

PERSONAL INFORMATION

**Prof Dr Jesus Simal-Gandara**



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Sex Male | Date of birth 05/04/1966 | Nationality Spanish/European

PRESENT POSITION

**Full Prof. in Food Sci. at the Univ. of Vigo (Spain) since 1999 & Vice-Chancellor for Internationalization in 2018**

WORK EXPERIENCE

- 1993-1999 Assoc. prof. in food sci. at the Univ. of Vigo (Spain)
- 1991-1993 Non-tenured assoc. prof. in food sci. at the Univ. of Vigo (Spain)
- 1990-1991 FPI pre-doc grant from the Spanish Ministry of Science
- 1988-1989 CSIC grant for starting researchers

EDUCATION AND TRAINING

- 1989-1991 **PhD in Nutrition and Food Sci. at the Univ. of Santiago de Compostela (Spain) – Prize award**
- 1989 Master degree in Pharmacy – 1<sup>st</sup> National prize award
- 1984-1989 Graduate in Pharmacy – Excellent qualifications

PERSONAL SKILLS

MOTHER TONGUE(S) Spanish; Galician.

OTHER LANGUAGE(S)

	UNDERSTANDING		SPEAKING		WRITING
	LISTENING	READING	SPOKEN INTERACTION	SPOKEN PRODUCTION	
English	B2	B2	B2	B2	B2
Portuguese	B2	B2	B2	B2	B2
French	B2	B2	A2	A2	A2

COMMUNICATION SKILLS

▪ **good communication skills** gained through my experience as prof. at the university

ORGANISATIONAL / MANAGERIAL SKILLS

▪ **leadership** (currently responsible for a team of 20 people at <http://aa1-uvigo.blogspot.com/>)

JOB-RELATED SKILLS

▪ **good command of scientific research productivity** (as responsible for international projects)

DIGITAL COMPETENCE

SELF-ASSESSMENT				
INFORMATION PROCESSING	COMMUNICATION	CONTENT CREATION	SAFETY	PROBLEM SOLVING
INDEPENDENT	INDEPENDENT	INDEPENDENT	INDEPENDENT	INDEPENDENT

DRIVING LICENCE

B

RESEARCH  
STAYS

**Visiting researcher:** Laboratoire de Chimie Analytique II (Prof. Mahuzier & Dr. Becue), Faculté des Sciences Pharmaceutiques et Biologiques, **Université de Paris-Sud, Chatenay-Malabry, France (1990, 6 months)**; Department of Chemistry (Prof. Thomas B. Brill), **University of Delaware, Newark, Delaware, USA (1991, 3 months)**; Fraunhofer-Institut für Lebensmittel-technologie und Verpackung (Drs. O. Piringer & R. Franz), **Fraunhofer-Institut, Munich, Germany (1992, 3 months)**; CSL: Central Science Laboratory, MAFF: Ministry of Agriculture, Fisheries and Food (Drs. J. Gilbert & L. Castle), **CSL, Norwich, Norfolk, UK (1993 & 1998, 3 months each)**; TNO-Nutrition and Food Research (Dr. R. Rijk), **TNO, Zeist, The Netherlands (1994, 1995 & 2000, 3 months each)**; PIRA: Packaging Industries Research Association (Dr. P.A. Tice), **PIRA, Leatherhead, Surrey, UK (1996, 3 months)**; and SIK: The Swedish Institute for Food and Biotechnology (Drs. L. Ahmé & A. Leufvén), **SIK, Göteborg, Sweden (1997, 3 months)**.

 RESEARCH  
PROJECTS &  
THESES

**Spanish projects:** "Research on nutritional status indicators in healthy elderly: anthropometrical, clinical, haematological, biochemical and immunological", granted by the University of Vigo (1993-1994); "Migration of cardboard components into food simulants (XUGA38304A94)", granted by the Galician government (1994-1995); "Development of a rapid method to detect functional barriers in multilayer food packages (XUGA38302B97)", granted by the Galician government (1997-1999); "Identification of volatile compounds and amino acids in monoclonal honeys from Galicia (API99-017-C2-2)", granted by the Spanish Ministry of Science (1999-2000); "Development and validation of methods to identify and quantify aliphatic hydrocarbons from liquid and solid paraffin's in food package, food simulants and foodstuffs (PGIDT00PXI38306PR)", granted by the Galician government (2000-2001); "Development of analytical methods for the optimization and control of plastic materials for food contact. Applications in the manufacturing and food packaging industry (1FD97-2167-C02-02)", granted by the Spanish Ministry of Science and FEDER funds (2000-2002); "Determination of antibiotes in grapes and wines. Evaluation of their persistence in soils (CAL01-047)", granted by the Food Research Programme of the Spanish Ministry of Science (2001-2003); "Fate of fungicides in vineyards: food and environmental contamination risks (AGL2003-02244)", granted by the Spanish Ministry of Science (2003-2005); "**Effect of antibiotes residues and their metabolites on vinification and the quality of wine (AGL2007-62075)**", granted by the Spanish Ministry of Science (2007- 2009); "**Impacts of the use of new fungicides into the vine-wine system (AGL2011-30378-C03-01)**", granted by the Spanish Ministry of Science (2011-2014); "**Molecular mechanisms by which changes in sensory and functional characteristics of red wines take place by the action of anti-mildew, anti-powdery mildew and antibiote fungicide (AGL2015-66491-C2-1-R)**", granted by the Spanish Ministry of Science (2015-2018); "**Development of prediction models of origin in wines from Galician designations of origin (FEADER 2018/002B)**", granted by the Galician government (2018-2020).

