DATE	18/9/2018

Part A. Personal Information

Surname(s)	Rodríguez-Vellando Fernández-Carvajal	
Forename	Pablo	
Social Security, Passport, ID number	07547762J	
Sex	Male	
Age	48	
Researcher codes	WoS Researcher ID *(*)*	**A-4880-2015**
	SCOPUS Author ID*(*)*	6506851966
	Open Researcher and Contributor ID (ORCID)	0000-0001-9649-1147

(*) At least one of these is mandatory

A.1. Current position

Post/ Professional Category	Profesor Titular de Universidad	
UNESCO Code	*330506, 330515*	
Key Words	Finite Elements, Fluid Flow	
Name of the University/Institution	University of A Coruña	
	Department/Centre	Departamento de Matemáticas ETS de Ingenieros de Caminos, canales y Puertos
	Full Address	Campus de Elviña s/n 15071 La Coruña
	Email Address	pvellando@udc.es
	Phone Number	+34 699348545
Start date	August 2003	

A.2. Education *(title, institution, date)*

Year	*University*	*Degree*	*Title*
1993	*Universidad de Cantabria*	*First degree*	Ingeniero de Caminos, C. y P.
1991	*Coventry University*	*Second degree*	BEng Civil Engineering
1993	*Universidad de Cantabria*	*Masters (if appropriate)*	*Ingeniero de Caminos, C. y P. (Integrated master of 6 years)*
2001	*Universidad de A Coruña*	*PhD*	*Doctor Ingenieros de Caminos, Canales y Puertos*

A.3. Indicators of Quality in Scientific Production *(See the instructions)*

a) Total number of citations: 44
b) Average number of citations during the last five years: 3.44
c) Total number of publications (11) in the first quartile (4) and first decile (2?)
d) h-index: 5
e) Supervised thesis(2)

A coupled model for the joint resolution of the shallow water and the groundwater flow equations with a new boundary condition treatment for moving interfaces (2014). Autor: Héctor García Rábade

Auscultación Deformacional por Métodos Geodésicos Clásicos de Presas de Hormigón de Gravedad. (Fecha de lectura: 14/7/2017). Autor: Carlos Losada Pérez

f) Any other indicators that you may consider relevant

Sexenios de investigación (MEC): 2 (2002-07)(2009-2014)
Quinquenios de docencia (UDC): 4 (1994-00)(2000-05)(2005-10)(2010-2015)
Tramos de excelencia curricular docente e investigadora (ACSUG): 7 tramos (2018)
Reconocimiento autonómico a la labor docente (XUNTA): (2005)
Reconocimiento autonómico a la labor investigadora (XUNTA): (2005)
Reconocimiento autonómico a los cargos de gestión: 4.6 tramos (2007)

Part B. Free Summary of CV *(Max. of 3.500 characters, including spaces)*

The main field of study of this researcher is that of computational hydraulics, and in particular the development of models for the calculation, by means of the finite element method, of the incompressible fluid flow. More specifically, in recent years, various codes have been programmed, verified and calibrated to resolve the incompressible flow in an efficient and precise manner, both on the free surface and in porous media. Likewise, coupled models have been developed that allow the interaction between free surface and groundwater flow. These models, once they have been adequately verified, have been used in the evaluation of several natural basins.

Part C. Relevant accomplishments

C.1. Publications

P. VELLANDO, '….and so Euler *discovered* differential equations', Foundations of Science (**2018**) Springer (In press) (Q2 Impact factor 0.661)

P. VELLANDO, R. JUNCOSA, F. PADILLA AND H. GARCÍA-RÁBADE Environ Earth Sciences (**2018**) 77: 447. https://doi.org/10.1007/s12665-018-7646-5. (Q2 Impact factor 1,569)

GOMES, R., VELLANDO, P., SOUSA, J., MURANHO, J., SÁ MARQUES. "Analysis and Simulation of Drainage Capacity of Urban Pipe Network, J. CCWI 2017" – Computing and Control for the Water Industry Sheffield 5th - 7th September **2017**". https://figshare.com/articles/CCWI2017_F136_Analysis_and_Simulation_of_Drainage_Capacity_of_Urban_Pipe_Network_/5363566

PADILLA, F., HERNÁNDEZ, J., JUNCOSA, R., VELLANDO, P. "Modelling integrated extreme hydrology". International Journal of Safety and Security Engineering. Volume 6, Issue 3, **2016**, Pages 685-696. ISSN: 2041903. DOI: 10.2495/SAFE-V6-N3-685-696. WITPress. Q4 Impact factor 0.29

