CV

FELICIDAD RONDA

2017 July 22

Part A. PERSONAL INFORMATION

CV date	22/07/2017

First and Family name	Felicidad Ronda Balbás		
Social Security, Passport, ID number	09252535A	Age	58
Researcher numbers	Researcher ID	D-7009-2016	
	Orcid code	0000-0001-7508-5537	

A.1. Current position

Name of University/Institution	University of Valladolid			
Department	Department of Agriculture and Forestry Engineering, Food Technology, College of Agricultural and Forestry Engineering			
Address and Country	Av. Madrid, 44, 34004, Palencia, Spain			
Phone number	+34979108339	E-mail	fronda@iaf.uva.es	
Current position	Associate Professor	From	2003	
Cód. UNESCO	330900 – Food Technology; 330907 – Cereal Products; 330920 – Food Properties 330904 – Breadmaking			
Keywords	Physical properties of foods, Food rheology, Food phase transitions, Food quality, Sensory evaluation, Glucemic index, Cereal derivatives, flours, doughs, gels, bread, gluten-free,			

A.2. Education

PhD	University	Year
PhD in Chemical Engineering	University of Valladolid	1985
BSc in Chemistry	University of Valladolid	1982
Specialist in Environmental Technology	University of Valladolid	1993

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

- Publications (S.C.I. – Web of Science): **40**
- Chapters in scientific books (volumes): **7**
- Full papers in Conference Proceedings: **28**
- Presentation in Conferences**: 79** (**52**, international).
- Citations: **600 citations** S.C.I. - Web of Knowledge
- h index: **14**
- Supervision of **3 Ph.D,** two of them **with International mention (**one **PhD Extraordinary Award)**, **40 M.Sc.** theses and **38** Final project degree.

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

Felicidad Ronda obtained BSc and PhD from University of Valladolid (Spain) at Chemical Sciences. From 2011 she is accredited as Full Professor belonging to University of Valladolid (UVA) Higher Technical School of Agricultural Engineering (ETSIIAA, Palencia). Prof. Ronda has wide, extensive and well documented expertise in food technology, cereal products, food characteristic and bread making, additionally she specialises in physical characteristic of food, rheology, phase transition, cereal derivatives, gels, doughs, bread, gluten-free raw materials and products, physicochemical and sensory quality of food. As teacher from 2001 until 2014 Dr. Ronda was a coordinator of Food Technology Area at University of Valladolid and at present coordinates Master of Science at Food Quality, Development and Innovation teaching. For 16 years of working at UVA she participates in 11 research grants funded from international, national and regional agencies. Main national and international collaboration and research stays Prof. Ronda performs at University College Cork,

Ireland, Aristotle University of Thessaloniki, Greece, Vasile Alexandri University of Bacau, Rumunia and Warsaw University of Life Sciences-SGGW, Poland.
First years after obtaining PhD (1985) Prof. Ronda was seconded to R&D Centre of Azucarera Ebro Agricolas company, which is the biggest sugar company in Spain. Working at fully facilitated analytical laboratory Prof. Ronda acquired trans-sectoral experience in analytical chemistry for quality of industrial product purposes. Being the Chief of Laboratory Prof. Ronda decided to develop the research career and transferred at University of Valladolid with established contacts with food industry which resulted in large number of industry funded grants (23). As the result from all research grants Prof. Ronda has published 74 articles, 37 at journal of JCR list, 74 conference communications (47 international), 7 books and book chapters and supervised 2 PhD finished and 2 ongoing, 34 BSc thesis and 33 MSc thesis.
Prof. Ronda combines and integrates the knowledge of food science and food engineering. Her research is focused on implementing strategies for nutritional and sensory enrichment of gluten-free systems. Within this area has experience in the application of diagnostic tools based on the measurement of physical properties to evaluate the effects of processing on the phase transitions of systems, functional and rheological properties of doughs, batters and gels; properties that are correlated with the physical-chemical and sensory quality of the final products.

