

Part A. Personal Information

DATE	28/06/21
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Surname(s)	MARTÍN GARCÍA	
Forename	Víctor Sotero	
Social Security, Passport, ID number	42151722J	
Sex	Male	
Age	66	
Researcher codes	WoS Researcher ID (*)	K-1760-2014
	SCOPUS Author ID(*)	7202200506
	Open Researcher and Contributor ID (ORCID)	http://orcid.org/0000-0003-0300-9636

(*) At least one of these is mandatory

A.1. Current position

Post/ Professional Category	Professor	
UNESCO Code	2306	
Key Words	Synthesis, bioactive products, marine natural products, metals	
Name of the University/Institution	Universidad de La Laguna (ULL)	
	Department/Centre	Organic Chemistry, Instituto Univ. de Bio-Orgánica Antonio González
	Full Address	Avenida Astrofísico Francisco Sánchez 2, 38206 La Laguna, Tenerife
	Email Address	vmartin@ull.es
	Phone Number	+34 922 318 579
Start date	26/03/1992	

A.2. Education (title, institution, date)

Year	University	Degree	Title
1975	La Laguna	First degree	Graduate in Chemical Sciences
		Masters (if appropriate)	
1978	La Laguna	PhD	Doctor in Chemical Sciences

A.3. Indicators of Quality in Scientific Production (See the instructions)

Total number of citations: 8,037, Source: WOS
 Average number of citations: 43 (250 last five years)
 Total number of publications (187) in the first quartile (Q1) and first decile (D1) (data available until 1997): 71 Q1, 26 D1
 h-index: 37
 Thesis supervised last 10 years: 11, Total: 34
 Positive evaluation of periods of six years of research = 6. Date of the last one granted: June 6, 2012

Part B. Free Summary of CV (Max. of 3.500 characters, including spaces)

Doctoral thesis (1975-78). Directors: Professors Antonio González, Julio Delgado and Manuel Norte on "*isolation and transformation of natural products of marine origin*", ULL
Postdoctoral stay (1980-82) at Stanford University and the Massachusetts Institute of Technology (MIT) (USA) under the direction of Professor K. Barry Sharpless (2001 Nobel Prize). In this stay, I worked on enantioselective methodology and synthesis.
Research areas. The opportunity to work in both areas has allowed me to focus my professional career on the *synthesis of bioactive molecules* and especially *natural products of marine origin*.
Fields of interest and scientific achievements.

- Total synthesis of bioactive natural products. Our main objectives have been cyclic ethers of marine origin, including lauroxanes (isolated from red algae of the genus *Laurencia*) and ladder-type toxins (isolated from dinoflagellates) involved in red tides. Special mention should be made of the application of the Nicholas reaction, using cobalt complexes of propargyl alcohols.
- Development of new synthetic methodologies based on methods that are not harmful to the environment. In particular, we have focused our attention on iron due to its wide availability and zero toxicity. The development of the simultaneous formation of C-C and C-X (O, N) bonds using the Prins reaction has shown us to be a very powerful methodology for the synthesis of saturated heterocycles. See invited review *SynLett*, **2014**, 25, 12-32.
- Synthesis of α -amino acids and natural and non-natural peptides. In general, we use natural α -amino acids as starting material and we carry out reactions of high synthetic efficiency and stereochemistry in a few chemical stages.

Professional evolution:

1982-92 Professor of Organic Chemistry, ULL

1989 Scientific Researcher, CSIC

Since 1992 Professor of Organic Chemistry, ULL

Director of the IUBO-AG (1995-99, 2001-10)

Research Group. Our group started its activities about 35 years ago counting for our activity, without interruption, with national funding. We have also participated in European and regional projects. At present we can be considered a consolidated group with a high interaction with other research groups (IPNA, CSIC), Faculty of Health Sciences (ULL) and various Universities of Latin-America (National University of San Luis-ARG), University National of the South-ARG, University of the Republic-URY) and European (University of Regensburg-DEU, University of Bergen (NOR), University of Oslo (NOR), University of Glasgow (UK). Mention to indicate that the doctors trained in our group, currently occupy important jobs in companies, universities and national and international research centers.

Medium-term scientific-technical objectives. The acquired experience and the current needs lead us to focus our efforts to achieve synthetic processes with high efficiency and low environmental impact. Our strategies are based on two fundamental approaches: a) the use of reagents that contain chemical elements that are the least possible pollutants, and b) development of high chemical efficiency processes with the formation of many bonds in a few chemical stages. All this applies to molecules with high added value.