R. JUNCOSA, J. DELGADO, F. PADILLA, F., P. VELLANDO AND H. HERNÁNDEZ, "Improvements in Mero River Basin Water Supply Regulation Through Integration of a Mining Pit Lake as a Water Supply Source". Mine Water and the Environment. Volume 35, Issue 3, 1 September **2016**, Pages 389-397. Mine water and the environment (Q2 Impact factor 1.278) 2015, DOI: 10.1007/s10230-015-0378-9

PADILLA, F., H. HERNÁNDEZ, R. JUNCOSA and P. VELLANDO, "A numerical solution for the integrated analysis of water resources management: Application to the Mero River watershed – La Coruña, Spain". Journal of Water Resource and Protection, 2015, 7, 815-829 (**2015**) (Impact factor 0.76) http://dx.doi.org/10.4236/jwarp.2015.710066

Padilla, F; Hernández, H; Juncosa, R.; Vellando, P., Application of a numerical model designed for integrated watershed management, WIT Transactions on Ecology and Environment, **2015**, ISBN: 978-1-84564-972-2. ISSN: 1743-3541
DOI: 10.2495/WS150111

H. G. Rábade, P. Vellando, F. Padilla and R. Juncosa, A coupled FE model for the joint resolution of the shallow water and the groundwater flow equations. International Journal of Numerical Methods for Heat and Fluid Flow, Vol 24 (7) (**2014**), pp 1553-1569. ISSN: 0961-5539, . DOI 10.1108/HFF-05-2012-0123 Emerald Group Publishing Limited (Q2 JCR impact factor = 1.093)

P. Vellando, "Ecuaciones Diferenciales para Ingenieros" ISBN: 978-84-615-9313-2. Pags: 1-339. Fundación de la Ingeniería Civil (Colección Ingeniería Civil, tomo 6), La Coruña, Lugami (2012)

J. -Horacio Hernández, Francisco Padilla, Ricardo Juncosa, Pablo R. Vellando, Álvaro Fernández, "A numerical solution to integrated water flows: Application to the flooding of an

open pit mine at the Barcés rives catchment – La Coruña, Spain", Journall of Hydrology. 472-473 (2012) pages 328-339, 2012. Q1 Impact factor: 3.271. doi: 10.1016/j.jhydrol.2012.09.040.

J. Fe , F. Navarrina, J. Puertas, P. Vellando and D. Ruiz, Experimental validation of two depth-averaged turbulence models, International Journal for Numerical Methods in Fluids. Clave:A. Vol. 60, pag: 177-202. Q1 Published online. DOI: 10.1002/fld.1880 (2009)

J. Delgado Martín, R. Juncosa Rivera, , A. Vázquez, I. Falcón, J. Canall, H. Hernández, F. Padilla, P. Rguez-Vellando, and J.L. Delgado. Hydrochemical characteristics of the natural waters associated to the flooding of the Meirama open pit (A Coruña, NW Spain). Mineralogical Magazine. Q2 Clave:A. (2008). Vol. 72; no. 1; p. 399-403; DOI: 10.1180/minmag.2008.072.1.399. ISSN: 0026-461X.

F. Padilla, A. Méndez, R. Fernández, P. Vellando, Numerical modelling of surface/groundwater flows for fresh/saltwater hydrology: the case of the alluvial coastal aquifer of the low Guadalorce River, Malaga, Spain, Environmental geology. Q2 Clave:A. Vol:55. Pags:215-226(2007). DOI: 10.1007/s00254-007-0977-2.

P. Vellando, J. Fe, R. Juncosa, F. Padilla, Improvements in mixing operations of water treatment plants by use of a stable finite element method, Q2 Water Environment Research. Clave: A. Vol:79. Pags:625-640 (2007)

P. Vellando, J. Puertas, I. Colominas, Resolution of the flow in clarifiers by using a stabilized Finite Element Method, International Journal for Numerical Methods in Fluids. Q1 Clave: A. Vol:44. Pags: 115-133 (2004)). Impact factor: 1.176

P. Vellando, J. Puertas, I. Colominas, "SUPG stabilized finite element resolution of the Navier-Stokes equations. Applications to water treatment engineering". Computer Methods in Applied Mechanics and Engineering. Clave: A. Vol:191 (51-52). Q1 Pags: 5899-5922 (2002). Impact factor: 3.949

