single-ion magnet. *Dalton Trans.,* **2019**, *48*, 4857-4866.

11.- Scientific article: Ismael F. Díaz-Ortega, Juan Manuel Herrera*, Álvaro Reyes Carmona, José Ramón Galán-Mascarós, Sourav Dey, Hiroyuki Nojiri, Gopalan Rajaraman, Enrique Colacio. A Chiral Bipyrimidine-Bridged Dy2 SMM: A Comparative Experimental and Theoretical Study of the Correlation Between the Distortion of the DyO6N2 Coordination Sphere and the Anisotropy Barrier. *Frontiers in Chemistry,* **2018**, *6*, 537-554

12-Scientific article: Matilde Fondo, Julio Corredoira-Vázquez, Ana M García-Deibe, Jesús Sanmartín-Matalobos, Juan Manuel Herrera, Enrique Colacio. Tb2, Dy2, and Zn2Dy4 Complexes Showing the Unusual Versatility of a Hydrazone Ligand toward Lanthanoid Ions: a Structural and Magnetic Study. *Inorg. Chem.,* **2018**, *57*, 10100-10110.

13-Scientific article: Ismael F Díaz-Ortega, Juan Manuel Herrera, Daniel Aravena, Eliseo Ruiz, Tulika Gupta, Gopalan Rajaraman, H Nojiri, Enrique Colacio. Designing a Dy2 Single-Molecule Magnet with Two Well-Differentiated Relaxation Processes by Using a Nonsymmetric Bis-bidentate Bipyrimidine-N-Oxide Ligand: A Comparison with Mononuclear Counterparts. *Inorg. Chem.,* **2018**, *57*, 6362-6375.

15.- Scientific article: Francisco R Fortea-Pérez, Marta Mon, Jesús Ferrando-Soria, Mercedes Boronat, Antonio Leyva-Pérez, Avelino Corma, Juan Manuel Herrera, Dmitrii Osadchii, Jorge Gascon, Donatella Armentano, Emilio Pardo. The MOF-driven synthesis of supported palladium clusters with catalytic activity for carbene-mediated chemistry . *Nature Materials.* **2017**, *16*, 760-766.

15.- Scientific article: Ismael F Díaz-Ortega, Juan Manuel Herrera, Tulika Gupta, Gopalan Rajaraman, Hiroyuki Nojiri, Enrique Colacio. Design of a Family of Ln3 Triangles with the HAT Ligand (1,4,5,8,9,12-Hexaazatriphenylene): Single-Molecule Magnetism. *Inorg. Chem.* **2017**, *56*, 5594-5610.

16.- Scientific article: Matilde Fondo, Julio Corredoira-Vázquez, Ana M García-Deibe, Jesús Sanmartín-Matalobos, Juan Manuel Herrera, Enrique Colacio. Designing Ligands to Isolate ZnLn and Zn2Ln Complexes: Field-Induced Single-Ion Magnet Behavior of the ZnDy, Zn2Dy, and Zn2Er Analogues. *Inorg. Chem.,* **2017**, *56*, 5646-5656.

17.- Scientific article: Sourav Biswas, Sourav Das, Joydev Acharya, Vierandra Kumar, Jan van Leusen, Paul Kögerler, Juan Manuel Herrera, Enrique Colacio, Vadapalli Chandrasekhar. Homometallic DyIII Complexes of Varying Nuclearity from 2 to 21: Synthesis, Structure, and Magnetism. *Chem. Eur. J.,* **2017**, *23*, 5154-5170.

18.- Scientific article: Juan-Ramon Jimenez, Ismael F Diaz-Ortega, Eliseo Ruiz, Daniel Aravena, Simon JA Pope, Enrique Colacio, Juan Manuel Herrera. Lanthanide tetrazolate complexes combining single-molecule magnet and luminescence properties: the effect of the replacement of tetrazolate n3 by β-diketonate ligands on the anisotropy energy barrier. *Chem. Eur. J.,* **2016**, *22*, 14548-14559 (Frontispiece).

19.- Scientific article: Tania Romero-Morcillo, Francisco J Valverde-Muñoz, M Carmen Muñoz, Juan Manuel Herrera, Enrique Colacio, José A Real. Two-step spin crossover behaviour in the chiral one-dimensional coordination polymer [Fe (HAT)(NCS) 2]∞. *RSC Advances,* **2015**, *5*, 69782-69789.

20.- Scientific article: Juan Manuel Herrera, Silvia Titos-Padilla, Simon JA Pope, Isadora Berlanga, Félix Zamora, Juan José Delgado, Konstantin V Kamenev, Xiao Wang, Alessandro Prescimone, Euan K Brechin, Enrique Colacio. Studies on bifunctional Fe(II)-triazole spin crossover nanoparticles: time-dependent luminescence, surface grafting and the effect of a silica shell and hydrostatic pressure on the magnetic properties. *J. Mater. Chem. C,* **2015**, *3*, 7819-7829.

C.2. Congresses

32 national and international conferences taken part by both oral and poster communications. **2** invited conferences. Member of the local organizing committee of the international 5th EuChemMS Conference on Nitrogen Ligands (2011) and the XXXVIII Reunión Bienal RSQE (2022).

