



### Personal Information

**Name: José Luis Mascareñas Cid**

Date and place of birth: 25/October/1961, Allariz (Ourense)

URL: <http://metbiocat.eu>

<http://www.researcherid.com/rid/A-1208-2015>

<https://scholar.google.es/citations?user=Htmo8U0AAAAJ&hl=es>

### Education

BSc: July 1984, University of Santiago de Compostela, Chemistry.

PhD: July 1988, University of Santiago de Compostela, Chemistry.

### Current Position

- Full Professor (Catedrático), Department of Organic Chemistry, University of Santiago de Compostela, since may 2005.
- Scientific Director of the Research Center CIQUS, since 2014.

### Previous Positions

- FPI. Fellow, University of Santiago de Compostela, 1985-1989.
- Postdoctoral Associate Researcher, **Stanford** University (USA), January 1989-October 1990.
- Postdoctoral Associate Researcher, **Harvard** University (USA), June 1992-October 1992
- Assistant Professor, University of Santiago de Compostela, 1991-1993.
- Associated Professor, University of Santiago de Compostela, 1993-may 2005.
- Visiting Scholar, **Harvard** University (USA), June-October 1995.
- Visiting Professor, University of **Cambridge** (UK), july-august 2009.
- Visiting Scientist, **MIT** (USA), july-august 2013.

### Major honors and awards

- Habilitation to Full Professor (national competition), Sevilla 2003.
- Janssen Cilag **Organic Chemistry Award** of the Spanish Royal Society of Chemistry (2009).
- President, founder of the **Chemical Biology group** of the Spanish Royal Society of Chemistry (2012).
- **Gold medal** of the University of Santiago de Compostela (2013).
- **Advanced Grant award of the ERC** (2014).
- **Galician** of the year “Grupo Correo Gallego” (2014).
- **GDCh-lecturer**: Humboldt-Universität zu Berlin (January 2015) and Philips Marburg Universität (April 2015)
- **Gold Medal** of the Spanish Royal Society of Chemistry (2015)
- **Felix Serratosa** Lecturership 2015
- **Selected member of the EURASC** (European Academy of Sciences) 2016

### Membership and boards

- Member of American Chemical Society, the Spanish Royal Society of Chemistry, and the Spanish Society of Biochemistry and Molecular biology.
- Member of national and international evaluation committees. Committee of ERC Advanced Grants Evaluation (Brussels, 2014 and 2016)
- Member of directing board of the Organic Chemistry group of the Spanish Royal Society of Chemistry, since 2009.
- Member of the steering committee of European Symposium on Bio-organic Chemistry (ESBOC, UK) since 2010, the Marcial Moreno Mañas School since 2008, the Iberian Peptide Meeting (EPI) since 2007 and the group of Chemical Biology of the RSEQ (since 2011).

- Member of the International editorial advisory board of *ChemBioChem* (since 2007), *Asian Journal of Organic Chemistry* (since 2011), and *ACS Omega* (since 2017).
- Scientific Director of the Center for research in Biological Chemistry and Molecular Materials (CIQUS) since 2014
- Partner of the MB Use Innovations, S. L. technological company 2015.
- Member of the Scientific committee of the “Centro de Estudios Avanzados” (USC)
- Member of the Scientific Assessment Committees: CINBIO (Vigo) and CIQSO (Huelva)
- Honorary Member of the Argentinian Organic Chemistry Society, since 2017.
- Member of the European Academy of Sciences (EurASc), since 2017.
- Spanish representative of EUCHEMS.
- Member of the scientific committee of the Kærto Foundation, since 2017.
- Member of the scientific committee of the Gadea Foundation, since 2017.

### Current research

Splits between a **synthetic** program aimed at discovering novel methods based on metal catalysis, and a **chemical biology** program focused to the development of synthetic tools for biological intervention. Interdisciplinary research trying to merge both programs is also ongoing.

