

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>	15/04/2016
First and Family name	Claudio Palomo Nicolau		
Social Security, Passport, ID number	37655199J	Edad	64
Researcher numbers	Researcher ID		
	Orcid code	0000-0001-9809-2799	

### A.1. Current position

Name of University/Institution	University of the Basque Country UPV/EHU		
Department	Organic Chemistry I		
Address and Country	Paseo Manuel Lardizabal, 3; 20018- Donostia-San Sebastián		
Phone number	(+34) 943018200	E-mail	<a href="mailto:claudio.palomo@ehu.es">claudio.palomo@ehu.es</a>
Current position	Catedrático Universidad	From	10/03/1989
Espec. cód. UNESCO	260610		
Palabras clave	Organic Chemistry, Asymmetric Catalysis, Organocatalysis		

### A.2. Education

Title	University	Year
PhD-Organic Chemistry	University of the Basque Country UPV/EHU	1983
Licenciado en Ciencias Químicas	University of Barcelona	1979
Ingeniero Químico Diplomado	Institut Químic de Sarrià IQS	1975

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

247 articles published in peer-reviewed journals, including reviews and Highlights. Doctoral Thesis Supervised: 46; (2006-2016):19; h index 46. Sum of Times Cited without self-citations: 8159. Average Citations per Item= 16,9.

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

**Visiting Professor:** University of California at Berkeley; Host, Prof. Henry Rapoport, 1992/1993. **Awards:** IQS Award, Padre Salvador Gil, 1976; PhD Thesis Award, (UPV/EHU, 1983); Organic Chemistry Award, (Spanish Royal Society of Chemistry, 2002) Euskadi Research Award, (Basque Government, 2008). **Conferences and Seminars:** Regularly invited from academic institutions from Spain and abroad, most than 50 lectures. He has been *Hoffmann la Roche Lecturer-1992* (Basel, Switzerland), *IUPAC Lecturer-2000* (Warsaw, Poland), *Lilly Lecturer-2005* (Madrid, Spain), *Antonio Gonzalez Lecturer-2006* (Tenerife, Spain), *Serratosa Lecturer-2006* (Barcelona, Spain), *EJOC Lecturer-2012* (Lisboa, Portugal) and *Barluenga Lecturer-2015* (Oviedo, Spain). **Research Interests:** Stereoselective carbon-carbon bond forming reactions. Asymmetric catalysis. Organocatalysis.

#### Author profile in Angewandte:

<http://onlinelibrary.wiley.com/doi/10.1002/anie.201208009/pdf>

### Part C. RELEVANT MERITS

#### C.1. Publications (including books)

**Most Relevant in *Asymmetric catalysis assisted by metals* ( in parenthesis, times cited 15/04/2016; impact factor 2016)**

C. Palomo; M. Oiarbide; R. Halder; M. Kelso; E. Gómez-Bengoia; J.M. García. Catalytic Enantioselective Conjugate Addition of Carbamates *J. Am. Chem. Soc.* **2004**, 126, 9188-9189 (**99**) **Impact Factor:** 12,113

C. Palomo; M. Oiarbide; B.G. Kardak; J.M. Garcia; A. Linden. "Highly Enantioselective Friedel-Crafts Alkylations of Pyrroles and Indoles with  $\alpha$ -Hydroxy Enones under Cu(II)-Simple Bis(oxazoline) Catalysis" *J. Am. Chem. Soc.* **2005**, *127*, 4154-4155 (**195**) **Impact Factor:** 12,113 (paper highlighted in *Synfacts* **2005**, *0*, 36)

C. Palomo; M. Oiarbide; A. Laso. "Enantioselective Henry Reactions under Dual Lewis Acid/Amine Catalysis Using Chiral Amino Alcohol Ligands" *Angew. Chem. Int. Ed.* **2005**, *44*, 3881-3884 (**180**) **Impact Factor:** 9,596

C. Palomo; M. Oiarbide; R. Halder; A. Laso and R. López. "Enantioselective Aza-Henry Reactions Assisted by Zn(II) and *N*-Methyl Ephedrine" *Angew. Chem. Int. Ed.* **2006**, *45*, 117-120 (**77**) **Impact Factor:** 11,261 (paper highlighted in *Synfacts*, **2006**, *1*, 366)