**International projects:** "Development of methods of analysis for monomers and other starting substances with SML and/or QM limits in Directives 90/128/EEC and 92/39/EEC", granted by the EU Standard, Measurement & Testing Programme (1993-1995). "Intercomparison on the determination of fatty contact using a candidate polyethylene reference material (RM 593) in accordance with the draft CEN method ENV 1186-15", granted by the EU Standard, Measurement & Testing Programme (1997-1998). "Detection of ecotoxicology risks by persistent organic pollutants (POPs) in water ecosystems of the State of Tamaulepas, México (SEMARNAT-2002-C01-0462)", granted by the Natural Resources and Environmental Research Programme of the Mexican Ministry of Science (2003-2007). "Detection of POPs in five species of fish in three reservoirs of the State of Tamaulepas, México (PROMEP/103.5/05/1681)", granted by the Mexican Ministry of Science (2006-2008). "Characterization of volatiles in Morocco olive oils: effects of harvest date and fruit storing conditions (A/6211/06)", granted by the Inter-Universities Scientific Research Cooperation Programme in the Mediterranean Area (2006-2007). "New products for animal feeding: valorisation of cheese by-products for probiotics production (AgroFood- 108RT0362)", granted by the Iberoamerican Scientific and Technological Programme for Development (2008-2011). "**Nano-engineered packaging systems for improved quality, safer and healthier foods (EUI2008-00115)**", granted by Euroresearch subprogram of the Spanish Ministry of Science (2009-2012). "**Characterization of the extra virgin olive oil produced in Galicia and the study of its typicity through the development of biosensors (NANOEATERS)**" & "**Cooperative research network in the field of polyphenols and their industrial applications (IBERPHENOL)**", both granted by Interreg V-POCTEP Spain-Portugal (2017-2019). "**Strengthening aquaculture in Ibero-America: quality, competitiveness and sustainability (AQUA-CIBUS)**", granted by the Iberoamerican Scientific and Technological Programme for Development (2018-2021). "**Organic production of chestnuts and development of better marketing competences in chestnuts producer (EcoChestnut)**", granted by the KA2 - Cooperation for innovation and the exchange of good practices (2019-2022). "**An integrated approach to the challenge of sustainable food systems: adaptive and mitigatory strategies to address climate change and malnutrition (SYSTEMIC)**", granted by ERA-HDHL Knowledge Hub on Food and Nutrition Security in collaboration with JPI-OCEANS and FACCE-JPI (2020-2023). "**Sustainable and cost-effective production process for the upcycling of olive, grape and nut by-products into 4 natural and healthy ingredients for nutraceutical and cosmetic applications (UP4HEALTH)**", granted by H2020-BBI-JTI-2019 (2020-2023).

