

scholar

<b>Part A. PERSONAL INFORMATION</b>		<b>ACV Data</b>	04/07/2023
Name and Surname	Juan Carlos Mejuto-Fernández		
Invest. Identification number	Researcher ID	<b>L-5900-2014</b>	
	Orcid	<b>0000-0001-8396-1891</b>	

**ResearchGate:** [https://www.researchgate.net/profile/Juan\\_Mejuto](https://www.researchgate.net/profile/Juan_Mejuto)

**Publons:** <https://publons.com/author/1226732/juan-mejuto#profile>

**KUDOS:** <https://www.growkudos.com/profiles/8774>

**Google Scholar:** [https://scholar.google.es/citations?user=\\_9dTCqIAAAAJ&hl=es](https://scholar.google.es/citations?user=_9dTCqIAAAAJ&hl=es)

**A.1. Current profesional status**

University	Universidad de Vigo		
Department/Faculty	Departamento de Química Física – Facultad de Ciencias		
Professional Category	Full Professor	Start Date	18/08/2009
UNESCO Code	2300 2210 2307 2391 2210.01 2210.03 2210.04 2210.08 204.01 2304.09 3303.90 3309.12 1233.04		
Keywords	Colloids, Interfaces, Catalysis, Kinetics, Modellization, Neural Networks, Supramolecular Chemistry, Food Chemistry, Physical Chemistry		

**A.2. Academic training**

BSc/MSc/PhD	University	Year
BSc in Chemistry	Universidad de Santiago de Compostela	1992
PhD in Chemistry	Universidad de Santiago de Compostela	1996

**A.3. Scientific production quality general indicators**

**Sexennium number:** 5 (2023)

**Quinquennium number:** 5 (2020)

**Bibliometric data:**

Number of publications: 244 Research Papers  
h-index: 41 (Google Scholar) – [since 2018: 24]  
I10-index: 124 (Google Scholar) – [since 2017: 50]  
Total citation: 8635 (Google Scholar) – [4082 since 2018]

Papers with more than 1000 citations: 2 (Google Scholar)  
Papers with more than 500 citations: 3 (Google Scholar)  
Papers with more than 100 citations: 15 (Google Scholar)  
WoS Author Impact Papers (100th percentile): 3 (Publons)  
WoS Author Impact Papers (>90th percentile): 13 (Publons)  
WoS Author Impact Papers (>90th percentile in the last 10 years): 7 (Publons)

**More cited papers (>100 citations):**

1. Agric. Ecosys. Environ. 123, 247-260 (2008): 1560 times (Google Scholar)
2. Food Hydrocolloids. 23, 1631-1640 (2009): 1044 times (Google Scholar)
3. TrAC Trends in Analytical Chemistry 107, 222-232 (2018): 678 times (Google Scholar)
4. Chemosphere 48, 1081-1088 (2002): 326 times (Google Scholar)
5. Chem. Soc. Rev. 39, 2948-2976 (2010): 226 times (Google Scholar)
6. Food Res. Int. 43, 1212-1218 (2010): 177 times (Google Scholar)
7. Food Hydrocoll. 654, 157-164 (2017): 162 times (Google Scholar)
8. Food Res. Int. 134, 109256 (2020): 150 times (Google Scholar)
9. Antioxidants. 8, 406 (2019): 144 times (Google Scholar)
10. Ind. Crops Prod. 111, 219-225 (2018): 137 times (Google Scholar)
11. Langmuir 10, 1676-1683 (1994): 136 times (Google Scholar)
12. Food Chem. 106,18-26 (2008): 129 times (Google Scholar)
13. J. Coll. Interface Sci. 295, 65-70 (2006): 120 times (Google Scholar)
14. Food Chem. 97, 130-136 (2006): 118 times (Google Scholar)
15. Crit. Rev. Food Sci. Nut., 59, 1913-1926 (2019): 102 times (Google Scholar)

## **Part B. CURRÍCULUM FREE SUMMARY**

I did my Doctoral Thesis on organic reactivity in biomimetic media, which is one of my lines of research that I maintain at present, evaluating catalytic processes on reactions of biological interest in colloidal aggregates.

In the same way, the studies of these systems not only restricted their kinetic implications, but also their thermodynamic properties and their internal dynamics.

I have also carried out studies related to supramolecular chemistry, in particular with cyclodextrins, crown ethers and cryptands, and their interaction with colloidal aggregates, both from the point of view of their internal dynamics and the effects that these chemical systems have upon the chemical reactivity.

At the same time, I have carried out modeling studies of complex systems, in particular colloidal systems, although at present, using different computational tools, in collaboration with different research groups we have applied mathematical models for the prediction of different environmental phenomena.

I have also collaborated on issues related to the stability of xenobiotics in the environmental implications of their uses.