Part C. RELEVANT MERITS

C.1. Publications (including books)

- S. Pérez-Quirce; F. Ronda; A. Lazaridou & C. Biliaderis (2017) Effect of Microwave Radiation Pretreatment of Rice Flour on Gluten-Free Breadmaking and Molecular Size of β-Glucans in the Fortified Breads. Food and Bioprocess Technology, 10(8), 1412-1421. DOI 10.1007/s11947-017-1910-7. Cuartil Q1.
- S. Pérez-Quirce; A. Lazaridou; C. Biliaderis; F. Ronda (2017) Effect of β -glucan molecular weight on rice flour dough rheology, quality parameters of breads and in vitro starch digestibility. LWT - Food Science and Technology 82: 446-453 Cuartil Q1. Autor de correspondencia
- Ronda, F.; Pérez-Quirce, S., Villanueva, M. (2016) Rheological Properties of Gluten-Free Bread Doughs. Relationship with Bread Quality. In Ahmed, J. Ptaszek, P. and Basu, S. (Eds), Advances in Food Rheology and Applications. Elsevier. Chapter 12.
- Pérez-Quirce, S. Ronda, F.; Melendre, C.; Lazaridou, A.; Biliaderis, C. (2016) Inactivation of endogenous rice flour β-glucanase by microwave radiation and impact on physico-chemical properties of the treated flour. Food and Bioprocess Technology. DOI: 10.1007/s11947-016-1741-y. Cuartil Q1.
- Ronda, F., Abebe, W., Pérez-Quire, S., Collar, C. 2015. Suitability of tef varieties in mixed wheat flour bread matrices: A physico-chemical and nutritional approach. Journal of Cereal Science, 64, 139-146. Cuartil: Q2
- Abebe, W., Ronda, F., Villanueva, M., Collar, C. 2015. Effect of tef [Eragrostis tef (Zucc.) Trotter] grain flour addition on viscoelastic properties and stickiness of wheat dough matrices and bread loaf volume. European Food Research and Technology (DOI 10.1007/s00217-015-2476-0). Cuartil Q2.
- Ronda, F., Pérez-Quirce, S., Lazaridou, A., Biliaderis, C. 2015. Effect of barley and oat β-glucan concentrates on gluten-free rice-based doughs and bread quality: a physico-chemical and nutritional perspective. Food Hydrocolloids, 48, 198-207. Cuartil: Q1
- Abebe, W.; Collar, C., Ronda, F. 2015. Impact of variety type and particle size distribution on starchenzymatic hydrolysis and functional properties of tef flours. Carbohydrates Polymers, 115, 260-268. Cuartil: Q1
- Abebe, W.; Ronda, F. 2015. Flowability, moisture sorption and thermal properties of tef flours. Journal of Cereal Science, 63: 14-20. Cuartil: Q2
- Abebe, W.; Ronda, F. 2014. Rheological and textural properties of tef [Eragrostis tef (Zucc.)Trotter] grain flour gels. Journal of Cereal Science 60: 122-130. Cuartil: Q2
- Villanueva, M., Mauro, R.R., Collar, C., Ronda, F. 2015. Acidification of protein-enriched rice starch doughs: effects on breadmaking. European Food Research and Technology, 240, 783-794. Cuartil: Q2
- Ronda, F., Villanueva, M., Collar, C. 2014. Influence of acidification on dough viscoelasticity

of gluten-free rice starch-based dough matrices enriched with exogenous protein. LWT -Food Science and Technology, 59, 12-20. Cuartil: Q1