**Companies and organizations projects:** "Development of analytical methods in food simulants for monomers of epoxy coatings of large tanks and small food containers with specific migration limits included in Community Directives (GAIRESA Co., 1988-1191)". "Food quality and safety analysis (FEUGA Org., 1989-1992)". "Determination of the migration levels of components from cardboard packaging into fatty food simulants (GRAFINSA Co., 1994-1997)". "Feed and medicines. Incorporation by spray (COREN Co., 2000-2001)". "Antibiotrytic determination in grapes for vinification and wines. Evaluation of its persistence in soils and waters (Ribeiro wines PDO Org., 2001-2003)". "Study of the effects of the application of antifungals on the quality of the vineyard soils and the quality of the grapes (EVEGA Org., 2002-2007)". "Development and application of solid phase extraction and chromatographic separation to determine pesticides (Galiza Analitica Co., 2002)". "Development of chromatographic separation applications for the simultaneous quantification of phytosterols and tocopherols in nut oil (ThermoQuest SA Co., 2005)". "Carrying out of analytical determinations corresponding to various samples of the discharge to the Umia River (Xunta de Galicia Org., 2006)". "Determination of pollutants in waters (IIAA-USC Org., 2001-2008)". "Recovery of olive and oil production in Galicia: Definition of sensory aspects in virgin olive oil (Aceites Abril SL Co., 2009-2012)". "Comparative sensory analysis of meat products at the state level (Murcia University Org., 2011-2012)". "Dissipation study of soil fumigants (ISAGRO Spain SL Co., 2012)". "Development of an indicator of optimal stress, and development of an indicator of the presence of antibiotic residues in meat (FRIGORIFICAS DEL LOURO SA Co., 2013-2015)". "Service of actions for the quantification of the origin of diffuse pollution due to the presence of nitrates in the Limia river basin by carrying out an isotopic study (Confederación Hidrográfica Miño-Sil Org., 2017-2019)". **Development of new functional foods and nutritional supplements aimed at neurocognitive development – NEUROFOOD** (Algas Atlánticas Algamar SL Co., 2019-2020)". **Agreement between the Miño-Sil Hydrographic Confederation and the University of Vigo for the development of research work to determine the origin of nitrate contamination in the Limia river basin by studying isotopic relationships of various elements** (Confederación Hidrográfica Miño-Sil Org., 2019-2021)".

**Supervised Doctoral Theses:** "Development of analytical methods for the determination of primary amines with restriction limits in Directive 90/128/EEC in food simulants (Patricia Sanmartin-Fenolleras, 1996)". "Eating habits in the rural Galician population (Juan Francisco Jimenez-Contreras, 1997)". "Assessment of the suitability of food packaging, based on the study of packaging-food interactions (Miguel Angel Sarria-Vidal, 1999)". "Development of methods to study the food and agro-environmental implications of fungicides in vineyards (Raquel Rial-Otero, 2004)". "Effect of post-harvest processes (industrial and culinary) on flavonoid levels in onions (Maria Rosa Perez-Gregorio, 2010)". "Evolution of the levels of new fungicides during winemaking and its influence on the aromatic composition of monovarietal wines (Rosa Maria Gonzalez-Rodriguez, 2010)". "Dynamics of quaternary ammonium herbicides in soils dedicated to vineyards (Mirian Pateiro-Moure, 2010)". "New analytical methodologies for doping control. Detection of anabolic androgenic steroids in human urine (Marco Andre Miranda-Galesio, 2011)". "Characterization of the polyphenolic profile and other quality characteristics in Portuguese regional varieties of onion (*Allium cepa* L.) (Ana Sofia de Gil-Rodrigues, 2012)". "Characterization of the phenolic profile of minority varieties of red grapes and sweet red wine (Maria Figueiredo-Gonzalez, 2013)". "Effect on the aromatic profile of the wine by the presence of fungicides on grapes and by the process of making sweet wines (Mariana Gonzalez-Alvarez, 2013)". "Distribution of polycyclic aromatic hydrocarbons (PAHs) in the food chain: inputs and decontamination strategies (Iria Yebra-Pimentel Alvarez, 2015)". "Characterization of the aromatic profile of minor varieties of red grapes and effect on the aroma of wine by the use of fungicides (Raquel Noguerol-Pato, 2015)". "Aromatic and phenolic characterization of olives and olive oil produced in Galicia (Patricia Reboredo-Rodriguez, 2015)". "Effects of new generation fungicides on the fermentative yeast proteome and phenolic metabolome with influence on the color of red wines (Noelia Briz-Cid, 2019)". "Health status of the Galician maternal-child population base don its exposure to environmental pollutants (Tania Fernandez-Cruz, 2019)". **Three more ongoing theses to be defended by the end of 2020.**

**Research projects evaluator:**

1) "International Foundation for Science" (1998-); 2) "Agencia Nacional de Evaluación y Prospectiva" (Spain, 1998-); 3) "Marie Curie Programme" (2005-); 4) "Biological Control and Agricultural Information Centre (BCARC)" (Saudi Arabia, 2011-); 5) "Ministry of Business, Innovation & Employment (MBIE)" (New Zealand, 2013-); 6) "Czech-Norwegian research Programme (CZ-NRP)" (Czech Republic & Norway, 2014-); 7) "Concurso FONDECYT Regular 2015", una iniciativa de la Comisión de Investigación Científica Tecnológica (CONICYT)" (Chile, 2014-); 8) Agencia Nacional de Promoción Científica y Tecnológica (Argentina, 2015-); 9) "National Centre of Science and Technology Evaluation" (Republic of Kazakhstan, 2015-); 10) "Excellence Initiative for the site Bourgogne Franche-Comté (Acronym: ISITE-BFC)" (French Region Bourgogne Franche-Comté, 2017-).

