CV date	17-05-20

Part A. PERSONAL INFORMATION

First and Family name	Gustavo Montero García		
Social Security, Passport, ID number	42803218B	Age	58
Researcher codes	WoS Researcher ID *(*)*	L-1011-2014	
	SCOPUS Author ID*(*)*	56256002000	
	Open Researcher and Contributor ID (ORCID) **	0000-0001-5641-442X	

(*) At least one of these is mandatory
(**) Mandatory

A.1. Current position

Name of University/Institution	University of Las Palmas de Gran Canaria		
Department	University Institute for Intelligent Systems and Numerical Applications in Engineering (SIANI)		
Address and Country	Edificio Polivalente I, Campus Universitario de Tafira, 35016 Las Palmas de Gran Canaria, Spain		
Phone number	+34928451923	E-mail	gustavo.montero@ulpgc.es
Current position	Full Professor	From	19-09-1997
Key words	Numerical Simulation in Environmental problems, Finite Element Method, Mesh Generation, Adaptive Finite Element Techniques, Convection-diffusion Problems, Resolution of Large and Sparse Linear Systems of Equations, Preconditioning, Ordering, Iterative Solvers, Inverse Problems, Evolutionary Algorithms.		

A.2. Education

PhD	University	Year
PhD Industrial Engineering	Las Palmas de Gran Canaria	1989

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

1. Six years research: 4 (1989/1995, 1996/2002, 2003-2008, 2009-2014). Last date of assignment: 17/06/2015.
2. Doctoral thesis directed during the last decade: 2.
3. Sum of times cited: 606 (Scopus), 508 (Web of Science) y 942 (Researchgate).
4. Average citations per year (2015-2019): 34.8 (Scopus) y 34.6 (Web of Science) y 36.2 (Researchgate).
5. Total Q1 publications: 9.
6. h-index: 14 (Scopus) y 13 (Web of Science) y 15 (Researchgate).
7. Total publications: 59 (Scopus), 66 (Web of Science) y 118 (Researchgate).

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

Gustavo Montero García was born in Las Palmas de Gran Canaria in 1961. He is Industrial Engineer in 1986 and received his PhD in 1989, both from the University of Las Palmas de Gran Canaria, and is currently a full professor at that university. His research interests are the application of the finite element method in environmental problems (wind, air quality and solar radiation modelling), tetrahedral mesh generation and adaptivity, and iterative solution of large and sparse linear systems of equations, since more than 25 years ago. He has got 4 positive research evaluations. He is the author or co-author of 50 publications in international journals and books, and 183 conference communications in the last years. He has participated in more than 10 national and international research projects, being the main researcher and coordinator in some of them. He has supervised 10 PhD theses. With respect to the participation in committees, he was a member of the editorial and scientific committees of more than a dozen of conferences, journals and scientific bulletins. Finally, he was a member of the organizing committees of the I Conference on Numerical Methods in Engineering (CMN 1990), The Fifth International Conference on Engineering Computational Technology (ECT 2006),

The Eighth International Conference on Computational Structures Technology (CST 2006) and The Second Global Conference on Applied Computing in Science and Engineering (ACSE2-2017).

Part C. RELEVANT MERITS

C.1. Publications (including books)

