Fecha del CVA	04/06/2021

Parte A. DATOS PERSONALES

Nombre y Apellidos	Lina María Aguirre Díaz		
DNI/NIE/Pasaporte		Edad	36
Núm. identificación del investigador	Researcher ID		
	Scopus Author ID	55915204400	
	* Código ORCID	0000-0002-7510-1653	

* Obligatorio

A.1. Situación profesional actual

Organismo	GSK GlaxoSmithKline		
Dpto. / Centro			
Dirección			
Teléfono		Correo electrónico	aguirrediaz.lina@gmail.com
Categoría profesional	Analista PMO	Fecha inicio	2020
Palabras clave	Cromatografía de líquidos (uv, luminiscente, ms, electroquímica, etc); Infrarrojo		

A.2. Formación académica (titulo, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Ph.D program in Crystallography and Crystallization	Universidad Internacional Menéndez Pelayo	2016
Official master in Crystallography and Crystallization	Universidad Internacional Menéndez Pelayo	2011
Official master in Molecular Inorganic Chemistry	Universidad de Alcalá	2010
Chemist	Universidad del Valle	2008

A.3. Indicadores generales de calidad de la producción científica

Until now, in the course of my scientific career I have published 15 SCI articles in high quality international journals, being the first author in 7 of them. My work has been cited up to 400 times, currently gathering an H factor of 9. I have presented my job to more than 10 national and international conferences, and participated in up to 5 research projects. My formation also includes a short stay at research institution of recognized international prestige in the area of inorganic Chemistry at the Universitá Degli Studi di Milano. I am also co-author of two international patents licensed by the Spanish Research Council. Additionally, I was able to continue as a Post-doctoral researcher at the Department of New Architectures in Materials chemistry (Instituto de Ciencia de Materiales de Madrid), focusing on the development of new materials with multifuntional properties.

Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Graduated in Chemistry degree at Universidad del Valle, Colombia, followed by a master degree in Molecular Inorganic Chemistry at the Universidad de Alcalá (Spain) with a Carolina's Foundation scholarship (2009-2010). Subsequently, for the period 2010-2011 and with a grant from the Research Council of Spain (CSIC), I performed a second master degree in Crystallography and Crystallization at the Menendez Pelayo International University (Spain). Then, in 2011 I was awarded with a doctoral research fellowship (FPI 2+2) from the MINECO (The Ministry of Economy and Competitiveness) to perform my Doctoral Thesis on "New Aluminium, Gallium and Indium Polymeric Framework as Heterogeneous Green Catalysts" at the Multifunctional and Supramolecular Materials Group in the Materials Science Institute of Madrid (ICMM).

In January 2016 I defended my PhD thesis and with the highest academic achievement as well as the Cum Laude mention. Also, in June 2016 as a result of the remarkable scientific papers that I published from my research during my doctorate, I was awarded with the 'Xavier

Solans' prize by the Crystallography and Crystalline Growth Specialized Group (GE3C). In may of 2017, I was awarded by the Spanish Royal Society of Chemistry with an accesit prize for the best PhD thesis (2015-2016) in Madrid.

Currently, I am working as a postdoctoral researcher at the Multifunctional and Supramolecular Materials Group, continuing my studies on the MOFs materials, leading the research line on heterogeneous catalysis application.

My area of expertise is centered on inorganic, organometallic and metal-organic framework materials synthesis, as well as on structure determination by single X-ray diffraction, physicochemical characterization of materials and spectrometry analysis. My research during the past years has been focused on the development of new metal-organic framework materials (MOFs) with high catalytic activity. As quality indicator of my research, it can be considered the 15 papers that I have published, all of them in highly recognized international journals such as: JACS, Coord. Chem. Rev., Chem. -Eur. J., CrystEngComm, Inorg. Chem., RSC Adv., where I am the first author in 7 of them. Besides, I have generated 2 invention patents. As well I have participated in several international and national congresses, seminars and meetings. The relevance of my work had opened new research lines in my current research group, which are generating interesting results in the area of novel materials development.