**International research associations:** President of the "INTERNATIONAL ASSOCIATION OF DIETARY NUTRITION AND SAFETY (IADNS)" (2020-).

SCIENTIFIC  
PUBLICATIONS

**2018 – Highly Cited Researcher** & 13188 citations in 430 papers= 31 per paper; h-index= 61):  
-Researcher ID: <http://www.researcherid.com/rid/A-9533-2009>  
-Scopus: <http://www.scopus.com/authid/detail.uri?origin=resultslist&authorId=7004118440&zone=>  
-Orcid: <http://orcid.org/0000-0001-9215-9737>  
-Google scholar: <http://scholar.google.es/citations?user=rmeHFxIAAAAJ&hl=es&oi=ao>  
-Researchgate: [https://www.researchgate.net/profile/Jesus\\_Simal-Gandara](https://www.researchgate.net/profile/Jesus_Simal-Gandara)  
-Mendeley: <https://www.mendeley.com/profiles/jesus-simal-gandara/>

FOOD RISK  
ASSESSMENT

Member of the **Scientific Committee of the Spanish Agency for Food Safety and Nutrition - AESAN (2013-2014)** and of the **Scientific Committee of the Spanish Agency for Consumers, Food Safety and Nutrition – AECOSAN (2015-2016)**:

**Reports 2013:**

-Journal of the Scientific Committee of the AESAN, No. 18 (2013):

- 1.-Report of the Scientific Committee of the Spanish Agency for Food Safety and Nutrition (AESAN) in relation to a request for initial assessment for the commercialization of the marine microalgae *Tetraselmis chuiien* the framework of Regulation (EC) No. 258/97 on **new foods and new food ingredients** (p.11).
- 2.-Report of the Scientific Committee of the Spanish Agency for Food Safety and Nutrition (AESAN) on the application of **ionizing radiation for the sanitization of fresh meat, meat preparations and meat products** (page 29).
- 3.-Report of the Scientific Committee of the Spanish Agency for Food Safety and Nutrition (AESAN) in relation to the use of an aqueous solution of hydrogen peroxide, acetic acid and peracetic acid as a **technological adjuvant for the bacterial disinfection** of citrus fruits and peppers and the washing water of the same (p.53).
- 4.-Report of the Scientific Committee of the Spanish Agency for Food Safety and Nutrition (AESAN) on conditions of use of certain substances other than vitamins, minerals and plants to be used in **food supplements** - 2 (p.71).

**Reports 2014:**

-Journal of the Scientific Committee of AECOSAN, No. 19 (2014):

- 1.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) in relation to the **microbiological risks associated with the consumption of certain foods by pregnant women** (p.11).
- 2.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) on conditions of use of certain substances to be used in **food supplements**-3 (page 51).
- 3.-Report of the Scientific Committee of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) on **objectives and nutritional recommendations and physical activity against obesity** within the framework of the NAOS Strategy (page 95).

-Journal of the Scientific Committee of the AECOSAN, No. 20 (2014):

- 1.-Report of the Scientific Committee of the Spanish Agency of Consumption, Food Safety and Nutrition (AECOSAN) on the necessary criteria to be able to effect in natural mineral waters the mention "**indicated for the preparation of infant foods**" (page 11).

**Reports 2015:**

-Journal of the Scientific Committee of the AECOSAN, No. 21 (2015):

- 1.-Report of the Scientific Committee of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) in relation to an initial evaluation request for the commercialization of hydroxytyrosol obtained by chemical synthesis in the framework of Regulation (EC) No. 258/97 on **new foods and new food ingredients** (p.11).
- 2.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) on the use as an **edible salt of sodium chloride obtained from a process of potassium chloride production by flotation** (page 27).
- 3.-Report of the Scientific Committee of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) on the risk of the use of *Tribulus terrestris* in **food supplements** (page 37).
- 4.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) on the **microbiological risks associated with the consumption of raw milk and dairy products made from raw milk** (page 45).

-Journal of the Scientific Committee of the AECOSAN, No. 22 (2015).

