MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES

CURRICULUM VITAE (maximum 4 pages)

CV date	19/10/2021

Part A. PERSONAL INFORMATION

First and Family name	Anna Roglans		
Social Security, Passport, ID number	40517603K	Age	57
Researcher numbers	Researcher ID	J-9852-2014	
	Orcid code	0000-0002-7943-5706	

A.1. Current position

Name of University/Institution	University of Girona			
Department	Institute of Computational Chemistry and Catalysis and Department of Chemistry			
Address and Country	C/ Maria Aurèlia Capmany, 69 17003 - Girona			
Phone number	972418275	E-mail	anna.roglans@udg.edu	
Current position	Full professor		From	16/10/2010
Espec. cód. UNESCO	2306			
Palabras clave	Catalysis, transition metals, cycloadditions, fullerene, reaction mechanisms, ESI-MS			

A.2. Education

PhD	University	Year
Degree in Chemistry	Universitat Autònoma de Barcelona	1988
PhD in Chemistry	Universitat Autònoma de Barcelona	1994

A.3. JCR articles, h Index, thesis supervised

JCR articles: 96
H index: 28
Thesis supervised: 13

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

Anna Roglans (1964, Palafrugell, Girona) obtained her PhD in chemistry from the Autonomous University of Barcelona (UAB) in 1994 under the supervision of Prof. Marcial Moreno-Mañas, before joining the group of Prof. Victor Snieckus at the University of Waterloo (Ontario, Canada) for post-doctoral studies (1995-1996). In 1997 she rejoined the Autonomous University of Barcelona with a two-year contract to returning doctors (RED contract of Ministry of Education and Science). In February 1999 she was appointed as a permanent lecturer at the Department of Chemistry at the University of Girona (UdG). In 2010 she was promoted to full professor in chemistry. At the UdG she established her own research group (METSO: Transition Metals in Organic Synthesis, web: http://tnt.udg.edu/gr_metso/), which also forms part of the Institute of Computational Chemistry and Catalysis (IQCC, web: http://iqcc.udg.edu) of the same university. The group, since its creation, has obtained continuous financial support in competitive calls.

Prof. Roglans is a frequent author of academic papers in leading chemistry journals (96 papers, 7 reviews and 1 book chapter). These publications have received more than 2900 citations. Her h index is 28. She actively participates in international congresses (more than 70) and directs Master's and Doctoral Theses (14 Masters, 13 completed Theses and 2 Theses in progress). She has participated in 17 national and international projects, 9 of them as principal investigator.

At the UdG, she has served as the academic secretary of the Department of Chemistry (2000-2004). She is currently academic secretary of the Institute of Computational Chemistry and Catalysis (IQCC) (since 2013) and a member of the Doctoral Studies Committee of the UdG (since 2015).

Research interests
She works in the field of organic and organometallic chemistry. In recent years, her research interests have mainly been focused on the construction and synthesis of molecular architectures with a high level of complexity starting from simple products by means of transition-metal catalyzed cyclizations to access a wide range of carbo- and heterocyclic compounds. In particular: i) the study of rhodium-catalyzed [2+2+2] cycloadditions involving alkenes and allenes, which permit the enantioselective generation of cycloadducts with asymmetric quaternary carbons; ii) the study of cyclizations through rhodium carbenoid intermediates generated from tosylhydrazones; iii) the functionalization of fullerenes for optical and electronic devices by rhodium-catalyzed cyclizations; and iv) the investigation of the reaction mechanisms of all the previous cyclization reactions.

Part C. RELEVANT MERITS

C.1. Publications (including books) (selected publications from the last 5 years)

A. Artigas, C. Castanyer, N. Roig, A. Lledó, M. Solà, A. Pla-Quintana, A. Roglans.
Synthesis of fused dihydroazepine derivatives of fullerenes by a Rh-catalyzed cascade process
Adv. Synth. Catal. **2021**, *363*, 3835-3844.

A. Roglans, A. Pla-Quintana, M. Solà.
Mechanistic studies of transition-metal-catalyzed [2+2+2] cycloaddition reactions
Chem. Rev. **2021**, *121*, 1894-1979.

A. Artigas, J. Vila, A. Lledó, M. Solà, A. Pla-Quintana, A. Roglans.
A Rh-Catalyzed Cycloisomerization/Diels–Alder Cascade Reaction of 1,5-Bisallenes for the Synthesis of Polycyclic Heterocycles.
Org. Lett., **2019**, *21*, 6608-6613.

E. Castro, A. Artigas, A. Pla-Quintana, A. Roglans, F. Liu, F. Perez, A. Lledó, X.-Y. Zhu, L. Echegoyen.
Enhanced open-circuit voltatge in perovskite solar cells with open-cage [60]fullerene derivatives as electron-transporting materials.
Materials, **2019**, *12*, 1314-1322.

A. Pla-Quintana, A. Roglans.
Chiral induction in [2+2+2] cycloaddition reactions.
Asian J. Org. Chem., **2018**, *7*, 1706-1718.

A. Artigas, A. Pla-Quintana, A. Lledó, A. Roglans, M. Solà.
Expeditious preparation of open-cage fullerenes by rhodium(I)-catalyzed [2+2+2] cycloaddition of diynes and C60: an experimental and theoretical study.
Chem. Eur. J., **2018**, *24*, 10653-10661.