C.2. Research Projects and Grants

Gestión de la Calidad Hidrodinámica de las Masas Artificiales de Agua de la Cuenca del Río Barcés, 10MDS008CT. FUNDED BY: INCITE, Xunta de Galicia. FROM oct 2010 TO Septiembre 2013. BUDGET: 64755.35 €. MAIN RESEARCHER: Ricardo Juncosa Rivera

Aplicación y validación de un modelo numérico para resolver problemas medioambientales con interacción de aguas subterráneas y superficiales (CGL2009-11258)
FUNDED BY: CICYT FROM 1/1/2010 TO 31/12/2012 MAIN RESEARCHER: Francisco Padilla Benítez

Desarrollo y aplicación de un modelo numérico para resolver problemas medioambientales con interacción de aguas subterráneas y superficiales (CGL2006-1452)
FUNDED BY: CICYT FROM 1/10/2006 TO 30/09/ 2009 MAIN RESEARCHER: Francisco Padilla Benítez

Análisis del flujo y de la calidad de las aguas durante el llenado y la evolución del régimen hídrico de la excavación minera de Meirama FUNDED BY: Xunta de Galicia, LIMEISA FROM 2005 TO 2006 MAIN RESEARCHER: Francisco Padilla Benítez

C.3. Contracts

Asesoramiento y colaboración técnico-científica en estudios y proyectos mineros y de medioambiente. TYPE: Proyecto de colaboración Universidad- Empresa
ENTERPRISE/ADMINISTRATION: Ceima Ingniería S.L.
FROM: 2007 TO 2008
MAIN RESEARCHER: Ricardo Juncosa Rivera

TITULO DEL CONTRATO: Evolución hidroquímica y del transporte de solutos en el futuro lago de la excavación minera de Meirama en el postllenado. Estudio y modelización de la calidad química del lago minero
TIPO: Proyecto de colaboración Universidad- Empresa
ENTERPRISE/ADMINISTRATION: Lignitos de Meirama
DURACIÓN FROM 2006 TO 2007
MAIN RESEARCHER: Ricardo Juncosa Rivera

TITULO DEL CONTRATO: Informe de caracterización geomecánica del macizo rocoso de la galería excavada en el embalse de Castadón (Orense).
TIPO: Proyecto de colaboración Universidad- Empresa
ENTERPRISE/ADMINISTRATION: Aquagest
DURACIÓN FROM 2005 TO 2005
MAIN RESEARCHER: Pablo Rodriguez-Vellando

C.4. Patents and other IPR

2012/2015	Coordinator of the International Master in Water Engineering UDC/Universidad de Magdeburgo (Alemania)
2009/2015	Coordinator of the PhD Program in Water Engineering UDC
2008/2012	Coordinator of the Máster en Ingeniería del Agua, UDC
2000/2005	Director of International Relationships (ETSICCP), UDC

C.5, C.6, C.7… Other

Languajes
English (C1 C1 C1) University of Cambridge Advanced Certificate (2012)
French (B1 B1 A2)
German (A1 A1 A1) University of A Coruña Diploma 2014
Spanish (C2 C2 C2) Mother tongue

Supervision of Master Thesis:
Mathematical model of water supply in Ormiño by Alejandro Casal Freire. March 2014

Adaptation and extension of the framework to the St. Lawrence River estuary operationalizing by Mario Juan Domínguez. March 2014

Hydraulic model and proposals for actions for the improvement of the sanitation network on an average municipality by Juan Carlos Velayos BlanCO. September 2014

STRATEGIC ENVIRONMENTAL ASSESSMENT. One way to go by Javier Bouzas Caamaño. September 2014

Leak detection and technical direction in water distribution network in Galicia by Efrén Díaz Rodríguez. September 2014

Fresh water supply network calculation in Canicouva (Pontevedra) by Eduardo Artime Rial. March 2015

Simulation model and self-protection plan of the waste water treatment plant of cabo prioriño, Ferrol by Manuel Corredoira Santos. March 2015

Mathematic model of a supply water system in a Galician municipality by Alfonso J. Tamayo Rodriguez. March **2016**

Elaboration of a mathematical model of a water supply network by Laura Roca González. March **2016**

Treatment of liquid effluents from a coal power plant by Alvaro Bouza Morgade. September **2016**
Research Project on Different Sanitary Model Software by Francisco Uzábal Barriga. September **2017**

Instructions

Important Announcement

Following the Call for Proposals, ONLY CVS SUBMITTED IN THIS FORMAT WILL BE TAKEN INTO CONSIDERATION. CVs presented in other formats WILL BE DISMISSED with no possibilities for modifications.