#### **Most Relevant in Asymmetric organocatalysis**

C. Palomo; M. Oiarbide; A.Laso; R. Lopez. "Catalytic Enantioselective Aza-Henry Reaction with Broad Substrate Scope" *J. Am. Chem. Soc.* **2005**, *127*, 17622-17623 (**142**) **Impact Factor:** 12,113 (paper highlighted in *Synfacts*, **2006**, *1*, 169)

C. Palomo; S. Vera; A. Mielgo; E. Gómez-Bengoa. "Highly Efficient Asymmetric Michael Addition of Aldehydes to Nitroalkenes Catalyzed by a Simple *Trans*-4-Hydroxyprolynamide" *Angew. Chem. Int. Ed.* **2006**, *45*, 5984-5987 (**169**). **Impact Factor:** 11,261

C. Palomo; A. Mielgo. "Diaryl Prolinol Ethers: Expanding the Potential of Enamine-Iminium Ion Catalysis". *Angew.Chem. Int. Ed.* **2006**, *45*, 7876 - 7880. (**356**). **Impact Factor:** 11,261

C. Palomo; A. Landa; A. Mielgo; M. Oiarbide; A. Puente; S. Vera. "Water-Compatible Iminium Activation: Organocatalytic Michael Reactions of Carbon-Centered Nucleophiles with Enals" *Angew. Chem. Int. Ed.* **2007**, *46*, 8431-8435 (**158**). **Impact Factor:** 11,261 (paper highlighted in *Synfacts*, **2007**, *12*, 1313)

E. Gómez-Bengoa; J. Jiménez; I. Lapuerta; A. Mielgo; M. Oiarbide; I. Otazo; I.Velilla; S. Vera, C. Palomo. "Combined  $\alpha,\alpha$ -Dialkylprolinol Ether/Brønsted Acid Promotes Mannich Reactions of Aldehydes with Unactivated Imines. An Entry to anti-Configured Propargylic Aminoalcohols". *Chem. Sci.* **2012**, *3*, 2949 – 2957 (**14**). **Impact Factor:** 9,211

E. Gómez-Bengoa, J. M. García, S.Jiménez, I.Lapuerta, A.Mielgo, j. M. Odriozola, I. Otazo, J.Razkin, I. Urruzuno, S. Vera, M. Oiarbide and C. Palomo. "Asymmetric synthesis of propargylic alcohols via aldol reaction of aldehydes with ynals promoted by prolinol ether-transition metal-Brønsted acid cooperative catalysis". *Chem.Sci.* **2013**, *4*, 3198-3204 (**9**). **Impact Factor:** 9,211 (paper highlighted in *Synfacts*, **2013**,**9**,**975**)

#### **Most Relevant Recent publications**

J. Izquierdo, A. Landa; I. Bastida; R. López; M. Oiarbide; C. Palomo. "Base-Catalyzed Asymmetric  $\alpha$ -Functionalization of 2-(Cyanomethyl) azaarene N-Oxides Leading to Quaternary Stereocenters" *J.Am.Chem.Soc.* **2016**, *138*, 3282 - 3285. **Impact Factor:** 12,113

H. Echave; R. López; C. Palomo. "Bifunctional Brønsted Base Catalyzes Direct Asymmetric Aldol Reaction of  $\alpha$ -Keto Amides". *Angew. Chem. Int. Ed.* **2016**, 55, 3364 - 3368. **Impact Factor:** 11,261

I. Lapuerta; S. Vera; M. Oiarbide; C. Palomo. "Development of a syn-Selective Mannich Reaction of Aldehydes with Propargylic Imines by Dual Catalysis: Asymmetric Synthesis of Functionalized Propargylic Amines". *Chem. Eur. J.* 2016, 22, 7229-7237 **Impact Factor:** 5,731