### 10 selected recent publications (out of more than 170)

1. Meta—dependent DNA Recognition and Cell Internalization of Designed, Basic Peptides.  
S. Learte-Aymamy, N. Curado, J. Rodríguez, M. E. Vázquez, J. L. Mascareñas  
*J. Am. Chem. Soc.*, **2017**, *139*, 16188-16193.
2. Anion Recognition as a Supramolecular Switch of Cell Internalization.  
J. Rodríguez, J. Mosquera, J. Couceiro, J. R. Nitsche, M. E. Vázquez, J. L. Mascareñas  
*J. Am. Chem. Soc.*, **2017**, *139*, 55-58.
3. Ruthenium-Catalyzed Azide-Thioalkyne Cycloadditions in Aqueous Media: A Mild, Orthogonal, and Biocompatible Chemical Ligation.  
P. Destito, J. Couceiro, H. Ferreira, F. López, J. L. Mascareñas  
*Angew. Chem. Int. Ed.*, **2017**, *56*, 10766-10770.
4. Transition metal catalysis in the mitochondria of living cells.  
M. Tomás, M. Martínez, J. Couceiro, J. L. Mascareñas  
*Nature Commun.*, **2016**, *7*, 12538.
5. Concise, Enantioselective, and Versatile Synthesis of (-)-Englerin A Based on a Platinum-Catalyzed [4C+3C] Cycloaddition of Allenedienes. *Synfacts* 2017, 13 (01), 0012  
R. Nelson, M. Gulías, J. L. Mascareñas, F. López  
*Angew. Chem. Int. Ed.*, **2016**, *55*, 14359-14363.
6. Rhodium-Catalyzed (5+1) Annulations Between 2-Alkenylphenols and Allenes: A Practical Entry to 2, 2-Disubstituted 2H-Chromenes.  
N. Casanova, A. Seoane, J. L. Mascareñas, M. Gulías  
*Angew. Chem. Int. Ed.*, **2015**, *54*, 2374-2377.
7. Reversible Supramolecular Assembly at Specific DNA Sites: Nickel-Promoted Bivalent DNA Binding with Designed Peptide and Bipyridyl-Bis (benzamidine) Components.  
M. I. Sánchez, J. Mosquera, M. E. Vázquez, J. L. Mascareñas  
*Angew. Chem. Int. Ed.*, **2014**, *53*, 9917-9921. “Selected as a hot paper”.
8. Straightforward Assembly of benzoxepines by Means of a Rhodium (III)-Catalyzed C-H Functionalization of o-Vinylphenols.  
A. Seoane, N. Casanova, N. Quiñones, J. L. Mascareñas, M. Gulías  
*J. Am. Chem. Soc.*, **2014**, *136* (3), 834-837.
9. Stimuli-responsive selection of target DNA sequences by synthetic bZIP peptides.  
J. Mosquera, A. Jiménez, V. I. Doderó, M. E. Vázquez, José L. Mascareñas  
*Nature Commun.* **2013**, *4*, 1874-1879.
10. Gold(I)-Catalyzed Cascade Cycloadditions between Allenamides and Carbonyl-Tethered Alkenes: An Enantioselective Approach to Oxa-Bridged Medium-Sized Carbocycles,

H. Faustino, I. Alonso, F. López, J. L. Mascareñas.  
*Angew. Chem. Int. Ed.*, **2013**, 52, 6526-6530.

## 19 Patent applications

### Major recent funding

- ERC Advanced Grant 2013 (METBIOCAT, UE). Start February 2014.
- SAF2016-76689-R (AEI, MICINN, Spain)
- ED431C20171/19 (Xunta de Galicia)

### Supervision and training

- 16 postdoctoral associates, 9 currently in the group.
- 30 PhD thesis supervised, and 13 ongoing.
- More than 80 master and undergrad students supervised.
- 5 PhD students of the group gained a **Ramón y Cajal** position, and 3 the award of the RSEQ for young investigators.
- The following former PhD or postdoctoral students have established academic careers as professors: T. Knoerzer (USA), V. Doderó (Argentina), M. Araya (Chile), G. Bhargava (India), A. Rumbo (Spain), M. E. Vázquez (Spain), F. López (Spain), M. Gullías (Spain), O. Vázquez (Marburg), J. B. Blanco Spain), E. Pazos (Spain), C. Comanezcu (Bucharest).
- 7 PhD students got the Lilly Award to the best doctoral thesis.
- 1 PhD student among the 10 finalist of Reaxis international award (Jéssica Rodríguez).
- 1 PhD student got the Suschem Award (Noelia Casanova).
- 1 PhD student got the Chemical Biology Award of the RSEQ (Jéssica Rodríguez).

### Invited presentations in the last 10 years

- More than 100 lectures in **Symposiums** and in **Research Centers and Universities**. More than a half of them at international forums.

### Organization of international conferences

- 5th Spanish-Italian Symposium on Organic Chemistry (Santiago, 2004). Member of the organizing committee.
- International Iberian Peptide Meeting (Santiago, 2008). **President** of the organizing committee.
- Prospects in Chemical Sciences (Santiago, 2009). **President** of the organizing committee.
- 4th School on Organometallic Chemistry, Marcial Moreno Mañas (Santiago, 2011). **President** of the organizing committee.
- 1st Biennial Meeting of the Chemical Biology Group (RSEQ) (Santiago, 2012). **President** of the organizing committee.
- Biological Applications of Supramolecular Chemistry, (ESBOC 2013, Gregynog, UK, 16-18th may 2014). **President** of the scientific committee.
- XXV Reunión Bienal De Química Orgánica (Alicante, 4-6th June 2014). Member of the scientific committee.
- International School on Organometallic Chemistry Marcial Moreno Mañas (Sevilla, June 2015). Member of the steering and scientific committee.
- 8th IUPAC International Symposium on Organometallic Chemistry (OMCOS 18; Sitges-Barcelona, June 28th-July 2<sup>nd</sup> 2015). Member of the scientific committee
- XXXV Biennial meeting of Spanish Society of Chemistry (Coruña, 19-23th July 2015). **President** of the scientific committee.