- 1.-Report of the Scientific Committee of the Spanish Agency of Consumption, Food Security and Nutrition (AECOSAN) on **recommendations of physical activity** in the framework of the NAOS Strategy (page 11).
- 2.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) on the **microbiological risks associated with the consumption of certain foods by children from 0 to 3 years old** (page 19).
- 3.-Report of the Scientific Committee of the Spanish Agency for Consumption, Food Safety and Nutrition (AECOSAN) on conditions of use of certain substances to be used in **food supplements**-4 (page 79).
- 4.-Report of the Scientific Committee of the Spanish Agency of Consumption, Food Safety and Nutrition (AECOSAN) in relation to the **vitamin D supplementation of the diet of children from 0 to 3 years** (p 133).



**Reports 2016:**

-Journal of the Scientific Committee of the AECOSAN, No. 23 (2016):

1.-Report of the Scientific Committee of the Spanish Agency of Consumption, Food Safety and Nutrition (AECOSAN) in relation to the evaluation of **exposure to morphine of the Spanish population for consumption of poppy seeds** (p.11).

2.-Report of the Scientific Committee of the Spanish Agency of Consumption, Food Safety and Nutrition (AECOSAN) in relation to the use of an aqueous solution of hydrogen peroxide, acetic acid and peracetic acid (23/17/15) as a **technological adjuvant for bacterial disinfection** of citrus fruits and tomatoes and their washing water (p 21).

-Journal of the Scientific Committee of the AECOSAN, No. 24 (2016).

1.-Report of the Scientific Committee of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) on **histological methods for the differentiation of meat preparations and meat products** (p.11).

2.-Report of the Scientific Committee of the Spanish Agency for Consumer Affairs, Food Safety and Nutrition (AECOSAN) in relation to the **allergy to Anisakis** (page 23).

**KEYWORDS & SKILLS**

**Food Science**; Food Technology; **Analytical Chemistry**; **Public Health**; Biochemistry; Nutrition; Food Quality; **Food Safety**.

**ACADEMIC EXPERIENCE**

I was **1<sup>st</sup> Spanish Award of Completion of Pharmacy and PhD Prize at the Faculty of Pharmacy**, University of Santiago de Compostela (Spain). I also was Associate Professor in 1991 at the University of Vigo, where he is **Full Professor since 1999. I now lead a research group of excellence at NW Spain**. In addition, **I was leading CIA<sup>3</sup> (Environmental, Agricultural and Food Research Centre) formed by 10 research groups from different fields** (botany, plant physiology, soil science and agricultural chemistry, biochemistry and molecular biology, nutrition and food science, biotechnology, food technology, food rheology, chemical engineering, and colloidal chemistry) since 2008 till 2018, and also was the **Head of the Department of Analytical Chemistry and Food Science at the University of Vigo between 2013 and 2018**. I was also **Vice-Chancellor for Internationalization at the University of Vigo in 2018**.

**ACADEMIC ACHIEVEMENTS**

My research group is specialized in **chromatographic separations** (GC-MS and LC-MS) and **molecular biology** and proteomics. We investigate the **distribution of agricultural and environmental organic chemical contaminants in the food production chain**, and **how improving the sensory and functional quality of food**, with an eye on the food chain globally, integrating environment, agriculture and food with nutrition and public health issues.

Our focus today is on **the study of persistent organic pollutants (POPs) from the point of view of public health** (epidemiology, toxicity of mixtures, metabolites ...), and on **the study of secondary metabolites in plant foods**, exploring the molecular mechanisms that explain their activity.

**ACADEMIC VISION**

I enjoy working together in an international atmosphere on the specific topics of science, culture, and education. In this sense, to work in cooperation within an International Laboratory is always a dream for me. It will be a great opportunity to expand science-driven knowledge that will be published in internationally-reputed papers and also in dissemination notes to contribute to the education of world society in these topics. The links between Academies will boost the perspectives of all institutions, taking into account my experience in international research labs.

I performed research stays at the Université de Paris-Sud (Paris, France), University of Delaware (Newark, USA), Fraunhofer-Institut für Lebensmitteltechnologie und Verpackung (Munich, Germany), Central Science Laboratory (Norwich and York, UK), TNO-Voeding (Zeist, Netherlands), Packaging Industries Research Association (Leatherhead, UK) and The Swedish Institute for Food and Biotechnology (Gothenburg, Sweden). All this background makes me feel as a world citizen, very close to the building process of any kind of cooperation.

Since 1991, I am involved as associate professor first, and since 1999, as full professor now, both in scientific training and knowledge management for undergraduate students but also pre- and post-docs, without forgetting coordinating the efforts of some other colleagues in both teaching and research in my different positions of group leader, head of research centre, head of department, and vice-chancellor for internationalization.

**It is always a great pleasure to work in an international atmosphere on any of the specific topics of food quality and safety, of food authenticity and traceability, and of risk assessment of food contaminants.**