GENERAL CONSIDERATIONS

Following the call it is mandatory to use the following format when filling the document: Font Times New Roman / Arial (minimum size 11), single interlineal space, lateral margins of 2.5 cm and top and bottom margins of 1.5 cm.

Max. length of the whole document (Part A, B and C) cannot exceed four pages.

PART A. PERSONAL INFORMATION

Researcher ID is a unique identifier that consists of alphanumeric characters that enable researchers to manage their publication lists, track their times cited counts and h-index, identify potential collaborators and avoid author misidentification. It is hosted by Web of Science.
Access: Web of Science > My Tools > Researcher ID.

Author ID is a unique identifier that consists of alphanumeric characters that enable researchers to manage their publication lists, track their times cited counts and h-index, identify potential collaborators and avoid author misidentification. It is assigned automatically by SCOPUS. You can find an author identifier by running a search for that author. It will appear underneath the author details.
Access: SCOPUS > Author Feedback Wizard> Researcher name.

Open Researcher and Contributor ID (ORCID) provides a persistent digital identifier that distinguishes the researcher from every other person and, through integration in key research workflows such as manuscript and grant submission, supports automated linkages between you and your professional activities ensuring that your work is recognized.
Access: www.orcid.org

A.3. Indicators of Quality in Scientific Production

Please add information on a) total number of citations, average number of citations during the last five years, b) total number of publications in the first quartile (Q1) and first decile (D1), c) h-index, d) thesis supervised, and e) any other indicators that you may consider relevant.

To calculate these values, use default data collected in the Web of Science or Scopus. When this is not possible, other indicators may be used, specifying the reference database.

PART B. FREE SUMMARY OF CV *(Max. of 3.500 characters, including spaces)*

Describe briefly your scientific career, the main scientific-technical achievements, and the mid-to-long term scientific-technical interests and objectives of your research agenda. Indicate any other aspects that you may consider important to understand your career path.

PART C. ACCOMPLISHMENTS (Order by typology)

Given the limitations in number of characters, please mention the most relevant achievements sorted by the typology that best suits your scientific profile. Please be clear and avoid ambiguities.

Use reverse chronological order within each section. Limit your merits over the past 5 years, except for those which have an extraordinary importance for your CV.

C.1. Publications
Include a full review of relevant 5 to 10 publications.

In case of an article, please include authors in order of signature, year of publication, title of the article, name of the journal, volume, start page to end page.
If it's a book or chapter of a book, include its publisher and ISBN also.
If there are many authors, please indicate the total number of signatories and the position of the researcher (total number/ position of researcher) as for example 95/18.

C.2. Participation in Research, Development and Innovation Projects
Indicate the most important projects in which you have participated (maximum 5 to 7 projects), including a) its reference, b) title, c) funding body and call for proposals, d) name of the principal investigator and his/her institution affiliation, e) date of start and end of the project, f) amount of subsidy, and g) your type of participation, e.g.: researcher, principal investigator, European project coordinator, etc..

C.3. Participation in Research, Development and Innovation Contracts
Indicate the most important contracts in which you have participated (maximum 5 to 7 contracts), including a) title, b) company or entity, c) name of principal investigator and his/her institution affiliation, d) date of start and end of the contract, and e) amount of funding.

C.4. Patents
Indicate the most important patents and other intellectual property in which you have collaborated. Give a) the order of signing authors, b) reference, c) title, d) priority countries, e) date, f) holder entity and companies that are exploiting the patents.

C.5, C.6, C.7… Other
By sequential numbering (C.5, C.6, C.7 ...) please include any other achievements that you deem necessary, such as for example: direction of works, participation in assessment or advisory tasks, membership of international committees, management of scientific activity, editorial boards, **scientific awards**, etc.

FINAL CONSIDERATIONS
Please remember that all the submitted achievements must be presented concisely, including dates or periods for each performance.

The short CV aims to facilitate, organize and streamline the evaluation process. The use of the individual researcher identifier facilitates access to the published scientific papers and information on the impact of each of them.

Remember that only CVs submitted either in this format or in CVN abridged version will be taken into consideration.