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EMPLOYMENT

Academic employment

	University of A Coruña, Spain
04/2010-date	<i>Associate Professor</i>
10/2007-04/2010	<i>Associate Professor</i>
09/2005-10/2007	<i>Assistant Professor</i>
11/2002-09/2005	<i>Assistant Professor</i>
05/2005-11/2002	<i>Assistant Professor</i>
11/2001-05/2002	<i>Assistant Professor</i>
06/1999-11/2001	<i>Researcher</i>

Professional employment

	Estudio Técnico Gallego, SA, A Coruña, Spain
04/1999-05/2005	<i>Civil engineering of projects (part time)</i>
04/1997-04/1999	<i>Civil engineering of projects</i>

EDUCATION

2002	University of A Coruña (UDC) <i>PhD Civil Engineer</i> <i>Supervisor: Dr. Fernando Martínez Abella</i>
1996	University of A Coruña (UDC) <i>Spanish 6-year Official Civil Engineering MSc.</i> <i>(Ingeniero de Caminos, Canales y Puertos)</i>

GENERAL MARKS:

Citations: 309 (Scopus)

H Index: 9 (Scopus)

RESEARCH

Research interests

Concrete technology, construction materials, sustainable construction, use of waste as building materials, special concretes (recycled c., self-compacting c., lightweight c., fiber reinforced c.), bond in concrete, genetic programming and neural networks, durability.

Indexed Publications

- Iris González Taboada; María Belén González Fonteboa; Fernando Martínez Abella; Diego Carro López. Self-compacting recycled concrete: Relationships between empirical and rheological parameters and proposal of a workability box. CONSTRUCTION AND BUILDING MATERIALS. 143, pp. 537 - 546. (Holanda): ELSEVIER, 01/2017. ISSN 0950-0618
- González-Taboada, Iris; González-Fonteboa, Belén; Eiras-López, Javier; Rojo-López, Gemma, 2017, **Tools for the study of self-compacting 2 recycled concrete fresh behaviour: workability and rheology**, Journal of Cleaner Production. Volume 156, Pages 1–18
- Javier Eiras-López, Sindy Seara-Paz, Belén González-Fonteboa, Fernando Martínez-Abella, 2017, **Bond behaviour of recycled concrete. Analysis and prediction of bond stress-slip curve**. Journal of Materials in Civil Engineering. Accepted. DOI: 10.1061/(ASCE)MT.1943-5533.0002000
- González-Taboada, I., González-Fonteboa, B., Martínez-Abella, F., Carro-López, D. 2017, **Self-compacting recycled concrete: Relationships between empirical and rheological parameters and proposal of a workability box**. Construction and building materials. 143, pp. 537-546
- González-Fonteboa, B., Carro López, D., de Brito, Jorge, Martínez-Abella, F., Seara-Paz, S., Gutiérrez-Mainar, S. 2017, **Comparison of ground bottom ash and limestone as additons in blended cements**. Materials and Structures. 50 (1) 84. DOI <https://doi.org/10.1617/s11527-016-0954-x>
- I. González-Taboada, González-Fonteboa, B., Pérez-Ordóñez J.L., Eiras López, J. 2017, **Prediction of self-compacting recycled concrete mechanical properties using vibrated recycled concrete experience**. Construction and building materials Vol. 131 Núm. 30 (págs. 641 a 654)
- C. Martínez, González-Fonteboa, B., Martínez-Abella, F., Carro López, D. 2017, **Performance of mussel shell as aggregate in plain concrete**. Construction and building materials. Núm. 139 (págs. 570 a 583)
- I. González-Taboada, González-Fonteboa, B., Martínez-Abella, F., Pérez-Ordóñez J.L. 2016, **Prediction of the mechanical properties of structural recycled concrete using multivariable regression and genetic programming**. Construction and building materials, Vol. 106 (págs. 480 a 499).
- Seara-Paz, S., González-Fonteboa, B., Martínez-Abella, F., I. González-Taboada. 2016, **Time-dependent behaviour of structural concrete made with recycled coarse aggregates. Creep and shrinkage**. Construction and building materials Vol. 122 (págs. 95 a 109)
- Seara-Paz, S., Corinaldesi, Valeria, González-Fonteboa, B., Martínez-Abella, F. 2016, **Influence of recycled coarse aggregates characteristics on mechanical properties of structural concrete**. European Journal of Environmental and Civil Engineering Vol. 20 (págs. 123 a 129).
- I. González-Taboada, González-Fonteboa, B., Martínez-Abella, F., Carro López, D. 2016, **Study of recycled concrete aggregate quality and its relationship with recycled concrete compressive strength using database analsis**. Materiales de construccion, Vol. 66 Núm. 323 (págs. 1 a 18)
- Carro-López, Diego, González-Fonteboa, Belén; de Brito, Jorge; Martínez-Abella, Fernando; González-Taboada, Iris; Silva, Pedro, 2015, **Study of the rheology of self-compacting concrete**