- Pérez-Quirce, S., Collar, C., Ronda, F. 2014. Significance of healthy viscous dietary fibres on the performance of gluten-free rice-based formulated breads. International Journal of Food Science and Technology, 49, 1375-1382. Cuartil Q2
- Ronda, F., Quilez, J., Pando, V., Roos, Y. 2014. Fermentation time and fiber effects on recrystallization of starch components and staling of bread from frozen part-baked bread. Journal of Food Engineering, 131, 116-123. Cuartil: Q1
- Ronda, F., Pérez-Quirce, S., Angioloni, A., Collar, C. 2013. Impact of viscous dietary fibres on the viscoelastic behaviour of gluten-free formulated rice doughs: A fundamental and empirical rheological approach. Food Hydrocolloids, 32, 252-262. Cuartil: Q1
- Acevedo, B.A., Avanza, M.V., Cháves, M.G., Ronda, F. 2013. Gelation, thermal and pasting properties of pigeon pea (Cajanus cajan L.), dolichos bean (Dolichos lablab L.) and jack bean (Canavalia ensiformis) flours. Journal of Food Engineering, 119, 65-71. Cuartil: Q1
- Ronda, F., Rivero, P., Caballero, P.A., Quilez, J. 2012. High insoluble fiber content increases in vitro starch digestibility in partially baked breads. Journal of Food Science and Nutrition 63 (8): 971-977. Cuartil Q2
- Blanco, C.A., Ronda, F., Pérez, B., Pando, V. 2011. Improving gluten-free bread quality by enrichment with acidic food additives. Food Chemistry, 127, 1204-1209. Cuartil: Q1
- Ronda, F., Roos, Y. 2011. Staling of fresh and frozen gluten-free bread. Journal of Cereal Science, 53, 340-356. Cuartil: Q1
- Ronda, F., Caballero, P.A., Quilez, J., Roos, Y. 2011. Staling of frozen partly and fully baked breads. Study of the combined effect of amylopectin recrystallization and water content on bread firmness. Journal of Cereal Science. 53, 97-103. Cuartil: Q1
- Ronda, F.; Oliete, B.; Gómez, M.; Caballero, P.A.; Pando, V. (2011) Rheological study of layer cake batters made with soybean protein isolate and different starch sources. Journal of Food Engineering 102: 272- 277. Cuartil: Q1
- Ronda, F.; Gómez, M.; Quilez, J (2010) Prolonged frozen storage of partially-baked wheat bread increases in vitro slowly digestible starch after final bake. International Journal of Food Sciences and Nutrition. 61(6): 624 -629. Cuartil Q2
- Ronda, F.; M. Gómez, P. A. Caballero, B. Oliete, C.A. Blanco (2009) Improvement of quality of gluten-free layer cakes Food Science and Technology International 15 :193- 202 . Cuartil Q3
- Oliete, B., Gómez, M., Pando, V., Fernández, E.; Caballero, P.A. Ronda, F. (2008) Effect of nut paste enrichment on physical characteristics and consumer acceptability of bread. Food Science and Technology International 14 (3): 259- 269. Cuartil Q3
- Gómez, M., Oliete, B., Caballero, P.A., Ronda, F. Blanco, C.A. (2008) Effect of nut paste enrichment on wheat dough rheology and bread volume. Food Science and Technology International 14 (1): 57- 65. Cuartil Q3
- Ronda, F., Roos, Y. 2008. Gelatinization and freeze-concentration effects on recrystallization in corn and potato starch gels. Carbohydrates Research. 343, 903-911. Cuartil Q1
- M. Gómez, B. Oliete, J. García-Álvarez, F. Ronda, J. Salazar (2008) Characterization of cake batters by ultrasound measurements. Journal of Food Engineering.89: 408- 413. Cuartil Q1
- M. Gómez, B. Oliete, V. Pando, F. Ronda, P. A. Caballero (2008) Effect of fermentation conditions on bread staling kinetics. European Food Research and Technology. 226: 1379-1387. Cuartil Q2
- F. Ronda; J.M. Rodríguez; D. Sancho.; B. Oliete; M. Gómez (2007) Multivariate optimisation of a capillary electrophoretic method for the separation of glutenins. Application to quantitative analysis of the endosperm storage proteins in wheat. Food Chemistry 108:287-296. Cuartil Q1
- Gómez, M; Ronda, F; .Caballero, P; Blanco, C., Rosell, C.M. (2007) Functionality of different hydrocolloids on the quality and shelf-life of yellow layer cakes. Food Hydrocolloids 21 (2):167-173. Cuartil Q1
- Rojas A, Blanco CA, Ronda F, Gómez M, Caballero PA (2007) 2-Acetyl-1,3-cyclopentanedione-oxovanadium(IV)complexes. Acidity and implications for gastrointestinal absorption Food and Chemical Toxicology. 45 322-327 Cuartil: Q3
- Blanco CA, Rojas A, Caballero PA, Ronda F, Gómez M, Caballero I. (2006) A better control of beer properties by predicting acidity of hop α-iso-acids. Trends in Food Science &

Technology 17: 373-377. Cuartil Q1

- Ronda, F.; Gómez, M.; Blanco, C.; Caballero, P. (2005) Effects of polyols and nondigestible oligosaccharides on the quality of sugar-free sponge cakes. Food Chemistry 90: 549:555. Cuartil Q1
- Gómez, M.; Del Real, S.; Rosell, C.M.; Ronda, F.; Blanco, C.; Caballero, P (2004) Functionality of different emulsifiers on the performance of breadmaking and wheat bread quality. European Food Research and Technology. 219: 145-150. Q2
- Blanco CA, Rojas A, Verdu J, Ronda F, Caballero PA (2003) Correlation of complexation rate constants of 1 : 1 iron chelates with ligand dissociation constants. Food considerations. Journal of food biochemistry, 27 (4), 331-332
- Gómez, M.; Ronda, F.; Blanco, C.A.; Caballero, P.A., Apesteguía, A. (2003) Effect of dietary fibre on dough rheology and bread quality. european Food Research and Technology. 216 (1): 51:56; Q2
- Blanco, C.A., Rojas, A., Gómez, M, Ronda, F., Caballero, P.A. (2003). Aspects of 2-acetyl-1,3-cyclopentanedione as a chromium (III) chelating agent: nutritional implications. International Journal of Food Science and Technology. 38 (1): 63-71,
- Sancho, D., Ronda, F., Debán, L., Vega, M., Pardo, R. (2002) Application of multivariate statistical methods for metal control in the production of ethanol in sugar industry. Zuckerindustrie. 127 (12), 931-935. Q3
- Ronda, F., Sancho, D., Blanco, C.A., M., Gómez, M., Caballero, P.A. (2002). Determination of Mercury and Arsenic in white beet sugar by vapor generation atomic absorption spectrometry. Zuckerindustrie. 127 (10): 763-767. Q3
- Ronda, F.; Sancho, D., del Álamo, M., Gómez, M. (2001) Direct determination of Arsenic, Cadmium, Cobalt, Copper, Chromium, Lead, Tin and Zinc in white beet sugar using graphite furnace atomic absorption spectrophotometry. Zuckerindustrie. 126 (51): 208-212. Q3

