CV date	July 2021

Part A. PERSONAL INFORMATION

First and Family name	Vanesa Ortega-López		
Passport, ID number	X1272311A	Date of birth	05/03/1980
Researcher codes	Open Researcher and Contributor ID (ORCID**)	000-0003-0212-355X	
	SCOPUS Author ID	51565854300	
	WoS Researcher ID	J-6597-2017	

A.1. Current position

Name of University/Institution	University of Burgos		
Department	Civil Engineering Department/Escuela Politécnica Superior		
Address and Country	C/Villadiego s/n		
Phone number	947259031	E-mail	vortega@ubu.es
Current position	Profesor Titular de Universidad (Associate Professor)	From	09/11/2020
Key words	Civil Engineering; Concrete; Waste; Recycling		

A.2. Education

PhD, Licensed, Graduate	University	Year
Agricultural Engineer (Master)	University of Valladolid (Spain)	2004
Technical Agricultural Engineer specializing in Industries (Degree)	University of Burgos (Spain)	2002
PhD. in Civil and Industrial Engineering	University of Burgos (Spain)	2011

A.3. General indicators of quality of scientific production *(see instructions)*

- Associate Professor with 2 sexennium (2009-2014; 2015-2020)
- 2 PhD Thesis supervised
- Total citations: 600. Citations/year in the last 5 years120
- 30 articles indexed in JCR: 21Q1, 6Q2, 1Q3, 2Q4
- h-index: 12

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

I hold a Ph.D. in Engineering that obtained the Extraordinary Doctorate Award from the University of Burgos), in 2011, within the doctoral program of Civil and Industrial Engineering. Previously, I have also obtained other awards such as the 2nd National Degree Award (2002). I have received various scholarships, including a postgraduate scholarship from the Agriculture Council of the Regional Government (2004-2005). My professional experience is linked to that Council and to the company Tragsa S.A. over the years 2005-2008.

Simultaneously, in 2004, I began work at the UBU as a part-time professor, changing to a full-time position in 2008 and Assistant Professor since 2016. Currently, I hold the position of Tenured Associate Professor in the Area of Mechanics of Continuous Media and Theory of Structures. Over my more than 17 years as a university professor, I have taught more than 2,500 hours of lessons in different subject areas. I have supervised a large number of Degree and Master Theses and, since 2013; I have been Head of the Teaching Innovation Group "Transition from High School to the University". Between 2012 and March 2019, I held the academic position of Secretary of the Civil Engineering Department.

I am the Coordinator of the Erasmus Agreement with the University of Tras-os-Montes and Alto Douro (Portugal, since 2005) and of the Erasmus Agreement with the University of Padua (Italy, since 2017). I am also member of the PhD School of the University of Padua since 2018 and maintain close collaboration with professors from the Department of Civil, Environmental and Architectural Engineering (ICEA). They have already co-authored some conference proceedings and three shared articles.

I am a member of the Research Group SUCONS of the UBU, member of the Consolidated Research Unit UIC-231 of the Junta de Castilla y León (Regional Government). The main research topic of the SUCONS group is the re-use of by-products in building and civil engineering applications. The SUCONS group is a member of the national excellence network BIA2017-90838-REDT (Recycled concrete based on alternative raw materials for a circular economy) and a corporate member of the International Union of Laboratories and Experts in Construction Materials, Systems and Structures (RILEM), where SUCONS researchers form part of some technical committees related with hydraulic and asphalt concretes.

I have co-authored 30 articles indexed in JCR (WoS) between 2011 and 2021 (21 of them Q1), and I am a co-author of five book chapters, some teaching innovation articles, and 3 patents. I have supervised the Doctoral Thesis of Dr. Marta Skaf (2016), related to the use of steel slag in bituminous mixtures, and the Doctoral Thesis of Dr. Aratz García-Llona (2020), with International and Industrial mention, related to the simulation of siderurgic fiber-reinforced concrete, in collaboration with TECNALIA Research&Innovation. Currently, I am co-supervising the Doctoral Thesis of the PhD student Mr. Víctor Revilla, who holds a Ministry scholarship FPU (University Professor Training).

I have participated in 15 research projects/contracts, mostly projects related to investigations in new materials, structures, and the reuse of waste in construction. I have likewise presented oral communications at several international conferences and I have over 30 publications in conference proceedings.