E. Haraburda, M. Fernández, A. Gifreu, J. Garcia, T. Parella, A. Pla-Quintana, A. Roglans.
Chiral induction in intramolecular rhodium-catalyzed [2+2+2] cycloadditions of optically active allene-ene/yne-allene substrates.
Adv. Synth. Catal., **2017**, *359*, 506-512.

Ò. Torres, M. Solà, A. Roglans, A. Pla-Quintana.
Unusual reactivity of rhodium carbenes with allenes: an efficient asymmetric synthesis of methylenetetrahydropyran scaffolds.
Chem. Commun., **2017**, *53*, 9922-9925.

C.2. Research projects and grants

1. Reference: CTQ-2017-85341-P. Title: *Avances en la reactividad de fullerenos y nanotubos: estudios teórico-experimentales de ciclaciones catalizadas por metales de transición*. Ministerio de Economía, Industria y Competitividad (MINECO). PI: Miquel Solà and Anna Pla-Quintana. Budget: 199.650 € (2018-2020).

2. Reference: CTQ2014-54306-P. Title: *Estudios teórico-experimentales de ciclaciones catalizadas por metales de transición. Nuevos desarrollos en aromaticidad, funcionales de densidad y química supramolecular*. Ministerio de Economía, Industria y Competitividad (MINECO). PI: Miquel Solà and Anna Roglans. Budget: 196.020€ (2015-2017).

3. Reference: 2017SGR39. Title: *Disseny i modelatge de reaccions catalitzades per metalls de transició (DiMoCat).* Generalitat de Catalunya. PI: Miquel Solà. Budget: 44.480€ (2018-2020).

4. Reference: 2014SGR931. Title: *Disseny i modelatge de reaccions catalitzades per metalls de transició (DiMoCat).* Generalitat de Catalunya. PI: Miquel Solà. Budget: 38.400€ (2014-2017).

5. Reference: CTQ2011-23121. Title: *Aplicaciones catalíticas de compuestos de rodio, paladio y níquel en síntesis orgánica. Metodología y estudios mecanísticos.* Ministerio de Ciencia, Innovación y Universidades (MICINN). PI: Anna Roglans. Budget: 83.480€ (2012-2014).

6. Reference: AIB2010DE-00262. Title: *Complejos de Ni para la formación de enlaces C-C*. Ministerio de Ciencia, Innovación y Universidades (MICINN). PI: Anna Roglans. Budget: 6.480€ (2011-2012).

7. Reference: CTQ2008-05409-C02-02. Title: *Síntesis, reactividad y aplicaciones de macrociclos poliinsaturados y sus precursores. Estudios mecanísticos mediante ESI-MS*. Ministerio de Educación, Cultura y Deporte (MEC). PI: Anna Roglans. Budget: 74.000€ (2009-2011).

8. Reference CTQ2005-04968-C02-02. Title: *Metales de Transición en Medios no Convencionales como Catalizadores en Síntesis Orgánica.* Ministerio de Educación, Cultura y Deporte (MEC). PI: Anna Roglans. Budget: 61.000€ (2005-2008).

9. Reference PCT-320100-2007-3. Title: Diseño Molecular de Compuestos con Interés Tecnológico. Ministerio de Educación, Cultura y Deporte (MEC). PI: Anna Roglans. Budget: 228.060€ (2007).

10. Reference COST D24/0013/02. Title: *Chemical transformations mediated by transition metals: selectivity, catalysis, and theoretical aspects*. European Co-operation Science Foundation. PI: Marcial Moreno Mañas. Duración: 2003-2007. Participants: UAB, UdG, U. La Sapienza (Italia), U. Paris VI (France), ENS Paris (France), U. Lyngby (Denmark) (2003-2007).

C.5, C.6, C.7… (e. g., Institutional responsibilities, memberships of scientific societies…)

1. Academic secretary of the Department of Chemistry (2000-2004).
2. Academic secretary of the Institute of Computational Chemistry and Catalysis (IQCC) (since 2013).
3. Member of the Doctoral Studies Committee of the UdG (since 2015).
4. Participation as a member in the evaluation of BQU/CTQ Spanish national projects (calls 2006, 2008, 2009, 2013, 2015 and 2016).

5. Member of the evaluation commission of Ramón y Cajal and Juan de la Cierva proposals (call 2011).
6. Evaluating member of ANECA for equipment proposals.
7. Member of the Comisión de Profesorado Lector y Profesorado Colaborador of the Agency for the Quality of the Catalan University System (AQU) (2007-2012).
8. Evaluator for national and international research agencies AQU, ANEP, FONCYT (Argentina), Conselleria d'Innovació i Competitivitat de la Generalitat Valenciana, City University of Hong Kong and Agence Nationale de la Recherche (ANR), France.
9. Peer reviewer of journals such as J. Am. Chem. Soc., Angew. Chem., Nature Synthesis, Chem. Catalysis, Chem. Commun., Chem.Eur. J., Org. Lett., J. Org. Chem., Eur. J. Org. Chem. Tetrahedron, Tetrahedron Lett., Synlett, Synthesis, Molecules and OpenChemistry.
10. Member of the Real Sociedad Española de Química (RSEQ). Member of the Catalan Society of Chemistry (SCQ) and editor of the journal that is published annually (2011-2016).