Part C. Relevant accomplishments

C.1. Publications

1. Rodríguez-López J; Brovotto M; Martín VS, Martín T. Enantiodivergent Cyclization by Inversion of the Reactivity in Ambiphilic Molecules. *Angew. Chem. Int. Ed.* **2020**, 59, 17077-83
2. Brindisi C, Vázquez S, Suescun L, Seoane G, Martín VS, Brovotto M. Chemoenzymatic Total Synthesis and Structural Revision of Ampelomins B, D, E, and epi-Ampelomin B. *J. Org. Chem.* **2019**, 84, 15997-002
3. Álvarez-Méndez S, Fariña-Ramos M, Luisa Villalba M, Perretti MD, Garcia C, Moujir LM, Ramirez M A, Martin VS. Stereoselective Synthesis of Highly Substituted THPs through an Evans Aldol-Prins Strategy. *J. Org. Chem.* **2018**, 83, 9039-66
4. Scoccia J, Pérez SJ, Sinka V, Cruz DA, López-Soria JM, Fernández I, Martín VS, Miranda PO, Padrón JI. Direct Access to 2,3,4,6-Tetrasubstituted Tetrahydro-2H-pyrans via Tandem SN2'-Prins Cyclization. *Org. Lett.* **2017**, 19, pp 4834-37
5. Álvarez-Méndez S, García C, Martín VS. The Evans Aldol-Prins cyclization: a general and stereoselective method for the synthesis of 2,3,4,5,6-pentasubstituted tetrahydropyrans. *Chem. Commun.* **2016**, 52, 3380-83
6. Pérez SJ, Purino M, Miranda PO, Martín VS, Fernández I, Padrón JI. Prins Cyclization Catalyzed by a FeIII/Trimethylsilyl Halide System: The Oxocarbenium Ion Pathway versus the [2+2] Cycloaddition. *Chem. Eur. J.* **2015**, 21, 15211-21
7. Martín T, Padrón JI, Martín VS. Strategies for the Synthesis of Cyclic Ethers of Marine Natural Products. *Synlett* **2014**, 12-32

8. Rodríguez-López J, Crisóstomo FP, Ortega N, López-Rodríguez M, Martín VS, Martín T. Epoxide-Opening Cascades Triggered by a Nicholas Reaction: Total Synthesis of Teurilene. *Angew. Chem. Int. Ed.* **2013**, 52, 3659-62
9. Purino M, Ramírez MA, Daranas AH, Martín VS, Padrón JI. Iron(III) Catalyzed Direct Synthesis of cis-2,7-Disubstituted Oxepanes. The Shortest Total Synthesis of (+)-Isolaurepan. *Org. Lett.* **2012**, 14, 5904-07
10. Carballo RM, Purino M, Ramírez MA, Martín VS, Padrón JI. Iron(III)-Catalyzed Consecutive Aza-Cope-Mannich Cyclization: Synthesis of *trans*-3,5-Dialkyl Pyrrolidines and 3,5-Dialkyl-2,5-dihydro-1H-pyrroles. *Org. Lett.* **2010**, 12, 5334-37

C.2. Research Projects and Grants

(Last ten years)

1. Title: *Sustainable Chemistry: from Small Molecules to Complex Functional Systems (SUSCHEM)*
Financial institution: Ministerio de Ciencia, Innovación y Universidades (**PGC2018-094503-B-C22**)
Project duration: 01/01/2019 to 31/12/2021. Budget: 119.790€
Principal investigator 1: Juan Ignacio Padrón
Principal investigator 2: Víctor S. Martín
2. Title: *Organic synthesis under the sustainability paradigm approach*
Financial institution: MINECO (**CTQ2014-56362-C2-1-P**)
Project duration: 1/01/2015 to 31/12/2018. Budget: 257.730€
Principal investigator: Víctor S. Martín
3. Title: *Synthesis of novel chemical entities to map bioactivity in the chemical space*
Financial institution: MINECO (**CTQ2011-28417-C02-01**)
Project duration: 1/01/2012 to 31/12/2014 (prórroga 31/12/2015). Budget: 216.590€
Principal investigator: Víctor S. Martín (Coordinator, Coordinated project)
4. Title: *Development of New Catalytic Process Oriented to the Synthesis of Bioactive Molecules*
Financial institution: MICINN (**CTQ2008-06806-C02-01/BQU**)
Project duration: 1/01/2009 to 31/12/2011. Budget: 237.039€
Principal investigator: Víctor S. Martín (Coordinator, Coordinated project)
5. Title: *Efficient construction of privileged structural motifs: application to the stereoselective synthesis of natural products, biological leaders and new molecular receptors*
Financial institution: MEC (**CTQ2005-09074-C02-01/BQU**)
Project duration: 15/10/2005 to 15/10/2008. Budget: 142.420€
Principal investigator: Víctor S. Martín (Coordinator, Coordinated project)
6. Title: *Improving Biomedical Research and Innovation in the Canary Islands*
Financial institution: 7th Framework Programme for Research (**FP7-REGPOT-2012-CT2012-316137-IMBRAIN**)
Project duration: 1/12/2012 to 30/04/2016. Budget: 4.319.786€
Principal investigator: Prof. Rafael Alonso Solis
Participation type: Researcher