C.3. Research projects (Last 10 years):

21 research projects (2 European, 8 National, 7 Regional, 4 Local). **PI** in seven of them, three at regional level (Junta de Andalucía), two at national level (Spanish Ministry of Science) and three at local level (University of Granada).

1.- Puesta en servicio y optimización de infraestructura científica en las áreas de magnetismo, luminiscencia y análisis elemental (B-CIC-007-UGR23). Proyectos de investigación aplicada del plan propio de investigación y transferencia de la UGR 2023 financiados por el programa operativo FEDER ANDALUCÍA 2021-2027. PI: Juan Manuel Herrera Martínez. 01/01/2024 - 31/12/2026. Funding: 100000 €.

2.- Imanes monomoleculares multifuncionales, nanopartículas de lantánidos ultra-emisivas y materiales de transición de espín luminiscentes. De la molécula al material híbrido (PID2022-138090NB-C21). Proyectos de generación del conocimiento 2022 (MCIN). PI: Juan Manuel Herrera Martínez. 01/09/2023 - 31/08/2026. Funding: 175000 €.

3.- Emisión de luz multicolor y/o circularmente polarizada derivada de nanopartículas híbridas d-f (PP2022-30B9251101). Proyectos de investigación precompetitivos del plan propio de investigación de la UGR 2022. PI: Juan Manuel Herrera. Funding: 2000 €.

4.- Cromóforos basados en el abundante CrIII como fotosensibilizadores sostenibles para dispositivos de conversión de energía, tintas de seguridad quirales y memorias magnéticas (TED2021-129598A-I00). Agencia Estatal de Investigación (MCIN), Proyectos estratégicos orientados a la transición ecológica y a la transición digital 2021. Member of the research team. PI: Juan Ramón Jiménez. 01/12/2022 – 30/11/2024. Funding: 149500 €.

5.- Materiales fosforescentes derivados de iones Ir(III) y Cr(III) para el desarrollo de dispositivos optoelectrónicos de alta eficiencia (B-FQM-328-UGR20). Junta de Andalucía, Proyectos I+D+i del Programa FEDER 2020. Participant Entity: UGR. PI: Juan Manuel Herrera Martínez. 01/07/2021-30/06/2023. Funding: 35000 €.

6.- Imanes unimoleculares funcionales de alta temperatura y estabilidad para su uso en electrónica, espintrónica y fotónica molecular (P20_00692). Junta de Andalucía, Proyectos de Excelencia. Member of the research team. PI: Enrique Colacio Rodríguez. 04/10/2021-31/12/2022. Funding: 42200 €.

7.- Materiales moleculares magnéticos basados en compuestos de coordinación de iones lantánidos con propiedades quiroópticas: de las moléculas a los materiales híbridos (A-FQM-172-UGR18). Junta de Andalucía, Proyectos FEDER. Member of the research team. PIs: Enrique Colacio Rodríguez y Antonio Mota Ávila. 01/01/2020 - 31/12/2021. Funding: 32250 €.

8.- Materiales Magnéticos y/o quiroópticos basados en moléculas imán y sistemas poliméricos metal-orgánicos (PGC2018-102052-B-C21). Funding Entity: Ministerio de Educación, Cultura y Deporte, Proyectos del Plan Nacional I+D+i. Member of the research team. PIs: Enrique Colacio Rodríguez y Antonio Rodríguez Diéguez. 01/01/2019 - 31/12/2021. Funding: 118000 €.

9.- Desarrollo y procesamiento de materiales magnéticos y/o luminiscentes basados en compuestos de coordinación (CTQ2014-56312-P). MICINN, Proyectos del Plan Nacional I+D+i. PI: Juan Manuel Herrera Martínez y Enrique Colacio Rodríguez. 01/01/2015 - 31/12/2018. Funding: 116160 €.

10.- Nanocompuestos multimodales basados en nanopartículas de sílice y oro funcionalizadas con complejos metálicos que presentan propiedades magnéticas, y/o termocrómicas y/o luminiscentes (P11-FQM-7756). Junta de Andalucía, Proyectos de Excelencia Motrices. PIs: Juan Manuel Herrera Martínez y Enrique Colacio Rodríguez. 01/01/2012 - 31/12/2015. Funding: 190.242 €.

C.4. Contracts, technological or transfer merits

1.- Desarrollo de pinturas termocrómicas y/o luminiscentes. Industry: Industrias Kolmer S.A. Participants: Ismael Fco. Díaz Ortega, Enrique Colacio and Juan Manuel Herrera. Funding: 32000 €. Start-End Dates: 01/01/2012 - 31/12/2015.