C.2. Research projects and grants (last 10 years)

- Improving gluten-free flours functionality by Microwave treatments; A tool for high quality of gluten-free bakery (physical, sensorial and nutritional) (BREADforALL). European Commission H2020-MSCA-IF-2015 Action: MSCA-IF-EF-ST (Code: 706102): Joanna Harasym (University of Wroclaw, Poland) Supervisor: Felicidad Ronda. Period: 2016-2018; Project Cost: 170.121,60 €

- Impact of microwave and ultrasound on gluten-free flours functionality: structuring ability in gluten-free breadmaking matrices. Project Director: Felicidad Ronda. Ministry of Economy and Competitiveness (MINECO/FEDER) (AGL2015-63849-C2-2-R). Period: 2016-2020 (4 years); Project Cost: 84000 €

- Nutritional and functional improvement of gluten-free breads: addition of beta-glucans of different origins and molecular weights according to the health claims approved by the EFSA. Project Director: Felicidad Ronda. Ministry of Economy and Competitiveness (MINECO/FEDER) (Ref: AGL2012-35088). Period: 2013-2015 (3 years); Project Cost: 76.050 €

- Gluten-free bread making by incorporating structured protein networks (exogenous) and its impact on starch digestibility. Project Director: Felicidad Ronda. Regional Ministry of Education (Ref: VA 252A12-2). Period: 2012-2013 (3 years). Project Cost: 30.000 €.

- Increasing the shelf life of gluten-free bread by means of freezing processes. Project Director: Felicidad Ronda. Regional Ministry of Education (VA 067A08). Period: 2008-2010 (3 years). Project Cost: 11.100 €.

- Recovery of traditional varieties of wheat for its use in Castilla y Leon breads and bakery products. Project Director: Manuel Gómez Castilla y Leon Regional Ministry (Ref: VA-11-C2-1). Period: 29/05/2007-28/5/2010 (3 years). Project Cost: 46.000€.

- Getting bakery products for consumers with specific needs (panxtodos). Project Director:

Alberto León. Science and Technology for Development Ibero-American Program (CYTED) (Ref: P105PI0055). Period: 2006-2009 (4 years). Project Cost: 147.287 €

- Improving gluten network and creating analogous structures through the interaction of proteins, carbohydrates and enzymes. Project Director: Manuel Gómez. Ministry of Science and Education (Ref: AGL2005-05192-C04-02/ALI). Period: 2006-2008 (3 years). Project Cost: 60.000€.

- Study of the iso-α-acids and its effect on the bitterness of beer and consistency of foam. Project Director: Carlos Blanco. Regional Ministry of Education (Ref: VA032A05). Period: 2005-2007 (3 years). Project Cost: 17.900 €

C.3. Contrats, Technology Transfer (last ten years)

- Enrichment of Breads with cereal β-Glucans. Project Director: Felicidad Ronda; Company: Biofactoría Naturae Salus S.A. Period: 2016 (1 month). Project Cost: 2100 €.

- Preliminary study of life extension of wheat bread. Project Director: Felicidad Ronda; Company: Biofactoría Naturae Salus S.A. Period: 2016. Project Cost: 424 €.

- Analysis and study of flours. Project Director: Felicidad Ronda; Company: Grupo Ordesa, S.A. Period: 2014. Project Cost: 2300 €.

- Effect of the formulation of infant flours in starch digestibility. Project Director: Felicidad Ronda; Company: Grupo Ordesa, S.A. Period: 2014. Project Cost: 1260 €.

- Study of starch digestibility of flour samples. Project Director: Felicidad Ronda; Company: Grupo Ordesa, S.A. Period: 2014. Project Cost: 420 €.