with fine recycled concrete aggregates. Construction and building materials, Volumen: 96, Páginas: 491-501

- Seara-Paz, S., González-Fonteboa, B., Eiras-López, J., Herrador, M.F., 2014, **Bond behavior between steel reinforcement and recycled concrete.** Materials and Structures Volumen: 47 Issue 1-2, Páginas: 323-334
- Toledano-Prados, Mar; Lorenzo-Pesqueira, Miriam; González-Fonteboa, Belén & Seara-Paz, Sindy, 2013, **Effect of polycarboxylate superplasticizers on large amounts of fly ash cements,** Construction and building materials, Volumen: 48, Páginas: 628- 635
- González-Fonteboa Belén, Martínez-Abella Fernando; Herrador Manuel F.; Seara-Paz Sindy, 2012, **Structural recycled concrete: Behaviour under low loading rate,** Construction and building materials, Volumen: 28, Páginas: 111-116
- González-Fonteboa Belén, Martínez-Abella Fernando, Eiras-López Javier; Seara-Paz Sindy, 2011, **Effect of recycled coarse aggregate on damage of recycled concrete.** - Materials and Structures, Volumen: 44, Páginas:1759-1771.
- González-Fonteboa Belén, Martínez-Abella Fernando; Carro López Diego; Seara-Paz Sindy, 2011, **Stress-strain relationship in axial compression for concrete using recycled saturated coarse aggregate,** Construction and building materials, Volumen: 25,Páginas: 2335-2342
- Belén González Fonteboa, Fernando Martínez Abella, Diego Carro López, Javier Eiras López, 2010, **Shear friction capacity of recycled concretes.** Materiales de Construcción Volumen: 60-299, Páginas:53-67
- Belén González Fonteboa, Isabel Martínez Lage, Cristina Vázquez Herrero, Belén González Fonteboa, Fernando Martínez Abella, 2010, **Generation of recycled aggregates and technical requirements for some applications.** Dyna rev.fac.nac.minas Volumen: 71-161, Páginas:89-97
- González-Fonteboa Belén, Martínez-Abella Fernando, Martínez-Lage Isabel, Eiras-López Javier,2009, **Structural shear behaviour of recycled concrete with silica fume,** Construction and building materials, Volumen: 23, Páginas:3406-3410
- González-Fonteboa Belén, Martínez-Abella Fernando, 2008, **Concretes with aggregates from demolition waste and silica fume.** Materials and mechanical properties, Building and Environmental, Volumen: 43, Páginas: 429-437
- González-Fonteboa Belén, Martínez-Abella Fernando, 2007, **Shear strength of recycled concrete beams,** Construction and building materials, Volumen: 21, Páginas: 887-893
- González-Fonteboa Belén, Martínez-Abella Fernando, 2005, **Recycled concrete: aggregate and mix properties.** Materiales de Construcción, Volumen: 55/279, Páginas: 33-46