Fecha del CVA	23-11-2024

Parte A. DATOS PERSONALES

Nombre	Isabel María		
Apellidos	Saura Llamas		
Sexo (*)	Mujer	Fecha de nacimiento	[redacted]
DNI, NIE, pasaporte	[redacted]		
Dirección email	ims@um.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-8335-6747		

** datos obligatorios*

A.1. Situación profesional actual

Puesto	Catedrática de Universidad		
Fecha inicio	16-09-2011		
Organismo/ Institución	Universidad de Murcia		
Departamento/ Centro	Departamento de Química Inorgánica. Facultad de Química		
País	España	Teléfono	[redacted]
Palabras clave	Química Organometálica, Paladaciclos, Intermedios de paladio en síntesis orgánica, Activación C–H, Ruptura C–C, Catálisis		

A.2. Situación profesional anterior (incluye interrupciones en la carrera investigadora, de acuerdo con el Art. 14. 2.b) de la convocatoria, indicar meses totales)

Periodo	Puesto/ Institución/ País / Motivo interrupción
12/05/1994 - 15/09/2011	Titular de Universidad / Universidad de Murcia / España
25/11/1992 - 11/05/1994	Titular de Universidad Interina / Universidad de Murcia / España
01/10/1991 - 24/11/1992	Becaria de reincorporación (MEC) / Universidad de Murcia / España
01/09/1989 - 31/08/1991	Becaria postdoctoral (MEC-Fulbright) / Universidad de Utah / Utah, USA
01/01/1986 - 31/08/1989	Becaria de F.P.I. (MEC) / Universidad de Murcia / España

(Incorporar todas las filas que sean necesarias)

A.3. Formación Académica

Grado/Master/Tesis	Universidad/País	Año
Doctora en Ciencias (Sección Químicas)	Universidad de Murcia / España	1988
Licenciada en Ciencias (Sección Químicas)	Universidad de Murcia / España	1985

(Incorporar todas las filas que sean necesarias)

Parte B. RESUMEN DEL CV *(máx. 5000 caracteres, incluyendo espacios).*

Realicé mis estudios de Licenciatura en Ciencias Químicas en la Universidad de Murcia, obteniendo el primer premio nacional de terminación de estudios universitarios en Química. En 1986, obtuve una beca FPI (MEC) para realizar la Tesis en el Departamento de Química Inorgánica de la Universidad de Murcia, bajo la dirección de los Profs. J. Vicente Soler y M. T. Chicote Olalla. En septiembre de 1988 defendí mi Tesis Doctoral. Durante dos años disfruté una beca postdoctoral MEC-Fulbright en la Universidad de Utah (Salt Lake City, EE. UU.), donde trabajé con complejos organometálicos quirales de renio y estudié sus

aplicaciones en síntesis asimétrica y en procesos catalíticos, bajo la supervisión del Prof. J. A. Gladysz. En 1991 volví al Departamento de Química Inorgánica de la Universidad de Murcia con una beca de reincorporación del MEC. Un año más tarde fui contratada como profesora titular interina. Aprobé la oposición de Titular de Universidad en mayo de 1994 y la de Catedrática de Universidad en julio de 2011.

Soy autora de 43 artículos de investigación y un artículo docente (*J. Chem. Educ.*). De ellos, 33 han sido publicados en revistas que pertenecen al primer cuartil de sus áreas respectivas, de acuerdo con su factor de impacto (WoS). Soy también autora de una patente y he presentado 39 comunicaciones a congresos, dos de ellas como ponente invitada. He dirigido cuatro Tesis Doctorales, tres de ellas con Mención Europea/Internacional, una Tesis de Máster, ocho Trabajos Fin de Máster y 18 Trabajos Fin de Grado. En la actualidad estoy dirigiendo una Tesis Doctoral, en colaboración con la empresa de Kinsy. S.L., que optará a la mención industrial.

Desde el inicio de mi carrera investigadora, he trabajado en un grupo que ha disfrutado de financiación ininterrumpida, a través de programas nacionales y regionales. Así, he participado en 16 proyectos de investigación competitivos (once nacionales y cinco regionales). El grupo de investigación de Química Organometálica de la Universidad de Murcia, al cual pertenezco, ha sido reconocido como Grupo de Excelencia de la Comunidad Autónoma de la Región de Murcia, en las dos convocatorias resueltas hasta el momento.

Mi investigación se ha centrado en la química del paladio y en la síntesis de complejos conteniendo arilalquilaminas primarias de interés biológico y su reactividad frente a moléculas insaturadas. En la actualidad, mis principales objetivos investigadores son: 1) la síntesis de nuevos tipos de C,N-metalaciclos de Pd(II) de los que existan pocos precedentes; 2) el estudio de las reacciones de inserción de nuevas especies insaturadas polifuncionales en el enlace Pd–C y sus aplicaciones en síntesis orgánica (especialmente en procesos catalíticos) y 3) el estudio de modelos estequiométricos que reproduzcan los intermedios en procesos catalíticos de activación de enlaces C–H o ruptura de enlaces C–C mediados por paladio.

Además de la actividad docente y de investigación, he realizado tareas de gestión. He sido Secretaria General de la Universidad de Murcia (1998-2002) y Delegada Especial del Rector para el Desarrollo Normativo (2002-2006). Soy también académica de número de la Academia de Ciencias de la Región de Murcia (asociada al Instituto de España) desde noviembre de 2018 y Secretaria General de este organismo desde abril del año 2023 hasta la actualidad. He sido miembro de la Comisión de Investigación de la Universidad de Murcia (Comisión establecida por Estatutos) y evaluadora habitual de las convocatorias de Programa Propio de la Universidad de Murcia. También formo parte de la Comisión de Revisión A-Ciencias (Programa Academia de ANECA), que intervienen en la acreditación nacional para el acceso a los cuerpos docentes universitarios desde el 08/03/2022.

