

Part A. PERSONAL INFORMATION

CV date 2023/03/24

First and Family name	M. Carmen Nicasio Jaramillo		
Social Security, Passport, ID number		Age	
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0002-6485-2953	
	SCOPUS Author ID (*)	6602757274	
	WoS Researcher ID (*)	G-6799-2012	

(*) *Optional*

(**) *Mandatory*

A.1. Current position

Name of University/Institution	Universidad de Sevilla		
Department	Química Inorgánica/Facultad de Química		
Address and Country	C/ Prof. García González 1, 41012-Sevilla		
Phone number		E-mail	
Current position	Full Professor	From	2011/05/01
Key words	Homogeneous catalysis – Coordination Compounds - Organometallic Compounds – Reaction mechanism – cross-coupling– C-H activation		

A.2. Education

PhD, Licensed, Graduate	University	Year
Degree in Chemistry	Universidad de Sevilla	1989
PhD in Chemistry	Universidad de Sevilla	1993

A.3. General indicators of quality of scientific production (see instructions)

Publications in JCR-listed Journals 71 (81% located at top 25% (Q1)). The overall (full career) citation number is above 3300, for an average of cites per article of 47 and an h index of 35.

Five consecutive positive evaluations for research activity (1990-2019). The number of Ph. D. Theses supervised in the time frame 2012-2022 is 7 and three more in progress. Continuous funding from the Spanish National Program for R&D has been obtained from 2015 (three 3-years Grant).

Part B. CV SUMMARY (max. 3500 characters, including spaces)

MCN completed her PhD studies at the Universidad de Sevilla in **1993** under the supervision of Prof. Ernesto Carmona in the field of Organometallic Chemistry, focused in the activation of C-H bonds of hydrocarbons by iridium complexes. Then, she joined Prof. Robin N Perutz's group at the **University of York, UK**, as a **Marie Curie postdoctoral fellow**. She worked on the isolation, characterization and, reactivity towards small molecules of low-coordinate species of Ru(0) and Os(0) obtained under photochemical conditions (matrix-isolation and laser flash photolysis). In **1996**, she moved to the **Universidad de Huelva**, Spain, to work with Prof. Pedro J. Pérez as a post-doc researcher, where she worked in catalytic C-C and C-heteroatom bond forming reactions promoted by copper(I) complexes. A major part of her academic career was developed at the Universidad de Huelva as **Assistant Professor (1997)**, **Associate Professor (1998)** and **Lecturer (1999)**. In **2010** she moved to the **Universidad de Sevilla** where she is **Full Professor** since **2011**.

In the last years of her stay at the Universidad de Huelva, she started an independent research line focused on **late transition metal-based catalysts for applications in organic synthesis**. Since **2014**, she **heads the research group** named "Estructura y Reactividad de Compuestos Organometálicos. Catálisis Homogénea" Her research interests include the application of organometallic catalysis to organic synthesis and the study of the mechanism involved in these transformations. She has authored 71 publications and two book chapters, more than 80% in Q1 JCR-listed journals including several in high impact multidisciplinary chemistry publications. She has been invited as speaker at national and international meetings, as well as research centers. She has supervised



7 PhD Thesis (with two extraordinary PhD awards in 2004-2005 and 2020-2021) and more than 25 Degree Projects and Master Thesis. She is currently supervising 3 more theses in different stages.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (a selection from 2013-2023; all as main corresponding author)