Other Publications,

- Martínez Lage, I., Vázquez Herrero, C., González Fonteboa, B., Martínez-Abella, F. Generation of recycled aggregates and technical requirements for some applications | Generación de los áridos reciclados y requisitos técnicos para algunas aplicaciones. (2010) DYNA (Colombia) 77 (161). PP. 89 - 97
- Pérez Ordóñez, J.L., González-Fonteboa, B., Martínez-Abella, F. Encyclopedia of Artificial Intelligence. Chapter book: Techniques of EC in the Structural Concrete Field. (2009) IGI Global, pp. 526-531. doi: 10.4018/978-1-59904-849-9.ch080
- González, B., Martínez, M.I., Carro, D. Artificial Neural Networks in Real-Life Applications. Chapter book: Prediction of the consistency of concrete by means of the use of artificial neural networks. (2005), pp. 188-200

- Antonio Aguado, Marilda Barra, José Manuel Gómez-Soberón (UPC), Belén González (UDC). Potencialidades del hormigón estructural y su tecnología en el marco de la sostenibilidad de la construcción. (2003) Hormigón y Acero Vol 228-229, 2º-3º trimestre 2003, pp 207-2017

(in Spanish): books and book chapters

- Fernando Martínez Abella, Belén González Fonteboa, Isabel Martínez Lage. Programa de Gestión de Residuos de Construcción y demolición de Galicia 2005-2007. Xunta de Galicia. Consellería de Medio Ambiente. (2005) Depósito legal: C-1641/05
- Fernando Martínez Abella, Belén González Fonteboa, Isabel Martínez Lage. Fichas para la utilización de materiales reciclados a partir de residuos de construcción e demolición. Xunta de Galicia. Consellería de Medio Ambiente. (2005) Depósito legal: C-1641/05
- Belén González Fonteboa. Hormigones con áridos reciclados procedentes de demoliciones: dosificaciones, propiedades mecánicas y comportamiento estructural a cortante. ACHE (Asociación Científico-técnica del Hormigón Estructural). (2005) ISBN 84-89670-46-3
- Comisión 2. Grupo de trabajo 2/5 "Hormigón Reciclado". Utilización de árido reciclado para la fabricación de hormigón estructural. Monografía M-11. ACHE (Asociación Científico-técnica del Hormigón Estructural). (2006) ISBN 84-89670-55-2
- Juan Ignacio Vázquez Peña, Belén González Fonteboa, José Antonio Orejón Pajares, Diego Carro López, Javier Eiras López. Materiales de Construcción. Materiales Metálicos. Fundación Ingeniería Civil de Galicia. (2009). ISBN 84-613-1227-6
- Juan Cagiao, Juan Luis Doménech, Salvador Gutiérrez, Fernando Martínez, Belén González, Breixo Gómez. Huella ecológica del cemento. Fundación Ingeniería Civil de Galicia. (2011) ISBN 978-84-615-0034-5
- Comisión 2. Grupo de trabajo 2/5 "Hormigón Reciclado". Estudio prenормativo sobre la utilización de los RCD's en hormigón reciclado de aplicación estructural (Proyecto RECÑHOR) y Reciclado de los RCD's como áridos de hormigones estructurales (Proyecto CLEAM). (2011). IECA
- Juan Cagiao, Breixo Gómez, Juan Luis Doménech, Salvador Gutiérrez, Hortensia Gutiérrez, Fernando Martínez y Belén González. Sostenibilidad y construcción. Capítulo 7: Impacto ambiental de la industria del cemento: Cálculo de la huella de carbono. ACHE (Asociación Científico-técnica del Hormigón Estructural). (2012)

PhD thesis supervised

- "Self-compacting recycled concrete: Basic Mechanical Properties, Rheology, Robustness and Thixotropy", (in English). 2017. Cum laude.
- Seara-Paz S. Effect of long-term deformations in structural flexural performance and bond behaviour analysis of recycled concrete (in Spanish). 2015. Cum laude.
- Martínez Lage, I. Research on construction and demolition waste in Galicia: Methods of estimation of annual production and possible uses for recycling (in Spanish). 2007. Cum laude.