J. Etxabe; J. Izquierdo; A. Landa; M. Oiarbide; C. Palomo. "Catalytic Enantioselective Synthesis of N,C- $\alpha$ ,C- $\alpha$ -Trisubstituted  $\alpha$ -Amino Acid Derivatives Using 1H-Imidazol 4(5H)-ones as Key Templates". *Angew. Chem. Int. Ed.* **2015**, 54, 6883 - 6886. **Impact Factor:** 11,261

C.Palomo; R.López. Cyanoalkylation: AlkylNitriles in Catalytic C-C Bond- Forming Reactions. *Angew. Chem.Int.Ed.* **2015**, 54, 13170 – 13184. **Impact Factor:** 11,261

## Book Chapters: 15

### Recent Book Chapters

A.Landa; R.López; M.Oiarbide; C.Palomo. Additions of Nitroalkyls and Sulfones to C=X. *Comprehensive Enantioselective Organocatalysis*; P. Dalko, Ed.3, pp. 841 - 871. Weinheim(Alemania): Wiley-VCH, 2013.

A.Landa, R.López, A. Mielgo, M.Oiarbide, C.Palomo. Organocatalytic C-N bond formation. *Stereoselective Organocatalysis. Bond Formation Methodologies and Activation Modes*; R.Rios, Ed. pp. 381 - 431. Weinheim(Alemania): Wiley, 2013.

## C.2. Research projects and grants

Projects I+D+i developed : >47 ( MEC, GV, UPV/EHU)

### Recent National Projects:

Catalizadores mono-y bifuncionales para transformaciones orgánicas, CTQ2013-47925-C2-1-P(MEC). **Investigadores responsables:** Palomo Nicolau, Claudio ;Oiarbide Garmendia, Mikel. **Fecha de inicio:** 2013. **Fecha fin:** 2016. **Financiación:** 244€

Catálisis Asimétrica y Síntesis Química IT-628-13(GV). **Investigador responsable:** Palomo Nicolau, Claudio **Fecha de inicio:** 2013. **Fecha fin:** 2018. **Financiación:** 422,6€

European Projects and COST Actions: 8

### Recent COST Actions:

**Name:** Organocatalysis

**Network Identification:** COST Action CM0905 ( Coordinador Prof. Petri Pihko)

**Participating Countries:** BE, CH, CZ, DE, EE, ES, FI, FR, GR, HU, IT, IE, LV, NL, NO, PT, RO, SI, SE, TR, UK. **Start date:** 2011, 3 años

**Name:** Functional peptidomimetic foldamers: from unnatural amino acids to self-assembling nanomaterials

**Network Identification:** COST Action CM0803 ( Coordinador Prof. Ferenc Fülöp)

**Participating Countries:** Belgium, Hungary, Switzerland, Denmark, Italy, United Kingdom, France, Netherlands, Germany, Spain. **Start date:** 2010, 3 años

### C.3. Contracts

Projects with industries : 9

### C.4. Patents

Total Patents: 11

Most recent patent:

**Title of the Invention:** Procedimiento de preparación de 1,2-nitroalcoholes opticamente activos, ES 2 238, 2005. **Authors:** C.Palomo ; M.Oiarbide ; A.Laso **Entity Holding:** UPV/EHU

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

Number of "Quinquenios": 6 Number of "Sexenios": 6

Membership of Scientific Societies: Spanish Royal Society of Chemistry, American Association for the Advancement of Science, American Chemical Society.

Research Group Leader: Asymmetric Catalysis and Chemical Synthesis, Approximately 20 researchers / year <http://www.qo.ehu.es/s0040-gicarhom/en/>. The team has continuously been designed as High Performance and Consolidated Group a distinctive recognition granted by the Basque Government consecutively since its establishment.

Responsible for Training and Research Unit (UFI): "Organic Chemistry, Synthesis and Catalysis" (QOSYC) of the UPV / EHU: Personal 80 / year <http://www.ufi.ehu.es/p309-qosychm/es/>

Director of the Organic Chemistry Department 2004-2008 y 2012-2016

Vice President of the Organic Chemistry Group 2012-2016

<http://www.geqor.es/#!juntadegobierno/cfvg>