- R. J. Rama, C. Maya, F. Molina, A. Nova, M. C. Nicasio.
Important role on NH-carbazole in aryl amination reactions catalyzed by 2-aminobiphenyl palladacycles.
ACS Catal. **2023**, *13*, 3934.
- N. Santamaría, C. Velasco, M. Marín, C. Maya, M. C. Nicasio.
LPdCl₂(amine) complexes supported by terphenyl phosphanes: applications in aryl amination reactions.
Dalton Trans. **2022**, *51*, 15734.
- M. T. Martín, M. Marín., C. Maya, A. Prieto, M. C. Nicasio.
Ni(II) Precatalysts Enable Thioetherification of (Hetero)aryl Halides and Tosylates and Tandem C-S/C-N Couplings
Chem. Eur. J. **2021**, *27*, 12320. Selected as HOT article. It was highlighted in the inside front cover of issue 48.
- M. T. Martín, M. Marín. R. J. Rama, C. Maya, E. Álvarez, F. Molina, M. C. Nicasio.
Zero-valent ML₂ complexes of group 10 metals supported by terphenyl phosphanes
Chem. Commun. **2021**, *57*, 3083. It was highlighted in the inside front cover of issue 25.
- A. Beltrán, I. Gata, C. Maya, M. C. Nicasio
Dinuclear Cu(I) Halides with Terphenyl Phosphines: Synthesis, Photophysical Studies and Catalytic Applications in CuAAC Reactions.
Inorg. Chem. **2020**, *59*, 10894-10906.
- R. J. Rama, C. Maya, M. C. Nicasio.
Dialkylterphenyl Phosphine-Based Palladium Precatalysts for Efficient Aryl Amination of Nucleophile
Chem. Eur. J. **2020**, *26*, 1064-1073. Selected as HOT paper.
- R. J. Rama, C. Maya, M. C. Nicasio.
Palladium-Mediated Intramolecular Dearomatization of Ligated Dialkylterphenyl Phosphines.
Dalton Trans. **2019**, *48*, 14575. Selected as HOT article. It was highlighted in the inside front cover of issue 39.
- M. Marín, J. J. Moreno, C. Navarro-Gilabert, E. Álvarez, C. Maya, R. Peloso, M. C. Nicasio, E. Carmona.
Synthesis, Structure and Nickel Carbonyl Complexes of Dialkylterphenyl Phosphines.
Chem. Eur. J. **2019**, *25*, 260-272.
- Silvia G. Rull, Ignacio Funes-Ardoiz, Celia Maya, Feliu Maseras, Manuel R. Fructos, Tomás R. Belderrain, M. Carmen Nicasio.
Elucidating the Mechanism of Aryl Aminations Mediated by NHC-Supported Nickel Complexes: Evidence for a Nonradical Ni(0)/Ni(II) Pathway
ACS Catal. **2018**, *8*, 3733-3742.
- Mario Marín, Raquel J. Rama, M. Carmen Nicasio
Nickel-Catalyzed Amination Reactions: an Overview
Chem. Rec. **2016**, *16*, 1819-1832..
- Silvia. G. Rull, Juan. F. Blandez, Manuel. R. Fructos, Tomás. R. Belderrain, M. Carmen. Nicasio.



Efficient N-(Hetero)Arylation of Indoles and Carbazoles Catalyzed by a Single-Component NHC-Ni(0) Precursor.

Adv. Synth. Catal. **2015**, 357, 907-911. Selected as Vey Important Publication. It was highlighted in the inside front cover of issue 5.

C.2. Research projects (2011-2021)

1. Grant number: PID2020-113797RB-C22

Title: Estrategias catalíticas para la formación de enlaces carbono-carbon y carbono-heteroátomo en estructuras hidrocarbonadas.

PI: M. Carmen Nicasio Jaramillo

Founder: Ministerio de Ciencia e Innovación/Agencia Estatal de Investigación

Period: 9/2021-8/2024

Amount: 130.000€

2. Grant number: P20_00624

Title: Formación catalítica de enlaces C-C and C-heteroátomo. Búsqueda de soluciones sostenibles y nuevas metodologías.

PI: M. Carmen Nicasio Jaramillo

Founder: Junta de Andalucía

Period: 10/2021-12/2022

Amount: 75.000€

2. Grant number: US-1262266

Title: Complejos de Bajo Número de Coordinación de Metales del Grupo 10 (Ni, Pd y Pt) con Ligandos Fosforados Voluminosos. Aplicaciones en Catálisis.