Me siento muy comprometida con la divulgación científica. He participado durante 12 años en el programa “Vive la Ciencia (Experiencias de Física y Química en la Universidad de Murcia para alumnos de Bachillerato)”, llevado a cabo en la Facultad de Química (cursos académicos desde 2008/2009, hasta 2019/2020). He participado en el Comité Científico y en la organización de la I, II, III, IV, V y VI ediciones del Certamen MasterChem, un proyecto de la Unidad de Cultura Científica de la Universidad de Murcia, con financiación de la Fundación Española para la Ciencia y la Tecnología (en todas sus ediciones). Formo parte de un Grupo de Transferencia de Conocimiento de la Universidad de Murcia (Pa*Ciencia*LaNuestra) con el que he participado en la "*Mednight: Noche Europea de los Investigadores*" en sus ediciones de 2021, 2022, 2023 y 2024. Relacionada con el trabajo que realizamos en el grupo, he presentado una ponencia oral invitada en la XXXVIII Reunión Bienal de la Real Sociedad Española de Física (Murcia, 11-15/07/2022) titulada "Visibilidad de la mujer en la ciencia desde la actividad cotidiana: concursos, encuestas y otras propuestas sencillas" (Simposio: Mujeres en Física).

Parte C. LISTADO DE APORTACIONES MÁS RELEVANTES (últimos 5 años).

C.1. Publicaciones más importantes en libros y revistas con “peer review” y conferencias

Las publicaciones que se detallan a continuación pueden agruparse en tres líneas distintas.

A) La primera línea (publicación 5) aborda la síntesis de paladaciclos inusuales, en este caso, por el tamaño del metalaciclo formado. El artículo 3 es un artículo de revisión relacionado con este aspecto.

B) La segunda línea está representada por los artículos que versan sobre la inserción de moléculas insaturadas en el enlace C–Pd de los paladaciclos, con especial interés en su aplicación en síntesis orgánica. Hemos estudiado la inserción de isocianuros en paladaciclos tensionados (publicación 5) y la inserción secuencial de alquino/alqueno o alquino/alqueno tensionado/CO en los paladaciclos derivados de fenetilaminas de interés biológico (homoveratrilamina y fentermina; publicación 4).

C) Finalmente, la tercera línea aborda el estudio de modelos estequiométricos que reproduzcan los intermedios en procesos catalíticos de activación de enlaces C–H y C–C mediados por paladio (publicaciones 1 y 2). El artículo de revisión 3 está relacionado también con este aspecto.

1. *Pd-Catalyzed Ring-Opening Polymerization of Cyclobutanols through C(sp^3)−C(sp^3) Bond Cleavage*. Parra-García, S.; Saura-Llamas, I.; Bautista, D.; Gil-Rubio, J.; José-Antonio García-López, J.-A. *Macromolecules* **2024**, *57*, 6577–6582. https://pubs.acs.org/doi/epdf/10.1021/acs.macromol.4c01089

2. *Synthesis of benzofused O- and N-heterocycles through cascade carbopalladation/cross-alkylation of alkynes involving the C–C cleavage of cyclobutanols*. Pérez-Gómez, M.; Herrera-Ramírez, P.; Bautista, D.; Saura-Llamas, I.; García-López, J.-A. *Organometallics* **2022**, *41*, 649–658. https://doi.org/10.1021/acs.organomet.2c00015.

3. *Chasing C,C-palladacycles*. García-López, J.-A.; Saura-Llamas, I. *Eur. J. Inorg. Chem.* **2021**, 3655–3683. https://doi.org/10.1002/ejic.202100414.

4. *Sequential Insertion of Alkynes, Alkenes, and CO into the Pd−C Bond of ortho-Palladated Primary Phenethylamines: from η^3-Allyl Complexes and Enlarged Palladacycles to Functionalized Arylalkylamines.* García-López, J.-A.; Oliva-Madrid, M.-J.; Bautista, D.; Vicente, J.; Saura-Llamas I. *Organometallics* **2021**, *40*, 539–556. https://doi.org/10.1021/acs.organomet.0c00787.

5. *Insertion reactions of isocyanides into the Metal-C(sp^3) bonds of ylide complexes*. Chicote, M.-T.; Saura-Llamas, I.; García-Yuste, M.-Y.; Bautista, D.; Vicente, J. *J. Organometal. Chem.* **2019**, *894*, 61-66.

C.2. Congresos, *indicando la modalidad de su participación (conferencia invitada, presentación oral, póster)*

S. Fernández, and I. Saura-Llamas. Insertion reactions of insaturated molecules into the Pd–C bond of seven-member palladacycles. Póster (S. Fernández). I Symposium on Chemical and Physical Sciences for Young Researchers (Murcia, España; 22-23/10/2020). On-line.