Finally, I have done studies related to food chemistry and applications of cyclodextrins in this field

## **Part C. MOST RELEVANT MERITS**

### **C.1. Most relevant publications (last 5 years)**

1. Cid-Samamed, A.; Rakmai, J.; Mejuto, J.C.; Simal-Gándara, J.; Astray, G. "Cyclodextrins inclusion complex: Preparation methods, analytical techniques and food industry applications" *Food Chem.* 2022, 384, 132467 – (66 times cited Google Scholar - JCR IF:9.231/D1)
2. Astray, G.; Mejuto, J.C.; Xiao, J.; Simal-Gandara, J. "Benefits, toxicity and current market of cannabidiol in edibles". *Crit. Rev. Food Sci. Nut.* (2022) – (7 times cited Google Scholar – JCR IF:11.208/D1)
3. Sang, Y.; Mejuto, J.C.; Xiao, J.; Simal-Gandara, J. "Assessment of Glyphosate Impact on the Agrofood Ecosystem. *Plants*, 2021, 10(2), 405 (11 times cited Google Scholar – JCR IF: 4.658/Q1)
4. Gonzalez-Pereira, A.; Carpena, M.; García-Oliveira, P.; Mejuto, J.C.; Prieto, M.A.; Simal-Gandara, J. "Main applications of cyclodextrins in the food industria as the compounds choice to form host-guest complexes". *Int. J. Mol. Sci.* 2021, 22, 1339. (54 times cited Google Scholar - JCR IF:6.208/Q1)
5. Alonso-Gato, M.; Astray, G.; Mejuto, J.C.; Simal-Gandara, J. "Essential oils as antimicrobials in crop protection". *Antibiotics*, 2021, 10, 34. (38 times cited Google Scholar - JCR IF:5.222/Q1)
6. Astray, G.; Mejuto, J.C.; Simal-Gándara, J. "Lastest developments in the application of cyclodextrin host-guest complexes in beverage technology processes" *Food Hydrocoll.* 2020, 105882. (60 times cited Google Scholar – JCR IF:11.504/D1)
7. Gomez-Zavaglia, A.; Mejuto, J.C.; Simal-Gándara, J. "Mitigation of emerging implications of climate change on food production systems" *Food Res. Int.* 2020, 109256. (150 times cited Google Scholar – JCR IF:7.425/D1)
8. Gomez-Zavaglia, A.; Prieto-Lage, M.A.; Jiménez-López, C.; Mejuto, J.C.; Simal-Gandara, J. "The potencial of seaweeds as a source of functional ingredientes of

- prebiotic and antioxidant value”. *Antioxidants*, 2019, 8, 406. (144 times cited Google Scholar – JCR IF:7.675/D1)
9. González-Fernández, I.; Iglesias-Otero, M.A.; Esteki, M.; Moldes, O.A.; Mejuto, J.C.; Simal-Gándara, J. “A critical review on the use of artificial neural networks in olive oil production, characteriation and authentication” *Crit. Rev. Food Sci. Nut.* 2019, 59, 1913-1926. (102 times cited Google Scholar – JCR IF:11.208/D1)
  10. Astray, G.; Mejuto, J.C.; Martínez-Martínez, V.; Nevares, I.; Alamo-Sanza, M.; Simal-Gandara, J. “Prediction Models to Control Aging Time in Red Wine”. *Molecules*, 2019, 24(5), 826. (28 times cited Google Scholar – JCR IF:4.927/Q2)
  11. Galvez, J.F., Mejuto J.C., Simal-Gándara, J. “Future Changes on the use of blockchain for food trceability analysis” *Trends Anal. Chem.* 2018, 107, 222-232 (678 times cited Google Scholar – JCR IF:14.908/D1)
  12. Rakmai, J., Cheirsilp, B., Mejuto, J.C., Simal-Gándara, J., Torrado-Agrasar, A. “Antioxidant and antimicrobial properties of encapsulated guava leaf oil in hydroxypropyl-beta-cyclodextrin” *Ind. Crops Prod.* 2018, 111, 219-225. (137 times cited Google Scholar – JCR IF:6.449/D1)

