

Part A. PERSONAL INFORMATION

CV date	25/05/2020
---------	------------

First and Family name	Alberto de la Fuente Antequera		
ID number	40363675d	Age	38
Researcher numbers	Researcher ID	36657016500	
	Orcid code	0000-0002-8016-1677	

A.1. Current position

Name of University	Polytechnic University of Catalonia (UPC)		
Department	Civil and Environmental Engineering Department		
Address and Country	Jordi Girona Salgado 1-3, C1-202c		
Phone number	934016515	E-mail	albert.de.la.fuente@upc.edu
Current position	Associate Professor	From	1/9/2017
Espec. cód. UNESCO	3305		
Key Words	Fibre reinforced concrete; structural optimization; sustainability		

A.2. Education

PhD	University	Year
Civil Engineer	Polytechnic University of Catalonia (UPC)	2011

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

PhD Thesis supervised (last 3 years): 8

JCR-Indexed journal papers: 65 (48 in the 1st quartile)

H-index: 19 (Scopus)

Part B. CV SUMMARY

Albert de la Fuente is a Civil Engineer, **Associate Professor** in the area of concrete structures. He received his BS from UPC in 2007 and his PhD from UPC in 2011. His research interests are focused on the field of **optimization of concrete structures, fiber reinforced concrete design and material characterization** new techniques. He is also developing research in aspects related to **multi-criteria decision-making systems for sustainability assessment**.

He has published 75 scientific papers, **70 international JCR-indexed journal papers**, 2 book chapters and 4 books, and 60 conference papers. He **has supervised 8 PhD thesis (16 more ongoing)** and more than 150 Master Thesis and Bachelor Thesis.

He has **led (and leading) more than 5 and 15 research projects with public and private funds, respectively**, also involving the main construction Spanish companies (e.g., ACCIONA, DRAGADOS, SACYR, FERROVIAL).

Currently, prof. Albert is an active member of the fib task groups 1.4.1 “Tunnels in fibre reinforced concrete”; 6.3 “Sustainability of precast concrete structures”; 6.5 “Precast concrete bridges”; 7.1 “Sustainability of concrete” and 10.1 “Model Code 2020”.

In 2013, **he founded a UPC Spin-Off named Smart Engineering**, Professor de la Fuente being currently holding a Project Manager position within the company.

Part C. RELEVANT MERITS

C.1. Publications (Last 5 Years and on FRC and Sustainability and only Q1)

- E. GALEOTE, A. BLANCO, A. de la FUENTE. Design-oriented approach to determine FRC constitutive law parameters considering the size effect. *Composites Structures* 2020. [10.1016/j.compstruct.2020.112036](https://doi.org/10.1016/j.compstruct.2020.112036). IF: 5.39 (Q1)
- S.M.A. HOSSEINI, R. YAZDANI, A. de la FUENTE. Multi-objective interior design optimization method based on sustainability concepts for post-disaster temporary housing units. *Building and Environment* 2020. [10.1016/j.buildenv.2020.106742](https://doi.org/10.1016/j.buildenv.2020.106742). IF: 6.08 (Q1)