S. Fernández-García, M. Pérez-Gómez, I. Saura-Llamas. Reactivity of seven-membered palladacycles: insertion reactions of unsaturated molecules into the Pd–C bond. Póster (S. Fernández-García). 1er Congreso GEQONOVEL (Valladolid, España; 25/03/2021. On-line.

S. Parra-García, J. Gil-Rubio, I. Saura-Llamas, J.-A. García-López. Pd-catalyzed ROP through C(sp^3)-C(sp^3) bond cleavage of cyclobutanols for the synthesis of polyketones. Comunicación oral rápida (S. Parra-García). XIX Simposio de Jóvenes Investigadores Químicos de la RSEQ. (Murcia, España, 13-17/11/2023).

C.3. Proyectos o líneas de investigación en los que ha participado.

PID2021-122966NB-I00. *Nuevas reacciones organometálicas y fotoquímicas con aplicación en catálisis.* Ministerio de Ciencia e Innovación. Proyectos de Generación de Conocimiento 2021. Investigadores principales: P. González Herrero y J. A. García López, Universidad de Murcia. Duración: desde el 01/01/2022 hasta el 31/12/2024. Cuantía de la subvención: 151250 €. Tipo de participación: miembro del equipo de investigación. Actividad: diseño y supervisión de experimentos, trabajo experimental, análisis de resultados y redacción de artículos y comunicaciones en los objetivos 1 (Use of bifunctional cycloalkanols in transition metal

catalyzed polymerization reactions), 2 (Use of bifunctional cycloalkanols to build complex molecular architectures by transition metal catalyzed cascade reactions) y 3 (Development of new cross-coupling reactions using photochemically-generated reactive intermediates). Resolución provisional, pendiente de resolución definitiva.

PGC2018-100719-B-I00. *Extending the applicability of organometallic transition metal complexes in catalysis and photochemistry*. Ministerio de Ciencia, Innovación y Universidades. Proyectos de I+D de Generación de Conocimiento. Investigadores principales: P. González Herrero y J. A. García López, Universidad de Murcia. Duración: desde el 01/01/2019 hasta el 31/12/2021. Cuantía de la subvención: 89.540 €. Tipo de participación: miembro del equipo de investigación. Actividad: diseño y supervisión de experimentos, trabajo experimental, análisis de resultados y redacción de artículos y comunicaciones en el objetivo 1 (Synthesis of model cyclometalated complexes and development of new synthetic metodologies involving transition metals).

19890/GERM/15. *Synthesis, Structure and Reactivity of New Types of Organometallic Complexes. Applications as Synthetic Intermediates, Catalysts and Photoactive Materials*. Fundación SÉNECA (Comunidad Autónoma de la Región de Murcia). Programa de Ayudas a grupos de Excelencia de la Región de Murcia. Investigadores principales: María Teresa Chicote Olalla y Juan Gil Rubio, Universidad de Murcia. Duración: desde el 01/01/2016 hasta el 31/12/2019. Cuantía de la subvención 200.000 €. Tipo de participación: miembro del equipo de investigación. Actividad: diseño y supervisión de experimentos, trabajo experimental, análisis de resultados y redacción de artículos y comunicaciones en el objetivo A (New types of organopalladium complexes. Reactivity and application in organic synthesis).

C.4. Participación en actividades de transferencia de tecnología/conocimiento y explotación de resultados.

Contratos de I+D+i

Título: Química de la coordinación de macrociclos de interés farmacéutico.
Empresa: KINSY, S.L. Comienzo: 20/02/2020 Fin: 30/09/2021
Investigadores principales: J. Gil Rubio, I. Saura Llamas y P. González Herrero.
Cuantía Total (IVA incluido): 19.763,00 €

Título: Nuevas metodologías para mejora de las propiedades de polihidroxialcanoatos biosintéticos mediante la modificación estructural de la cadena polimérica.
Empresa: Asociación Empresarial de Investigación Centro Tecnológico del Calzado y del Plástico de la Región de Murcia. Comienzo: 19/12/2023 Fin: 19/12/2024
Investigador principal: J. Gil Rubio.
Cuantía Total (IVA incluido): 14.900,00 €

C.5. Dirección de Tesis doctorales

He codirigido un total de cinco tesis doctorales. En la actualidad, estoy co-dirigiendo una Tesis que optará a la mención industrial.

Título: Síntesis de compuestos orgánicos de interés farmacológico.
Doctorando: Manuel Iniesta Bernabé
Universidad: Murcia Facultad/Escuela: EIDUM (Universidad de Murcia)
Fecha prevista de lectura: Octubre 2025

C.6. Pertenencia a sociedades

Miembro de la Real Sociedad Española de Química y del Grupo Especializado de Química Organometálica (desde 1999).

Académica de número de la Academia de Ciencias de la Región de Murcia (Academia asociada al Instituto de España) (desde 2018).