Part C. RELEVANT MERITS

C.1. Relevant publications

1. **Ortega-López V**, García-Llona A, Revilla-Cuesta V, Santamaría A, San-José J.T. Fiber-reinforcement and its effects on the mechanical properties of high-workability concretes manufactured with slag as aggregate and binder. Journal of Building Engineering, 2021; 43: 102548
2. Revilla-Cuesta V, Evangelista L, de Brito J, **Ortega-López V**, Manso JM. Effect of the maturity of recycled aggregates on the mechanical properties and autogenous and drying shrinkage of high-performance concrete. Construction and Building Materials. 2021;299.
3. Santamaría A, García-Llona A, Revilla-Cuesta V, Piñero I, **Ortega-López V**. Bending tests on building beams containing electric arc furnace slag and alternative binders and manufactured with energy-saving placement techniques. Structures. 2021;32:1921-33
4. Revilla-Cuesta, V., M. Skaf, JA. Manso and **V. Ortega-López**, (2020) Effect of fine recycled concrete aggregate on the mechanical behavior of self-compacting concret. Construction and Building Materials, 263, 120671.
5. Santamaría, A., J.J. González, M.M. Losáñez, M. Skaf, and **V. Ortega-López** (2020), The design of self-compacting structural mortar containing steelmaking slags as aggregate. Cement and Concrete Composites, 111.
6. Skaf, M., E. Pasquini, V. Revilla-Cuesta, and **V. Ortega-López** (2019), Performance and Durability of Porous Asphalt Mixtures Manufactured Exclusively with Electric Steel Slags. Materials, 12(20): p. 3306 DOI: 10.3390/ma12203306.
7. F. Fiol, C. Thomas, C. Muñoz, **V. Ortega-López** and J.M. Manso (2018). “The influence of recycled aggregates from precast elements on the mechanical properties of structural self-compacting concrete.” Construction and Building Materials 182: 309-323.
8. **V. Ortega-López**, J.A. Fuente-Alonso, A. Santamaría, J.T. San-José and A. Aragón (2018). "Durability studies on fiber-reinforced EAF slag concrete for pavements." Construction and Building Materials 163: 471-481.
9. A. Santamaría, A. Orbe, M.M. Losañez, M. Skaf, **V. Ortega-Lopez** and J. J. González (2017). "Self-compacting concrete incorporating electric arc-furnace steelmaking slag as aggregate." Materials and Design 115: 179-193.
10. M. Skaf, **V. Ortega-Lopez**, J. A. Fuente-Alonso, A. Santamaría and J.M. Manso (2016). "Ladle furnace slag in asphalt mixes." Construction and Building Materials 122: 488-495.
11. I. Arribas, A. Santamaría, E. Ruiz, **V. Ortega-López** and J.M. Manso (2015). "Electric arc furnace slag and its use in hydraulic concrete." Construction and Building Materials 90: 68-79.
12. **V. Ortega-López**, J.M. Manso, I.I. Cuesta and J.J. González (2014). "The long-term accelerated expansion of various ladle-furnace basic slags and their soil-stabilization applications." Construction and Building Materials 68: 455-464.

13. Manso, J.M., **V. Ortega-López**, J.A. Polanco and J. Setién (2013). "The use of ladle furnace slag in soil stabilization." Construction and Building Materials 40: 126-134.

C.2. Relevant research projects

1. Reference: PID2020-113837RB-I00
   Project Title: Estudio a escala real de hormigones sostenibles, hidráulicos y bituminosos, de altas prestaciones, fabricados con residuos siderúrgicos y de construcción (FULLSCALE)
   Funds: €45,000
   Period (duration): 01/09/2021-01/09/2024 (36 moths). Lead Researcher: **Vanesa Ortega**
2. Reference: EU-RFCS ID-745982 (D01T08)
   Project Title: FAtigue STrength of COLD-formed structural steel details (FASTCOLD)
   Source of funding: European Commission
   Funds: €2,873,935.80 - UBU funds: €317,235.40
   Period (duration): 01/07/2017-31/12/2020 (42 moths). Lead Researcher: Juan M. Manso
3. Reference: BU119P17
   Project Title: Innovación Competitiva en la Utilización de Escorias Siderúrgicas para la elaboración de Hormigones de Altas Prestaciones. Aplicaciones en la Industrialización (HIGHSICON).
   Source of funding: Regional Government (Junta de Castilla y León)
   Funds: €48,400
   Period (duration): 26/07/2017-31/10/2019 (27 moths). Lead Researcher: J.M. Manso
4. Reference: BIA2014-55576-C2-1-R
   Project Title: Maximización del valor sostenible de materiales y productos de la obra civil, incorporando subproductos de la fabricación del acero (BLUECONS)
   Source of funding: Spanish Ministry and FEDER Funds
   Funds: €40,000
   Period (duration): 01/01/2015 – 31/12/2017 (36 moths). Lead Researcher: J.M. Manso