C.3. Contracts

Collaboration with the German company: Analyticon Discovery GmbH (www.ac-discovery.com).
Topic: *Enantiopure synthesis of functionalized oxepans as synthetic intermediates.*
Starting date: negotiations are closing.
Estimated amount of the collaboration: 21,000€

C.4. Patents and other IPR

Title: *Synthesis and derivatization of 2.7 cis and trans-disubstituted oxepenes*
Inventors / authors: Cruz-Perdomo, DA; Martín VS; Padrón JI
Entity holder: Superior Council of Scientific Investigations (CSIC)-Universidad de La Laguna
Application number: P201531188, Patent of invention, Country of priority: Spain
Country of registration: Spain, Community of Madrid
Date: 08/11/2015
Title: *Fluorescent blocker (\pm) RCTM-3 of ad-type adrenergic receptors.*
Inventors / authors: Borges, R.; Martín, T.; Beltrán, B.; Machado, J.D.; Carrillo, R.; Montesinos, M.S.; Martín, V.S.

Entity holder: University of La Laguna and Technological Institute of the Canary Islands-ITC
Application number: P200801297, Patent of invention, Country of priority: Spain
Date: 03/04/2008

C.5. Participation in evaluation processes

Evaluator of the Coordination and Evaluation Subdivision (AEI) (36 evaluations 2006-2017)
Project Evaluator at the Andalusian Agency for the Evaluation of Quality University Accreditation (2006, 2011)
Project Evaluator of the Junta de Castilla y León (2011, 2012, 2015)
Project Evaluator of the Ministry of Education, Science and Technology, Argentina (2010, 2012)
Project Evaluator of CONICYT, Ministry of Education, Chile (2009, 2013)
Project Evaluator of the National Research and Innovation Agency, Uruguay (2014, 2016, 2017)
Referee of scientific articles of *Adv. Synth Catal.*, *Org. Lett.*, *J. Org. Chem.*, *J. Am. Chem. Soc.*, *Angew. Chem. Int. Ed.*, *Science*, *Chem. Eur. J.*, *SynLett*, *Tetrahedron*, *Tet. Lett.*, *Synthesis*, etc.)

C.6. Management of scientific activity

Director of the University Institute of Bio-Organic Antonio Gonzalez (1995-99, 2001-10, 2019-to date)
Member of the Stakeholders Panel, NetBiome-CSAproject, FP7ENV-2013
President of the Organizing Committee of the 9th Spanish-Italian Symposium on Organic Chemistry (SISOC-IX) (CTQ2011-13297-E), San Miguel de Abona, Tenerife, 2012
President of the Organizing Committee of the 3rd Spanish-Japanese Organic Chemistry Symposium, Santa Cruz de Tenerife, 2003.
Member of the Scientific Committee in National and International Congresses (SISOC-X 2014, XXIV, Biennial Meeting of Organic Chemistry 2018 and 2012, SISOC-VIII 2010, SISOC-VII 2008).
President of the Organizing Committee of the 28th edition of the Organic Chemistry Meeting of the Royal Spanish Society of Chemistry (RSEQ), Santa Cruz de Tenerife, 2020.

C.7. Teaching.

Teaching in the second cycle (bachelor's and degree), and third cycle (doctorate and master's degree) in the Faculties of Chemistry and Pharmacy (ULL) in subjects for which the Department of Organic Chemistry is responsible (1982-present) (example: Pharmaceutical Chemistry, Advanced Organic Chemistry, Synthetic Design, Organometallic and Asymmetric Synthesis, Chemistry of Biological Processes, Application of Transition Metals to Organic Synthesis, etc.).
Doctorate courses at Universities of Chile (Concepción), Mexico (Yucatán), Argentina (National of San Luis, National of the South), Uruguay (University of the Republic) and Milan (Italy)
Positive evaluation of periods of five years of teaching: 6

C.8. Other merits

Member of the Royal Spanish Society of Chemistry, American Chemical Society and Canary Academy of Science
Institutional Research Award 220th Anniversary of the University of La Laguna (Synthesis of Bioactive Products Group) (2012)
Responsible for the NMR Service of the University of La Laguna (1982-2000).
Conferences (19) in different universities and national research centers (CSIC) (Institute of General Organic Chemistry), ICIQ, Universities of Barcelona, Autonomous University of Madrid, Oviedo, Las Palmas, Salamanca, University of the Basque Country) and foreigners (Kyushu, Yucatan, National of San Luis, National of Salta, National of Córdoba, National of the South, of the Republic of Uruguay).
Conference invited national congresses: 3, international 5
Plenary Conferences national congresses: 1, international 9
Felix Serratosa 2016 Medal, Specialized Group of Organic Chemistry of the Royal Spanish Society of Chemistry.