## **C.2. Research projets ( last 5 years)**

1. Sustainable and cost-efectivo production process for the upcycling of olive, grape and nut bioproduct into 4 natural and healthy indredients for nutraceutical and cosmetic applications (UP4HEALTH). European Union – Horizon 2020 (H2020-BBI-JTI-2019)
  - a. IP: Jesus Simal Gándara
  - b. Start date: 01/01/2020
  - c. End date: 31/12/2023
  - d. Budget: 689.480 €.
2. Effect of fungicides on the microbiota of wine and white grape wine composition. Ministerio de Ciencia y Tecnología – Plan Nacional de I+D (PID2019-105061RB-C21)
  - a. IP: Jesus Simal Gándara
  - b. Start date: 01/01/2019
  - c. End date: 31/12/2022
  - d. Budget: 105.000 €.
3. Program of consolidation and structuring of competitive research units: Competitive Reference Group 2007 (GRC 2018/2021). Consellería de Educación e Ordenación Universitaria da Xunta de Galicia.
  - a. IP: Jesus Simal Gándara
  - b. Start date: 01/01/2018
  - c. End date: 31/12/2021
  - d. Budget: 350.000 €.
4. Development of prediction models of origin in DO Gallician wines (GALIVINO). (FEADER 2018/002B). European Union - European Agricultural Rural Development Fund
  - a. IP: Jesus Simal Gándara
  - b. Star date: 01/01/2018
  - c. End date: 321/12/2020
  - d. Budget: 59.750 €.
5. Strategy for the optimization and sustainable development of the harvest of native vine varieties of the D.O. Ribeir (AGL2014-60412-R). Ministerio de Economía, industria y Competitividad (2015-2018)
  - a. IP: Javier Rodríguez Rajo
  - b. Start date: 01/01/2015
  - c. End date: 31/12/2018
  - d. Budget: 87.700 €
6. Molecular mechanisms of changes in the sensory and functional characteristics of red wines by the action of anti-mildium, anti-Oidio and antibotritic fungicides (AGL2015-66491-C2-1-R) Miniesterio de Economía, Industria y Competitividad. (2015-2018)
  - a. IP: Jesus Simal Gándara
  - b. Start date:01/01/2015
  - c. End date: 31/12/2019

d. Budget: 60.000 €

## **C.5 Research managemet**

### **PhD supervised:**

1. "Prediction of the influence of amphiphilic molecules on the internal dynamics of AOT-based microemulsions through the use of ANN", Iago Antonio Montoya Rodríguez, 2016 (Summa Cum Laude)
2. "Modeling the surface tension of non-ionic surfactants", Serxio Ith Arias Barros, 2016 (Summa Cum Laude)
3. "Organic reactivity in natural colloidal aggregates", Jorge Morales Vilanova, 2013 (Summa Cum Laude)
4. "Application of artificial neural networks for the prediction of physical properties of microemulsions in the presence of organic and inorganic additives", Oscar Adrián Moldes Figueiral, 2013 (Summa Cum Laude)
5. "Internal dynamics of microemulsions in the presence of additives", Antonio Cid Samamed, 2011 (Summa Cum Laude)
6. "Characterization of polymers by artificial neural networks", Gonzalo Astray Dopazo, 2011 (Summa Cum Laude and Extraordinarily doctoral award)
7. "Geological characterization of thermal springs in the province of Ourense", Pedro Antonio Araujo Nespereira, 2008 (Summa Cum Laude)
8. "Influence of the addition of phase transfer catalysts on the internal dynamics of AOT-based microemulsions", Javier Dasilva Carvalhal, 2007 (Summa Cum Laude)
9. "Effect of vine-making protocol on the content of polyphenols and chromatic characteristics of red green wines", Juan Javier Castillo Sanchez, 2005 (Summa Cum Laude)
10. "Simultaneous action of microemulsions and phase transfer catalysts on aminolysis reactions", Moisés Pérez Lorenzo, 2004 (Summa Cum Laude)
11. "Reactivity in Biomimetic Media. Micelles and Microemulsions as Means of Reaction", Pedro Rodríguez Dafonte, 2001 (Summa Cum Laude)

### **Final Degree Project & MSc Thesis supervised: 76**

**Reviewer records (Publons):** 289 reviews of 252 manuscripts (99<sup>th</sup> percentile)

**Editor records (Publons):** 65 manuscripts (as editor & invited-editor)

Review to publication ratio (Publons): 1.6:1

### **Other bibliometric merits:**

- 8<sup>th</sup> most cited paper in Food Hydrocolloids (Lifetime)
- 37<sup>th</sup> most cited paper in Agriculture, Ecosystems & Environment (Lifetime)
- 1<sup>st</sup> most cited paper in Agriculture, Ecosystems & Environment (2008)
- 4<sup>th</sup> most cited paper in Food Hydrocolloids (2009)
- 11<sup>th</sup> most cited paper in Trends in Analytical Chemistry (2018)
- 6<sup>th</sup> most cited author in Agriculture, Ecosystems & Environment (2008)
- 5<sup>th</sup> most cited author in Food Hydrocolloids (2009)
- 11<sup>th</sup> most cited author in Trends in Analytical Chemistry (2018)
  
- Average impact factor: 4.5
  
- Average citation per document: 31.74 (Publons – 2022)
- Average citation per year: 185.89(1993-2022)