- A. NOGALES, A. de la FUENTE. Crack width design approach for fibre reinforced concrete tunnel segments for TBM thrust loads. *Tunneling and Underground Space Technology* 2020. [10.1016/j.tust.2020.103342](https://doi.org/10.1016/j.tust.2020.103342). IF: 5.51 (Q1)
- I. JOSA, O. PONS, A. de la FUENTE, A. AGUADO. Multi-criteria decision-making model to assess the sustainability of girders and trusses: Case study for roofs of sports halls. *Journal of Cleaner Production* 2020. [10.1016/j.jclepro.2019.119312](https://doi.org/10.1016/j.jclepro.2019.119312). IF: 8.46 (Q1)
- E. PUJADAS-GISPERS, D. SANJUAN-DELMAS, A. de la FUENTE, S.P.G.F. MOONEN, A. JOSA. Environmental analysis of concrete deep foundations: Influence of prefabrication, concrete strength, and design codes. *Journal of Cleaner Production* 2020. [10.1016/j.jclepro.2019.118751](https://doi.org/10.1016/j.jclepro.2019.118751). IF: 8.46 (Q1)
- D. MARTINELLO, A. de la FUENTE, S.H.P. CAVALARO. Fatigue of cracked high-performance fiber reinforced concrete subjected to bending. *Construction and Building Materials* 2019. <https://doi.org/10.1016/j.conbuildmat.2019.06.038>. IF: 4.10 (Q1)
- A. de la FUENTE, M.M. CASANOVAS, O. PONS, J. ARMENGOU. Sustainability of column-supported RC slabs: fiber reinforcement as an alternative. *Journal of Construction Engineering and Management* 2019. [10.1061/\(ASCE\)CO.1943-7862.0001667](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001667). IF: 3.711 (Q1)
- C. ALMIRALL, A. PETIT-BOIX, D. SANJUAN-DELMÁS, A. de la FUENTE, P. PUJADAS, A. JOSA. Environmental effects of using different codes applied to reinforced concrete beam designs based on Model Code 2010 and Spanish Standard EHE-08. *Engineering Structures* 2019. [10.1016/j.engstruct.2018.11.013](https://doi.org/10.1016/j.engstruct.2018.11.013). IF: 2.755 (Q1)
- N. TOSIC, A. de la FUENTE, S. MARINKOVIC. Creep of recycled aggregate concrete: Experimental database and creep prediction model according to the fib Model Code 2010. *Construction and Building Materials* 2019. [10.1016/j.conbuildmat.2018.11.048](https://doi.org/10.1016/j.conbuildmat.2018.11.048). IF: 3.485 (Q1)
- N. TOSIC, A. de la FUENTE, S. MARINKOVIC. Shrinkage of recycled aggregate concrete: experimental database and application of fib Model Code 2010. *Materials and Structures* 2018. [10.1617/s11527-018-1258-0](https://doi.org/10.1617/s11527-018-1258-0) IF: 2.271 (Q1)
- M. JAMSHIDI, M. HOSEINI, S. VAHDANI, C. de SANTOS, A. de la FUENTE. Seismic fragility curves for vulnerability assessment of steel fiber reinforced concrete segmental tunnel linings. *Tunneling and Underground Space Technology* 2018. [10.1016/j.tust.2018.04.032](https://doi.org/10.1016/j.tust.2018.04.032) IF: 3.11 (Q1)
- S.M.A. HOSSEINI, O. PONS, A. de la FUENTE. A combination of the Knapsack algorithm and MIVES for choosing optimal temporary housing site locations: A case study in Tehran. *International Journal of Disaster Risk Reduction* 2018. [10.1016/j.ijdr.2017.10.013](https://doi.org/10.1016/j.ijdr.2017.10.013). IF: 2.30 (Q1)
- M. JAMSHIDI, A. HOSEINI, S. VAHDANI, A. de la FUENTE. Numerical-aided design of fiber reinforced concrete tunnel segment joints subjected to seismic loads. *Construction and Building Materials* 2018. [10.1016/j.conbuildmat.2018.02.219](https://doi.org/10.1016/j.conbuildmat.2018.02.219). IF: 4.10 (Q1)
- J.A. ORTIZ, A. de la FUENTE, F. MENA SEBASTIÀ, I. SEGURA, A. AGUADO. Steel-fibre-reinforced self-compacting concrete with 100% recycled mixed aggregates suitable for structural applications. *Construction and Building Materials* 2017. [10.1016/j.conbuildmat.2017.08.188](https://doi.org/10.1016/j.conbuildmat.2017.08.188). IF: 4.10 (Q1)
- E. GALEOTE, A. BLANCO, S.H.P. CAVALARO, A. de la FUENTE. Correlation between the Barcelona test and the bending test in fibre reinforced concrete. *Construction and Building Materials* 2017. [10.1016/j.conbuildmat.2017.07.028](https://doi.org/10.1016/j.conbuildmat.2017.07.028). IF: 4.10 (Q1)
- P. PUJADAS, A. BLANCO, S.H.P. CAVALARO, A. de la FUENTE, A. AGUADO. The need to consider flexural post-cracking creep behavior of macro-synthetic fiber reinforced concrete. *Construction and Building Materials* 2017. [10.1016/j.conbuildmat.2017.05.166](https://doi.org/10.1016/j.conbuildmat.2017.05.166). IF: 4.10 (Q1)
- L. CASTILLO, A. AGUADO, A. de la FUENTE y A. JOSA. By-layer diaphragm walls: structural and sectional analysis. *Journal of Civil Engineering and Management* 2016. [10.3846/13923730.2014.914085](https://doi.org/10.3846/13923730.2014.914085). IF: 2.171 (Q1)
- A. BLANCO, P. PUJADAS, S.H.P. CAVALARO, A. de la FUENTE, A. AGUADO. Influence of the type of fiber on the structural response and design of FRC slabs. *ASCE Journal of Structural Engineering* 2016. [10.1061/\(ASCE\)ST.1943-541X.0001515](https://doi.org/10.1061/(ASCE)ST.1943-541X.0001515). IF: 1.504 (Q1)
- A. de la FUENTE, J. ARMENGOU, O. PONS y A. AGUADO. Multi - criteria decision - making model for assessing the sustainability index of wind-turbine support systems: application to a new precast concrete alternative. *Journal of Civil Engineering and Management* 2016. [10.3846/13923730.2015.1023347](https://doi.org/10.3846/13923730.2015.1023347). IF: 1.370 (Q1)