PI: M. Carmen Nicasio Jaramillo

Founder: Universidad de Sevilla-FEDER

Period: 2020-2022

Amount: 75.000 € (only directed costs)

3. Grant number: CTQ2017-82893-C2-2-R

Title: Desarrollo de Sistemas Catalíticos y Estequiométricos Basados en Metales de Transición para la Funcionalización de Enlaces Carbono Hidrógeno de Hidrocarburos y sus Derivados.

PI: M. Carmen Nicasio Jaramillo

Founder: MINECO/Dirección General de Investigación

Period: 2018-2021 (extended deadline to July 2021)

Amount: 127.000.00 € (only directed costs)

4. Grant number: CTQ2014-52769-C3-3-R

Title: Valorización de materias primas asequibles: desarrollo de sistemas basados en metales para la activación y funcionalización de dióxido de carbono, hidrocarburos y dinitrógeno.

PI: M. Carmen Nicasio Jaramillo

Founder: MINECO/Dirección General de Investigación

Period: 2015-2017

Amount: 87.000 € (only directed costs)

C.3. Invited presentations/lectures at meetings and research centers (2012-2022).

2022: *XL GEQO Conference* (Barcelona); *XXII International Symposium on Homogeneous Catalysis-ISHC 2022* (Lisboa, Portugal), comunicación oral; *2nd Spanish Workshop on Phosphorus Chemistry* (online conference); **2021:** *1st Spanish Workshop on Phosphorus Chemistry* (online conference); **2020:** *International Workshop on Chemistry of Group 11 Elements* (Lisboa, Portugal); **2019:** *Robin Perutz's 70th Birthday Symposium* (York, UK); **2018:** *European Colloquium on Inorganic Reaction Mechanisms, ECIRM* (Barcelona); **2017:** *XXXVI Reunión Bienal de la Real Sociedad Española de Química* (Sitges) comunicación oral; **2016:** *11th Spanish-Italian Symposium on Organic Chemistry* (San Sebastián), comunicación oral;



2014: XXV Reunión Bienal de Química Orgánica (Alicante), comunicación oral; **2013:** Universidad de Cádiz; **2012:** XXV International Conference in Organometallic Chemistry, ICOMC, (Lisboa), comunicación oral.

C.4. Organization of scientific meetings

-Member of the organizing committee of XXVIII Reunión del Grupo Especializado de Química Organometálica, held at Punta Umbría (Huelva) in september 2010.

-Member of the organizing committee of XXVI Reunión Bienal del Grupo Especializado de Química Orgánica held at Punta Umbría (Huelva) in june 2016. -Member of the organizing committee of Symposium in Honor of Professor Ernesto Carmona, held at Sevilla in september 2018.

C.5. Membership and service to scientific societies

Member of the Spanish Royal Society of Chemistry (from 1991). Member of the American Chemical Society (from 1997). Member of the Board of the Organometallic Group (GEQO) of the Spanish Royal Society (2014-2018). Member of the Board of the Local Section of the Spanish Roayl Society of Chemistry-West Andalucía (since 2012).

C.6 Academic services at universities

2002-2007 Secretary of Departamento de Química, Universidad de Huelva.

2007-2010 Head of Departamento de Química, Universidad de Huelva.

2017-2019 Vice Dean for International Affairs of Facultad de Química, Universidad de Sevilla.

2021- Coordinator of the Doctoral Programme in Chemistry, Universidad de Sevilla

C.7 Research assesment

-Member of Evaluation Panels of Ramón y Cajal and Juan de la Cierva Programs (2013, 2014, 2016, 2017, 2018, 2022).

-Member of the Panel of Experts for the National Research Program (2016 and 2019).

C.8. Others

Guest Editor for a special virtual issue of papers in *Dalton Trans* "**Breaking bonds over many timescales: in celebration of Robin Perutz's 70th birthday**". doi.org/10.1039/C9DT90277E