Parte C. MÉRITOS MÁS RELEVANTES (ordenados por tipología)

C.1. Publicaciones

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores

1 **Artículo científico**. Reinares-Fisac, D.; Aguirre-Díaz, L. M.; Iglesias, M.; Snejko, N.; Gutiérrez-Puebla, E.; Monge, M. A.; Gándara, F.(2/7). 2016. A Mesoporous Indium Metal? Organic Framework: Remarkable Advances in Catalytic Activity for Strecker Reaction of Ketones Journal of American Chemical Society. ACS publications. 138-29, pp.9089-9092.

2 **Artículo científico**. Aguirre-Díaz, L. M.; Iglesias, M.; Snejko, N.; Gutierrez-Puebla, E.; Monge, M. A.2016. Synchronizing Substrate Activation Rates in Multicomponent Reactions with Metal–Organic Framework Catalysts Chemistry A European Journal. Wiley. 22, pp.6654-6665.

3 **Artículo científico**. Aguirre-Díaz, L. M.; Gándara, F.; Iglesias, M.; Snejko, N.; Gutierrez-Puebla, E.; Monge, A.(1/6). 2015. Tunable catalytic activity of solid solution MOFs in One Pot Multicomponent Reaction.Journal of American Chemical Society. ACS publications. 135, pp.6132-6135.

4 **Artículo científico**. Lina M. Aguirre-Díaz; Marcelo Echeverri; Katherine Paredes-Gil; Natalia Snejko; Berta Gómez-Lor; Enrique Gutiérrez-Puebla; M. Ángeles Monge. 2021. The Effect of Auxiliary Nitrogenated Linkers on the Design of New Cadmium-Based Coordination Polymers as Sensors for the Detection of Explosive Materials Chemistry A European Journal. Wiley. 27-16, pp.5298-5306.

5 **Artículo científico**. Marcelo Echeverri; Constanza Ruiz; Sergio Gámez-Valenzuela; et al; Berta Gómez-Lor. 2020. Untangling the Mechanochromic Properties of Benzothiadiazole-Based Luminescent Polymorphs through Supramolecular Organic Framework Topology Journal of the American Chemical Society. 142-40, pp.17147-17155.

6 **Artículo científico**. Cárdenas, J.C.; Aguirre-Díaz, L.M. (AC); Galindo, J.F.; et al; Sierra, C.A. (2/10). 2019. Nature of Color Diversity in Phenylenevinylene-Based Polymorphs Crystal Growth and Design. American Chemical Society. 19-7, pp.3913-3922. ISSN 15287483.

7 **Artículo científico**. Reinares-Fisac, D.; Aguirre-Díaz, L.M.; Iglesias, M.; Gutiérrez-Puebla, E.; Gándara, F.; Monge, M.Á.(2/6). 2019. Anionic and neutral 2D indium metal-organic frameworks as catalysts for the Ugi one-pot multicomponent reaction Dalton Transactions. Royal Society of Chemistry. 48-9, pp.2988-2995. ISSN 14779226.

8 **Artículo científico**. L. M. Aguirre-Diaz (AC); N. Snejko; M. Iglesias; F. Sánchez; E. Gutierrez-Puebla; M. A. Monge. (1/6). 2018. Efficient Rare-Earth-Based Coordination Polymers as Green Photocatalysts for the Synthesis of Imines at Room Temperature Inorganic Chemistry. ACS publications.

9 **Artículo científico**. Germán Gómez; Richard Dvries; Diego Lionello; et al; L. M. Aguirre-Díaz;. (4/16). 2017. Exploring Physical and Chemical Properties in new Multifunctional Indium, Bismuth and Zinc based 1D and 2D Coordination Polymers Dalton Transactions. Royal Society of Chemistry.

10 **Artículo científico**. Aguirre-Diaz, L. M.; Reinares-Fisac, D.; Iglesias, M.; Gutierrez-Puebla, E.; Gándara, F.; Snejko, N.; Monge, M.A.(1/7). 2017. Group 13th Metal-Organic Frameworks and their role in heterogeneous catalysis Coordination Chemistry Reviews. Elsevier. 335, pp.1-27. ISSN 0010-8545.