C.7. Otros índices de calidad (WoS, 16/07/2024)

- Número total de citas: 1809 (1566 sin autocitas)
- Número medio de citas en los últimos cinco años (2020-2024): 44.4
- h-index: 26
- Author's overall citation percentile median: 82nd

CURRICULUM VITAE (CVA)

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

CV date	12/01/2025

Part A. PERSONAL INFORMATION

First name	Rosa María		
Family name	Pedrido Castiñeiras		
Gender (*)	Female	Birth date	-
Social Security, Passport, ID number	-		
e-mail	rosa.pedrido@usc.es	URL Web	
Open Researcher and Contributor ID (ORCID) (*)		0000-0002-6161-4108	

(*) Mandatory

A.1. Current position

Position	Associate Professor (Prof. Titular de Universidad)			
Initial date	11/01/2011			
Institution	Universidade de Santiago de Compostela			
Department/Center	Química Inorgánica	Facultade de Química		
Country	Spain		Teleph. number	-
Key words	Supramolecular Architectures; Helicates; Transition Metals; Manganese; Schiff Bases; Thiosemicarbazones; Hydrazones; Electrochemistry; Biomimetic Catalysts; DNA, Science and gender			

A.2. Previous positions (research activity interuptions, art. 14.2.b))

Period	Position/Institution/Country/Interruption cause
24/2/2017-15/7/2017	Maternity Leaving 2-Alberto González Pedrido
20/02/2014-11/07/2014	Maternity Leaving 1-Adriana González Pedrido
2005-2011	Investigadora Posdoctoral Isidro Parga Pondal, Universidade de Santiago de Compostela Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
B. Sc. in Chemistry	Santiago de Compostela	1997
M. Sc. In Chemistry	Santiago de Compostela	1997
PhD in Chemistry(EU Mention)	Santiago de Compostela	2002

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

Rosa Pedrido graduated in Chemistry at the *Universidade de Santiago de Compostela (USC)* in 1997. She completed her PhD and European PhD in 2002 at the same University under supervision of Prof. Manuel R. Bermejo and Prof. Antonio Sousa, with a dissertation about thiosemicarbazones as suitable precursors for supramolecular architectures.
In 2002 she got a grant in the electrical company Unión Fenosa and later in the Dirección Xeral de Investigación of Xunta de Galicia as manager of research projects for universities, R&D centers, and industry.
During her PhD stage she did two predoctoral stays (2001 and 2002) at the University of Birmingham, under the supervision of Edwin C. Constable. In the period 2005-2007 she was postdoctoral fellow at

the Department of, University of Warwick (United Kingdom) under the supervision of Prof. Michael Hannon, with funding from Xunta de Galicia and Fundación Ramón Areces.
In 2005 she reincorporates to USC as "Isidro Parga Pondal" researcher and, after passing the pertinent evaluation, she obtained her permanent position as Associate Professor (Profesora Titular de Universidad) at the Department of Inorganic Chemistry of the USC in 2011.
She is member of the research group in Supramolecular and Bioinorganic Chemistry (SupraBioIn) at the USC since 1997, when she started her research activity as predoctoral fellow. Her research is focused in the study of self-assembly processes that lead to metallosupramolecular functional helicates, with potential applications in Biomedicine, Nanotechnology and Catalysis. She also works in the development of manganese and copper catalysts for processes of industrial relevance.
She is author of more than 85 scientific papers in JCR journals, including *Angew. Chem.*, *ChemComm*, *Chem. Eur. J.*, *Dalton Trans.*, *J. Inorg. Biochem.*, and *Inorg. Chem.*, being around 75% of them rated in the first quartile (Q1) or decile (D1) in the JCR ranking. This intense research activity leads to a *h* index of 25 and to a Scopus index of 26.
Besides she has more than 150 participations and publications in national and international conferences. She acts as regular referee of several high impact JCR journals (*Chem. Commun., Dalton, JACS, Inorg. Chem.*,..). In 2017 she was appointed as the "Asociación Española de Bioinogánica, (AEBIN)" secretary, organizing its 2019 conference, "XI Reunión Científica de Bioinorgánica (Biolugo)" as head of the organizing comity.
She has been involved in 17 competitive research projects, regional, national and international. During the period 2014-2017 she was the principal investigator (PI) in a project for emergent researchers (in the field of functional helicates as a new approach for the selective recognition of DNA a metallodrugs design). Moreover, she has participated in three contracts with companies and public administrations.
She has supervised six doctoral thesis in the last ten years, therefore contributing to the formation of new reserchers and professionals.
Considered the exposed research activiy, Dr. Pedrido has got 4 six-year research periods recognized by the ANECA agency (1998-2005, 2006-2011, 2012-2017; 2018-2023).
She carries out an intensive activity in science spread and Gender in science. Thus, since 2012 she is a regular collaborator and team member of the radio program "Efervesciencia" broadcasted in the Radio Galega (https://www.crtvg.es/rg/programas/efervescencia) funded since the beginning with FECYT grants. Therefore, she is an active member of the "Ciencia Nosa" group, that is actively dedicated to the innovation in teaching and science(http://ciencianosa.blogspot.com/). Since 2018 she also participates in "Regueifas de Ciencia", a debate activity also funded by FECYT. As a result of this effort in science diffusion and gender she has been awarded with the prizes *"INLUGO 2016"* Prize for the "Funil.gal" project developed by the CienciaNOSA team,*"Introduction to the Gender Perspective in Teaching and Research"* awards, VI Edition. Universidade de Santiago de Compostela (Spain), and "Luisa Villalta" Prize (2013) Universidade da Coruña (Spain).