- Effect of processing and composition of frozen part-baked bread on the quality of the final product. Project Director: Felicidad Ronda. Company: Europastry, S.A. Period: 2010 (4 months). Project Cost: 2000 €

- Study of the Life of mini-hamburger breads and pan whole bread without sugar. Project Director: Felicidad Ronda. Company: Productos Alimenticios La Familia, S.A. Period: 2008 (3 months). Project Cost: 2400€.

- Research and Healthy Food Ingredients. Project Director: Manuel Gómez. Company: Galletas Siro, S.A. Period: 2009-2011 (2.5 years). Project Cost: 286000 €

- Analysis of the life of new pan breads. Project Director: Manuel Gómez; Company: Productos Alimenticios La Familia, S.A. Period: 2008 (1 year). Project Cost: 4800 €

- Study of the life of hamburger and hot dog breads. Project Director: Manuel Gómez. Company: Productos Alimenticios La Familia, S.A.; Period: 2008 (2 months) Project Cost: 2400 €.

- Study of the life of pan white bread without crust. Project Director: Pedro A. Caballero; Company: Productos Alimenticios La Familia, S.A. Period: 2008 (1 month). Project Cost: 1200€.

- Study of the life of bakery products. Project Director: Manuel Gómez. Company: Productos Alimenticios La Familia, S.A. Period: 2008 (1 month); Project Cost: 1950 €

- Nutritional implications of processing and storage of frozen pre-baked bread. Project Director:
- Pedro A. Caballero. Company: Europastry S.A. Period: 2008 (1 year). Project Cost: 6000 €

- Starch properties of flours from different cereals. Project Director: Manuel Gomez. Company: Milling Factory Francisco Galindo Escudero, S.A. 2006 (1.5 years). Project Cost: 44160 €

C.4 Direction of research activities (last 10 years)

- Supervisor of Ph.D. Thesis: Desarrollo de una tecnología de clarificación de jugo de caña azucarera para la formulación de bebidas refrescantes. University of Valladolid. College of Agricultural and Forestry Engineering. Oscar Barrios Suárez, Mars, 2008-Apto cum Laude

- Supervisor of Ph.D. Thesis: Tef as an industrial crop for food processing. Exploring its latent potential and handling characteristics. University of Valladolid. College of Agricultural and Forestry Engineering. Workineh Abebe; Fecha: Marzo, 2015 – Sobresaliente Cum Laude with Extraordinary award; International Mention.

- Supervisor of Ph.D. Thesis (ongoing): Nutritional and functional improvement of gluten-free breads: addition of beta-glucans of different origins and molecular weights according to the health claims approved by the EFSA. University of Valladolid. College of Agricultural and Forestry Engineering. Sandra Pérez Quirce.

- Supervisor of Ph.D. Thesis (ongoing): Effect of acidification on structuring starch - protein gluten-free systems. University of Valladolid. College of Agricultural and Forestry Engineering. Marina Villanueva Barrero.

- Supervisor of Degree Thesis (Agricultural Engineering): 23
- Supervisor of Master Thesis (Ms. in Food Quality, Development and Innovation): 33
- Supervisor of Research Works granted for collaboration with departments: 5
- Supervisor of post-grade and visitant professor stays (Erasmus Mundus): 3

C.5 Research Stays Abroad:

- University of Thesaloniki (Greece) with Prof. C. Biliaderis. 2015 (1 week)
- University of Lund (Sweden) with Prof. A. Eliasson. 2013(1 week)
- University of Thesaloniki (Greece) with Dra. A. Lazaridou. 2011(1 week)
- University College Cork (Ireland) with Prof. Y. Roos. 2007 (3 months)
- University of Vasile Alexandri of Bacau (Rumunia). 2011 (1 week)
- University of Life Sciences-SGGW, Warsaw (Poland). 2010 (1 week)
- University of Lisbon - Higher Institute of Agronomy (Portugal). 2006 (1 week)

C.6 Evaluation Activities:

- Reviewer of Scientific Journals (SCI): Carbohydrate Polymers; Food Chemistry; Food Hydrocolloids; J. Food Engineering; Int. J. Food Science and Technol.; Int. J. Food Sci and Nutrition; J. Cereal Science; J. Agricultural and Food Chemistry; J. Agricultural Sci.; J. Food Processing and preservation; J. Food Sci.; LWT
- Reviewer of National Research Projects (ANEP) since 2009
- Reviewer of Projects of the Science and Technology for Development Ibero-American Program (CYTED) since 2006