11 **Artículo científico**. Mosquera, M.E; Gómez-Sal, P.; Isabel Díaz; Aguirre, L. M.; Andrea Ienco; Gabriel Manca; Carlo Mealli. 2015. Intriguing I2 Reduction in the Iodide for Chloride Ligand Substitution at a Ru(II) Complex: Role of Mixed Trihalides in Redox Mechanism.Inorganic Chemistry. ACS publications. 55, pp.283-291.

12 **Artículo científico**. Aguirre-Díaz, L. M.; Iglesias, M.; Snejko, N.; Gutierrez-Puebla, E.; Monge, A.2015. Toward understanding of structure-catalyst activity relationship of new Indium MOFs as catalysts for the solvent-free ketones cyanosilylation.RSC Advances. Royal Society of Chemistry. 5, pp.7058-7065.

13 **Artículo científico**. Aguirre-Díaz, L. M.; Iglesias, M.; Snejko, N.; Gutierrez-Puebla, E.; Monge, A.2013. Indium metal–organic frameworks as catalysts in solvent-free cyanosilylation reaction.CrystEngComm. Royal Society of Chemistry. 15, pp.9562-9571.

14 **Artículo científico**. Moreno-Fuquen, R.; Regina De Almeida Santos; Aguirre-Díaz, L. M.2011. Imidazole–imidazolium picrate monohydrate Acta Crystallographica Section E. IUCr Journals. 67, pp.o139.

15 **Artículo científico**. Moreno-Fuquen, R.; Aguirre-Díaz, L. M.; Kennedy, A. R.2008. Redetermination of 4-nitrostilbene.Acta Crystallographica Section E. IUCr Journals. E64, pp.o2259.

C.2. Proyectos

1 MAT2016-78465-R Solid Solution MOFs as clean, safe and sustainable energy source Maria Angeles Monge Bravo. (Instituto de Ciencia de Materiales de Madrid). 01/01/2017-31/12/2019. 150.000 €.

2 S2013/MIT-2740 Photonic Advanced Materials" (PHAMA 2.0-CM) Cefe Lopez. (Instituto de Ciencia de Materiales de Madrid). 01/10/2014-30/09/2018. Miembro de equipo.

3 MAT2013-45460-R Metal-organic frameworks (MOFs) materials as a clean energy platform Maria Angeles Monge Bravo. (Instituto de Ciencia de Materiales de Madrid). 01/01/2014-31/12/2016.

4 Crystallization factory of ministry of education and science Programa CONSOLIDER-INGENIO 2010 CSD2006-00015. Juan Manuel García Ruíz. (Universidad de Alcalá). 16/09/2006-31/12/2014. 5.000.000 €. Miembro de equipo.

5 MAT2010-17571 New architectures in materials chemistry: MOFs towards sustainable physical and chemical applications Maria Angeles Monge Bravo. (Instituto de Ciencia de Materiales de Madrid). 01/01/2011-31/12/2013. 120.000 €.

C.3. Contratos

C.4. Patentes

1 Felipe Gándara Barragan; Daniel Reinares Fisac; Maria Angeles Monge Bravo; Natalia Snejko Shalneva; Enrique Gutierrez Puebla; Marta Iglesias; Lina María Aguirre Díaz. P201630937. Materiales metal-orgánicos micro- y mesoporosos basados en elementos del grupo 13, síntesis y uso como catalizador heterogéneo España. 08/07/2016. Consejo Superior de Investigaciones Científicas.

2 Lina María Aguirre Díaz; Marta Iglesias; Maria Angeles Monge Bravo; Natalia Snejko Shalneva; Enrique Gutierrez Puebla. WO 2016/012649 Al. Crystalline organic-inorganic material based on cations of the group XIII of the periodic table, preparation method and use thereof España. 28/01/2016. Consejo Superior de Investigaciones Científicas.