1. G. Montero, E. Rodríguez, A. Oliver, J. Calvo, J.M. Escobar, R. Montenegro. Optimisation technique for improving wind downscaling results by estimating roughness parameters. Journal of Wind Engineering and Industrial Aerodynamics, 174, 411-423 (2018). DOI: 10.1016/j.jweia.2018.01.011
2. F. Díaz, G. Montero, L. Mazorra-Aguiar. Wind Field and Solar Radiation Characterization and Forecasting. A Numerical Approach for Complex Terrain – Chapter 10 "Solar Radiation Maps". ISBN: 978-3-319-76876-2. DOI: 10.1007/978-3-319-76876-2_10. Springer (2018).
3. E. Rodríguez, G. Montero, A. Oliver. Wind Field and Solar Radiation Characterization and Forecasting. A Numerical Approach for Complex Terrain – Chapter 4 "Wind Field Diagnostic Model". ISBN: 978-3-319-76876-2. DOI: 10.1007/978-3-319-76876-2_4. Springer (2018).
4. G. Montero, E. Rodríguez, A. Oliver. Wind Field and Solar Radiation Characterization and Forecasting. A Numerical Approach for Complex Terrain – Chapter 2 "Characterization of Geographical and Meteorological Parameters". ISBN: 978-3-319-76876-2_2. DOI: 10.1007/978-3-319-76876-2. Springer (2018).
5. F. Díaz, H. Montero, D. Santana, G. Montero, E. Rodríguez, L. Mazorra Aguiar, A. Oliver. Improving shadows detection for solar radiation numerical models, Applied Mathematics and Computation, 319, 71-85 (2018). DOI: 10.1016/j.amc.2017.01.046
6. F. Díaz, G. Montero, J.M. Escobar, E. Rodríguez, R. Montenegro. A New Predictive Solar Radiation Numerical Model, Applied Mathematics and Computation, 267C, 596-603 (2015). DOI: 10.1016/j.amc.2015.01.036
7. A. Oliver, E. Rodríguez, J.M. Escobar, G. Montero, M. Hortal, J. Calvo, J.M. Cascón, R. Montenegro. Wind Forecasting based on the HARMONIE Model and Finite Elements, Pure and Applied Geophysics, 172, 109-120 (2015). DOI: 10.1007/s00024-014-0913-9
8. Oliver, G. Montero, R. Montenegro, E. Rodríguez, J.M. Escobar, A. Pérez-Foguet. Adaptive Finite Element Simulation of Stack Pollutant Emissions over Complex Terrains, Energy, 49, 47-60 (2013). DOI:10.1016/j.energy.2012.10.051
9. F. Díaz, G. Montero, J.M. Escobar, E. Rodríguez, R. Montenegro. An adaptive solar radiation numerical model, Journal of Computational and Applied Mathematics, 236, 4611-4622 (2012). DOI: 10.1016/j.cam.2012.04.018
10. J.M. Escobar, R. Montenegro, E. Rodríguez, G. Montero. Simultaneous aligning and smoothing of surface triangulations, Engineering with Computers, 27(1), 17-29 (2011). DOI: 10.1007/s00366-010-0177-7
11. L. Ferragut, R. Montenegro, G. Montero, E. Rodríguez, M.I. Asensio, J.M. Escobar. Comparison between 2.5-D and 3-D realistic models for wind field adjustment, Journal of Wind Engineering & Industrial Aerodynamics, 98, 548-558 (2010). DOI: 10.1016/j.jweia.2010.04.004
12. G. Montero, J.M. Escobar, E. Rodríguez, R. Montenegro. Solar radiation and shadow modelling with adaptive triangular meshes, Solar Energy, 83(7), 998-1012 (2009). DOI: 10.1016/j.solener.2009.01.004

C.2. Research projects and grants

1. Reference: CTM2014-55014-C3-1-R
Title: Integration of new methodologies on wind, solar radiation and air quality simulation.
Organism: Secretaría de Estado de Investigación, Desarrollo e Innovación del Ministerio de Economía y Competitividad.
Partners: University of Las Palmas de Gran Canaria (ULPGC), Politechnique University of Cataluña (UPC)
Period: 2015 - 2018
Total amount: 146.410,00 euros
Main Researcher: José María Escobar Sánchez / Gustavo Montero García

Number of Researchers: 10
2. Reference: CGL2011-29396-C03-01
Title: Advances in the simulation of wind fields and solar radiation. Subprojecto of the Coordinate project: Advanced numerical methods for environmental management.
Organism: Secretaría de Estado de Investigación del Ministerio de Ciencia e Innovación.
Partners: University of Las Palmas de Gran Canaria (ULPGC), University of Salamanca (USAL),
Period: 2012 - 2014
Total amount: 107.690,00 euros
Main Researcher: Rafael Montenegro Armas
Number of Researchers: 9

3. Title: Estatistic techniques in weather forecast.
Organism: Red de Excelencia de Energía, Agua y Medio Ambiente, promoted by Universidad de Las Palmas de Gran Canaria (ULPGC) and Instituto Tecnológico de Canarias (ITC).
Partners: ULPGC.
Period: 2009 - 2012
Total amount: 17.500 euros (primer año)
Main Researcher: Rafael Montenegro Armas
Number of Researchers: 11