- A. de la FUENTE, O. PONS, A. JOSA y A. AGUADO. *Multicriteria-decision making in the sustainability assessment of sewerage pipe systems*. **Journal of Cleaner Production** 2016. [10.1016/j.jclepro.2015.07.002](https://doi.org/10.1016/j.jclepro.2015.07.002). IF: 3.844 (Q1)
- A. PETIT, N. ROIGÉ, A de la FUENTE, P. PUJADAS, X. GABARRELL, J. RIERADEVALL y A. JOSA. *Integrated Structural Analysis and Life Cycle Assessment of Equivalent Trench-Pipe Systems for Sewerage*. **Water Resources Management** 2016. [10.1007/s11269-015-1214-5](https://doi.org/10.1007/s11269-015-1214-5). IF: 2.600 (Q1)
- L. LIAO, A. de la FUENTE, S.H.P. CAVALARO, A. AGUADO, G. CARBONARI. *Design procedure and experimental study on fibre reinforced concrete segmental rings for vertical shafts*. **Materials & Design** 2016. [10.1016/j.matdes.2015.12.061](https://doi.org/10.1016/j.matdes.2015.12.061). IF: 3.501 (Q1)
- T. IKUMI, S.H.P. CAVALARO, I. SEGURA, A. de la FUENTE y A. AGUADO. *Simplified methodology to evaluate the external sulfate attack in concrete structures*. **Materials & Design** 2016. [10.1016/j.matdes.2015.10.084](https://doi.org/10.1016/j.matdes.2015.10.084). IF: 3.501 (Q1)
- L. LIAO, A. de la FUENTE, S.H.P. CAVALARO, A. AGUADO. *Design of FRC tunnel segments considering the ductility requirements of the Model Code 2010*. **Tunnelling and underground space technology** 2015. [10.1016/j.tust.2015.01.006](https://doi.org/10.1016/j.tust.2015.01.006). IF: 1.490 (Q1)
- D. SANJUAN-DELMÁS, E. HERNANDO, P. PUJADAS, A de la FUENTE, X. GABARRELL, J. RIERADEVALL y A. JOSA. *Environmental and geometric optimisation of cylindrical drinking water storage tanks*. **The International Journal of Life Cycle Assessment** 2015. [10.1007/s11367-015-0963-y](https://doi.org/10.1007/s11367-015-0963-y). IF: 3.988 (Q1)
- L. LIAO, A. de la FUENTE, S.H.P. CAVALARO, A. AGUADO, G. CARBONARI. *Experimental and analytical study of concrete blocks subjected to concentrated loads with an application to TBM-constructed tunnels*. **Tunneling and underground space technology** 2015. [10.1016/j.tust.2015.04.020](https://doi.org/10.1016/j.tust.2015.04.020). IF: 1.490 (Q1)
- A. BLANCO, P. PUJADAS, A. de la FUENTE, S.H.P. CAVALARO, A. AGUADO. *Assessment of the fibre orientation factor in SFRC slabs*. **Composites Part B: Engineering** 2015. [10.1016/j.compositesb.2014.09.001](https://doi.org/10.1016/j.compositesb.2014.09.001). IF: 2.602 (Q1)

C.2. Participation/Coordination in research projects with competitive funds (2013-2020)

- Title: *Optimization of construction processes and design of structural elements using fibre reinforced concretes substituting traditional reinforcement (eFIB)*. RCT-2016-5263-5 (MINECO). Entities: SACYR, UPC. Duration: 3 years. Amount: 318.663,80 € (UPC)
- Title: *Seguridad en aplicaciones estructurales de hormigón reforzado con fibras (SAES)*. BIA2016-78742-C2-1-R (MINECO). Duration: 3 years. Amount: 121.000,00 € (UPC)
- Title: *Development of precast concrete segments with plastic fibre reinforced concrete with enhanced durability and sustainability (DURADOV)*. RCT-2015-3617-4 (MINECO). Entities: DRAGADOS, UPC. Duration: 3 years. Amount: 175.820,00 € (UPC)
- Title: *Polifunctional projected materials for the reinforcement and monitorizations of transport infrastructures (MATMIT)*. RCT-2015-3185-4 (MINECO). Entities: UPC-IQE. Duration: 3 years. Amount: 246.000,00 € (UPC)
- Title: *Ghost aggregate to produce pervious high-performance concrete*. BIA2013-50069-EXP (MINECO). Entities: UPC. Duration: 2 years. Amount: 94.138,00 € (UPC)
- Title: *Management and security of hydraulic infrastructures*. BIA2013-49106-C2-1-R (MINECO). Entities: UPC. Duration: 3 years. Amount: 135.000,00 €

C.3. Memberships of scientific societies

Active member of *fib* (international federation of concrete) tasks groups: 1.4.1 *Tunnels in fibre reinforced concrete*; 1.8.1 *Fibre reinforced concrete industrial floors*; 6.3 *Sustainability of precast structures*; 6.5 *Precast concrete bridges*; 7.1 *Sustainability of concrete* and 10.1 *Model Code 2020*.