C.3. Relevant contracts, technological or transfer merits

1. Project Title: Asistencia técnica sobre ensayos en morteros/hormigones: 30 muestras ensayadas a flexotracción en probetas entalladas.
   Source of funding: Fundación Tecnalia Research & Innovation
   Period: 1/09/2020 - 1/12/2020 Lead Researcher: **Vanesa Ortega**
   Funds: € 3,600
2. Project Title: Asistencia técnica en el diseño y ensayo de hormigones siderúrgicos para el grupo CLIM-ADAPT (financiado por la UPV/EHU bajo referencia PPGA 20/26 de orgánica 314920NVAZ).
   Source of funding: Universidad del País Vasco
   Period: 30/07/2020 - 13/09/2020 Lead Researcher: **Vanesa Ortega**
   Funds: € 5,150
3. Project Title: Asistencia técnica en diseño y ensayo de vigas de edificación fabricadas con hormigones siderúrgicos (DESCLIMA: RTI2018-097079-B-C31 MCIU/AEI/FEDER).
   Source of funding: Universidad del País Vasco-UPV/EHU
   Funds: € 2,850
   Period: 22/07//2019 – 12/11/2019 Lead Researcher: **Vanesa Ortega López**.
4. Project Title: Manuales del Proyecto Europeo RFCS: SBRI+, sustainable bridges
   Source of funding: Fundación Tecnalia Research&Innovation
   Funds: €9,000
   Period: 1/10/2017 – 31/03/2018. Lead Researcher: **V. Ortega López**
5. Project Title: Investigación de la influencia de aligeramientos en una losa nervada para el paso de instalaciones: ensayo de verificación del diseño y cálculo.
   Source of funding: Fundación Tecnalia Research&Innovation
   Funds: €5,000
   Period: 20/06/2016 – 31/12/2017. Lead Researcher: J.M. Manso
6. Project Title: DIVERPIN: Investigación sobre productos industriales diversificados partiendo de la valorización de residuos del sector de la piedra natural y de materias primas de la comunidad de Castilla y León.

Source of funding: Agencia de Inversión y Servicios de Castilla y León (Regional Government); FEDER Funds
Funds: €1.5 M
Period: 26/10/2011-30/10/2013. Lead Researcher: J.M. Manso

7. Project Title: Servicios de Producción Integrada
   Source of funding: Consejería de Agricultura y Ganadería de la Junta de Castilla y León (Regional Government)
   Period: 01/10/2008-30/12/2010. Lead Researcher: **Vanesa Ortega**
   Funds: €26,990

C.4. Patents

1. Patent number: **ES2683224** (P201730408)
   Authors: **V. Ortega-López**, J.A. Fuente-Alonso, M. Skaf, A. Aragón, J.M. Manso.
   Title: Procedimiento de fratasado superficial de hormigón que incluye escoria negra de horno eléctrico de arco.
   Country: Spain
   Grant date: 07/03/2019. Holder: University of Burgos
2. Patent number: **ES2673396** (P201631632). B2-with previous exam.
   Authors: J.A. Fuente-Alonso, **V. Ortega-López**, M. Skaf, A. Aragón, J.M. Manso.
   Title: Hormigón siderúrgico reforzado con fibras para su uso en pavimentos.
   Country: Spain
   Grant date: 04/10/2018. Holder: University of Burgos
3. Patent number: **ES2558617** (P201400641)
   Authors: M. Skaf, J.M. Manso, M. Solaguren, R. Serrano, and **V. Ortega-López**.
   Title: Mezcla bituminosa drenante con residuo de escoria blanca de horno cuchara.
   Country: Spain
   Grant date: 04/10/2016. Holder: University of Burgos

C.5. Relevant contributions to International Conferences

1. Authors: **V. Ortega-López**, V. Revilla-Cuesta, A. Santamaría, B. Espinosa, M. Skaf.
Title: Durability studies on Fiber-Reinforced Siderurgic Concrete.
Conference: *RILEM DBMC 2020: XV International Conference on Durability of Building Materials and Components*
Place/date: Barcelona, Spain. October 2020

2. Authors: **V. Ortega-López**, V. Revilla-Cuesta, M. Skaf, F. Fiol, A. García-Llona, I. Piñero.
Title: Fracture toughness evaluation of fiber reinforced concrete manufactured with siderurgic aggregates.
Conference: *SCMT5 2019: 5th International Conference on Sustainable Construction Materials and Technologies*.
Place/date: Kington-London (United Kingdon); 17-19 July, 2019
Proceedings: ISSN: 25153048. Paper: IDSMT5096

3. Authors: **V. Ortega-López**, J.M. Fuente-Alonso, A. Santamaría, M. Skaf, J.M. Manso.
Title: Performance of fiber reinforced steel-making slag concrete
Conference: *Advances in Sustainable construction Materials&Civil Engineering System.*
Place/date: Dubai (Arab Emirates) ; 18-20 Apri 2017
Proceedings: Web of Conference 120. DOI: 10.1051/matecconf/20171200

4. Authors: **V. Ortega-López**, J.A. Fuente-Alonso, M. Skaf, A. Aragón, J.M. Manso.
Title: Fiber reinforced concrete manufactured with electric arc furnace slag
Conference: *3rd Pan-American Material Congress.*
Place/date: San Diego (Ca, U.S.A.); 26 February-2 March 2017
Proceedings: M. A. Meyers, H. A. C. Benavides, S. P. Brühl et al. Cham, Springer. ISBN 978-3-319-52131-2. DOI 10.1007/978-3-319-52132-9.

5. Authors: **V. Ortega-López**, M. Skaf, J.A. Fuente-Alonso, J.M. Manso.
Title: Pavement solutions for low-volume roads using steel slags
Conference: *EUROSLAG2015.* Place/date: Linz (Austria); 21-23 October 2015