4. Reference: CGL2008-06003-C03-01/CLI.
Title: Predictor Numerical Models for Environmental Management.
Organism: Plan Nacional de I+D+I, Programa Nacional de Promoción General del Conocimiento, Ministerio de Ciencia e Innovación y FEDER. Partners: University of Las Palmas de Gran Canaria (ULPGC), University of Salamanca (USAL), Politechnique University of Cataluña (UPC).
Period: 2009 - 2011
Total amount: 250.000,00 euros
Main Researcher: Rafael Montenegro Armas
Number of Researchers: 11

C.3. Contracts

1. Title: Solving linear equations systems module associated to the compositional numerical simulator and its parallelization in distributed and shared memory. (Associated with the project: Compositional numerical simulator for naturally fractured vugular fields with fractal behavior.)
Type of contract: Article 83 L.O.U. with the University of Las Palmas de Gran Canaria
Financing entity: PETROSOFT, sectoral fund CONACYT-SENER-HYDROCARBONS.
Partners: National Autonomous University of Mexico, University of Salamanca, Politechnique University of Cataluña, University of Las Palmas de Gran Canaria and Politechnique University of Tomsk**.**
Period: 01/01/2015 - 12/31/2017.
Total amount: 270.000,00 €
Main Researcher: Rafael Montenegro Armas
Number of Researchers: 20

2. Title: Adapted tetrahedral meshes generation for fractured fields. (Associated with the project: Compositional numerical simulator for naturally fractured vugular fields with fractal behavior.)
Type of contract: Article 83 L.O.U. with the University of Las Palmas de Gran Canaria
Financing entity: PETROSOFT, sectoral fund CONACYT-SENER-HYDROCARBONS.
Partners: National Autonomous University of Mexico, University of Salamanca, Politechnique University of Cataluña, University of Las Palmas de Gran Canaria and Politechnique University of Tomsk**.**
Period: 01/05/2012 - 30/11/2014
Total amount: 780.000,00 euros
Main Researcher: Rafael Montenegro Armas
Number of Researchers: 20

C.4. Patents

1. Inventors: J.M. Escobar, J.M. González-Yuste, E. Rodríguez, R. Montenegro, G. Montero.
Title: SUS Code. Available at http://www.dca.iusiani.ulpgc.es/SUScode/
Solicitude number: GC-290-2010.
Register number: 00 / 2010 / 6004
Date: 04/06/2010.
Organism: University of Las Palmas de Gran Canaria (ULPGC).

2. Inventors: J.M. Escobar, A. Oliver, E. Rodríguez, R. Montenegro, G. Montero.
Title: Wind3D. Available at http://www.dca.iusiani.ulpgc.es/Wind3D
Solicitude number: GC-96-2012.
Register number: 00 / 2012 / 2506
Date: 23/02/2012.
Organism: University of Las Palmas de Gran Canaria (ULPGC).

C.5. Institutional responsibilities

1. Pro-Vice-Chancellor of Teaching Staff of the ULPGC, from June 2008 to April 2012.
2. Pro-Vice-Chancellor of Teaching Staff and Academic Planning of the ULPGC, from April 2012 to September 2014.

C.6. Memberships of scientific societies

1. Member of the Spanish Society of Applied Mathematic (SeMA), of the Spanish Society of Numerical Methods in Engineering (SEMNI), of the International Association of Computational Mechanics (IACM) and of the European Community on Computational Methods in Applied Sciences (ECCOMAS).
2. Member of the Managing Board of ECCOMAS, Representation of SeMA (2015-2016).
3. Member of the General Assembly of ECCOMAS. Representation of SeMA (2015-2016).

C.7. Editorial Boards

Editorial Board of the ECT'2004, CST/ECT'2006, CST/ECT'2008, CST/ECT'2010 and the Twelfth International Conference on Civil, Structural and Environmental Engineering Computing 2009.
Editor of the volume 41(1) Civil-Comp Special Issue (2010) of the international journal *Advances in Engineering Software*, Elsevier; and 87(15-16) - *Computational Structures Technology* (2009) of the international journal *Computers & Structures*.