RECENT RESEARCH AND INNOVATIVE CONTRACTS (from 2010)

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|-----------|--|
| 2016-2018 | Eco-products with cementitious materials. Application on high standards furniture for building construction (dECOcem). (2016-2018) Budget: 153,966 €. GAIN (IN852A 2016/86) (Direction of the Project: Seara-Paz, G., Eiras-López, J.) |
| 2016-2018 | Valuation of rejected fly ash in materials and products for eco-construction in civil engineering and building construction. (2016-2018) Budget: 147,759 € GAIN (IN852A 2016/178) |

2015-2018	Coordinator: González Fonteboa, B. HORREO project MINECO: Recycled and robust self-compacting concrete. Fresh rheology and mechanical properties. University of A Coruña. Client: Ministry of Science and Innovation, Spain.
2013-2015	Coordinator: González Fonteboa, B., Martínez-Abella, F. INHORMES project CONECTA – PEME: Industrial research on concrete for a sustainable market. University of A Coruña. Clients: ATI Systems, K2 Consulting, GALAICONTROL.
2013-2015	Coordinator: González Fonteboa, B. BIOVALVO project INTERCONNECTA: Recycling Galician bivalve shells in the construction field. University of A Coruña. Clients: GALAICONTROL, EXTRACO Constructions, SERUMANO Consulting.
2012-2014	Coordinator: González Fonteboa, B. FLOMAR project INTERCONNECTA: New concepts and methodologies in the design and construction of breakwaters and floating concrete pontoons. University of A Coruña. Clients: PRETHOR Prefabrication, RONAUTICA, AQUATICA Consulting.
2010-2013	Coordinator: Martínez-Abella, F. METEFORES project INCITE: Development and improvement of theoretical models of structural concrete by genetic programming and artificial neural networks. University of A Coruña. Client: ENMACOSA.
2010-2013	Coordinator: Martínez-Abella, F. ADHAN project MINECO: Bond and anchorage of concrete reinforcement. University of A Coruña. Client: Ministry of Science and Innovation, Spain.
2010-2012	Coordinator: Herrador Barrios, M. AFIDHAVIT project INCITE: Tension cracking analysis in concrete tanks coated with glass fiber reinforced polymers. University of A Coruña. Client: Autonomous Government of Galicia, Spain.
2010-2012	Coordinator: Martínez-Abella, F. ESINMACON project INCITE: Recycling of slag from MSW incinerators in building materials. University of A Coruña. Client: RECINOR.
2010-2012	Coordinator: Martínez-Abella, F. ADHIEPR project INCITE: Bond conditions and cracking in prestressed elements. University of A Coruña. Client: EMESA TREFILERÍA.

ACADEMIC AND GOVERNMENT SERVICE

- Referee of the assessment agencies: ANEP (Spain)
- Collaborator in the development of Spanish Structural Concrete Code (EHE – 08). Ministry of Public Works, Spain (2005 – 2008)
- Vice Chancellor of Civil Engineering School. University of A Coruña. (2011 – 2013)
- Secretary of the Civil Engineering School. University of A Coruña (2005 – 2011)

UNIVERSITY TEACHING (in bold type, continuous teaching for more than 10 years)

Construction Materials	1st year (old 5-year degree)	Univ. A Coruña, Spain
Materials Science	1st year (old 4-year degree)	Univ. A Coruña, Spain
Structural Concrete	4 th year (old 5-year degree)	Univ. A Coruña, Spain
Materials and Construction Systems	3th, 4th year (old 4,5-year degree)	Univ. A Coruña, Spain
Adeadvanced MaterialsI	2nd MSc	Univ. A Coruña, Spain
Structural concrete II	5 th year (old 5-year degree)	Univ. A Coruña, Spain
Construction Materials I and II	1 st year (new 4-year degree)	Univ. A Coruña, Spain
Materials Technology	2 nd year (new 4-year degree)	Univ. A Coruña, Spain
Structural monitoring	PhD Courses	Univ. A Coruña, Spain
Special Concretes	PhD Courses	Univ. A Coruña, Spain

OTHERS

- Participation in the research group “Structural behaviour and innovation of recycled aggregate concrete” - Technical Committee RAC de la RILEM