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

C.1. Publications *118 publications in the period 1997-2024; Only included some recent ones (to see allpublications check https://investigacion.usc.gal/investigadores/59862).*

- S. Fernández-Fariña, L. Rodríguez-Silva, M. Maneiro, A. M. González-Noya; **R. Pedrido**, A Dinuclear Copper(II) Complex Electrochemically Obtained via the Endogenous Hydroxylation of a Carbamate Schiff Base Ligand: Synthesis, Structure and Catalase Activity; *Int. J. Mol. Sci.,* **2024**, 25, 4.
- U. Barreiro-Sisto, S. Fernández-Fariña, A. M. González-Noya; **R. Pedrido**, M. Maneiro, Enemies or Allies? Hormetic and Apparent Non-Dose-Dependent Effects of Natural Bioactive Antioxidants in the Treatment of Inflammation ; *Int. J. Mol. Sci.,* **2024**, 25, 3.
- S. Fernández-Fariña, M. Maneiro, G. Zaragoza, J.M. Seco, **R. Pedrido**, A. M. González-Noya; Nickel, copper, and zinc dinuclear helicates: how do bulky groups influence their architecture? *Dalton Trans.*, **2024**, 53, 5676.
- L Rouco, R. Alvariño, A. Alfonso, S. Fernández-Fariña, A. M. González-Noya; **R. Pedrido,** L. Rodríguez-Silva, M. Maneiro; Understanding the Factors That Influence the Antioxidant Activity of Manganosalen Complexes with Neuroprotective Effects ; *Antioxidants*, **2024**, 13, 3.
- S. Fernández-Fariña, U. Barreiro-Sisto, M. Martínez-Calvo**, R. Pedrido**, A. M. González-Noya,Cluster helicates: promising functional materials; *Dalton Trans.,* **2024**, 53, 18451.
- A. Jiménez-Pérez, S. Fernández-Fariña, **R. Pedrido**, J. García-Tojal; Desulfurization of thiosemicarbazones: the role of metal ions and biological implications *J. Bio. Inorg. Chem.*, **2024**, 29 (1)1, 3.

5) S. Fernández-Fariña, M. Martínez-Calvo, M. J. Romero, J. M. Seco, G. Zaragoza, **R. Pedrido**, A. M. González-Noya; Hydrolisis of a carbamate triggered by coordination of metal ions; *Dalton Trans.,* **2022**, 51, 12915.
6) S. Fernández-Fariña, L. M. González-Barcia, M. J. Romero,…,**R. Pedrido,*** (In press), "Conversion of a double-tetranuclear cluster silver helicate into a dihelicate via a rare desulfurization process' *Inorg. Chem. Front.*, 2022, 9, 531.
7) L. Rouco, R. Alvariño, A. Alfonso, M. J. Romero, **R. Pedrido**, M. Maneiro (2022), "Neuroprotective effects of fluorophore-labelled manganese complexes: Determination of ROS production, mitochondrial membrane potential and confocal fluorescence microscopy studies in neuroblastoma cells", *J. Inorg. Biochem.*, 227, 111670.
8) L. Rouco, A. M. González-Noya, **R. Pedrido**, M. Maneiro (2020), "Pursuing the Elixir of Life: In Vivo Antioxidative Effects of Manganosalen Complexes", *Antioxidants*, *9*(8), 727.
9) L. M. González-Barcia, S. Fernández-Fariña, L. Rodríguez-Silva, M. R. Bermejo, A. M. González-Noya, **R. Pedrido**, Comparative study of the antitumoral activity of phosphine-thiosemicarbazone gold(I) complexes obtained by different methodologies, *J. Inorg. Biochem.*, **2020**, 203, 110931.

C.2. Conference organization

XI Reunión Científica de Bioinorgánica, BioLugo
Organizadores: AEBIN, USC, SUPRABIOIN team
Place and dates: Lugo, from 30/06/2019 to 03/07/2019
Title: Rosa Pedrido, President of the organizing comity

C.3. Research projects

She has participated in 25 research competitive projects. I show below indicate the three active ones in 2025: (to see all check https://investigacion.usc.gal/investigadores/59862/proyectos.
-Catalizadores antioxidantes sintéticos: Evaluación de su potencial para el tratamiento del SARS y enfermedades relacionadas con la inflamación - GENERACIÓN DE CONOCIMIENTO 2021 - Proyectos de investigación no orientada; IPs Marcelino Maneiro, Rosa **Pedrido**; 2021-2024-extensión 2025, 114.950 euros.
-CONSOLIDACIÓN E ESTRUTURACIÓN 2023 GRC GI-1584-Química Bioinorgánica e supramolecular (Ref.ED431C 2023/02) . IP: MARCELINO MANEIRO; 2023-2026; 200.000 euros.
-Efervesciencia 23-24 - FECYT 2022; IP: XOSE LOPEZ, 2022, 14.000 euros.

C.4. Contracts, technological or transfer merits

Authors: **Rosa Pedrido**, Ana María González Noya, Sandra Fernández Fariña, Marcelino Maneiro, Miguel Martínez Calvo
Reference: Patent P2021131180
Title: Mesocatos y su síntesis selectiva
Priority countries: Spain
Holder entity: Universidade de Santiago de Compostela
Date: 21/12/2021 (Spain)

Reference: Convenio especifíco de colaboración entre a USC e a Asociación de ensinantes de Ciencias de Galicia para a xestión da oficina editorial do Boletín das Ciencias,…etc
Funding entity: USC (5065.D3TR.64300)
Start-end date: desde 2021/2023; Total amount: 19.575,00 euros
Principal Investigator: Marcelino Maneiro (USC)
Role: Member of work team

Reference: XI Reunión Científica de Bioinorgánica (5065.D3TR.64300)
Funding entity: USC, Xunta de Galicia
Start-end date: desde 2019/2020; Total amount: 19.086,38 euros
Principal Investigator: **Rosa Pedrido Castiñeiras** (USC)

C.4. 1 Excellence networks

1) Name of the project: Metalofármacos funcionales para diagnosis y terapia, MULTIMETDRUGS (RED2018-102471-T, https://multimetdrugs.webs.com/)
Funding entity: Ministerio de Ciencia, Innovación y Universidades
Start-end date: from 1/10/2019 to 01/10/2021; Total amount: 20.000 euros
Principal Investigator: M. Concepción Gimeno. Type of participation: Rosa Pedrido IP team SUPRABIOIN

2) Name of the project: Ayudas del Programa de consolidación y estructuración de unidades de investigación competitivas, modalidad Red de Investigación. ED431D 2017/01
Funding entity: Xunta de Galicia; Principal Investigator: Marcelino Maneiro Maneiro (USC); Start-end date: 01/01/2017 - 30/11/2019. Total amount: 120.000,00 euros; Type of participation: Researcher

3) Name of the project: Metales en Terapia y Diagnóstico, METDRUGS (CTQ2015-70371-REDT)
Funding entity: Ministerio de Economía y Competitividad
Start-end date: from 1/12/2015 to 30/11/2017; Total amount: 30.000 euros
Principal Investigator: Patrick Gámez Enamorado; Participación: Rosa Pedrido IP team SUPRABIOIN

C.4.2 PhD theses

Title: "Arquitecturas funcionales tipo helicato y mesocato". PhD: Sandra Fernández Fariña. University: Santiago de Compostela. Date: 16/07/2021. Mark: Sobresaliente cum laude.

Title: Complejos supramoleculares de Cu(I), Ag(I), Au(I), Pd(II) and Pt(II): Síntesis, caracterización y propiedades biológicas. PhD: Luis Miguel González Barcia. University: Santiago de Compostela. Date: 20/12/2019. Mark: Sobresaliente cum laude. European PhD.

Title: Arquitecturas metalosupramoleculares autoensambladas derivadas de hidrazona, carbamato y tiosemicarbazona. PhD: Rocío Carballido Piñeiro. University: Santiago de Compostela. Facultad de Química. Date: 23/09/2016. Mark: Sobresaliente *cum laude*.

Title: Estudio de la capacidad helicante de ligandos biscarbamato y bistiosemicarbazona frente a iones metálicos. PhD: Vanesa Suárez Gómez. Universidad: Santiago de Compostela. Facultad de Química. Fecha: 18/12/2014. Mark: Sobresaliente *cum laude*.

Title: Arquitecturas supramoleculares funcionales derivadas de tiosemicarbazona. PhD: Miguel Martínez Calvo. Universidad: Santiago de Compostela. Facultad de Química. Date: 15/07/2010. Mark: Sobresaliente *cum laude*. European PhD.
-Title: Novas arquitecturas moleculares xeradas por ligandos tiosemicarbazona, tosilo e dansilo. PhD: María José Romero Castro. University: Santiago de Compostela. Date: 26/03/2009. Mark: Sobresaliente cum laude.

C.4.3 Refereing activity

Regular Referee for ANEP projects and JCR journals: JACS, Chemical Science, Chem. Commun., Dalton Trans., EJIC, Chemistry, New J. Chem., CystEngComm, RSC Advances y Metallomics.

C.4.4 Prizes

"INLUGO 2016" Prize for the "Funil.gal" project developed by the CienciaNOSA team. Diputación Provincial de Lugo. 02/2018. Lugo (Spain); *"Introduction to the Gender Perspective in Teaching and Research"* awards, VI Edition. Date: 11/11/2015. Universidade de Santiago de Compostela (Spain); "Luísa Villalta" Prize. Date: 2013. Universidade da Coruña (Spain).

C.4.5 Positions

Board of Directors of the Spanish Association of Bioinorganic Chemistry (AEBIN) as Secretary (2015-2017) and Vocal (2013-2015, 2017-2019). https://www.aebin.es/.

C.4.6 Science difussion activities

From 2012 I participate as part of the team of the FECYT projects "Efervesciencia" a cience radio program in Radio Galega. In 2019. participate as the team of the FECYT project "Regueifas da Ciencia". Member of the "Ciencia Nosa" group (USC), dedicated to teaching innovation and promotion of science into society.