

Part A. PERSONAL INFORMATION		CV date		01/07/2023
First and Family name	Emilio Jiménez Macías			
Social Security, Passport, ID number		Age	52	
Researcher numbers	Researcher ID	A-4548-2008		
	Orcid code	0000-0001-6749-4592		

A.1. Current position

Name of University/Institution	Universidad de La Rioja / University of La Rioja		
Department	Electrical Engineering / Ingeniería Eléctrica		
Address and Country	C/ San José de Calasanz 31. 26004. Logroño (La Rioja), Spain		
Phone number	E-mail	emilio.jimenez@unirioja.es	
Current position	Full Professor (Catedrático de Universidad)	From	15/04/2016
Espec. UNESCO cod.	330000		
Keywords	Modeling and Simulation, Systems Engineering and Automation, Artificial Intelligence, Intelligent Control, Industry 4.0, Renewable Energy, and Environmental Impact		

A.2. Education

PhD	University	Year
PhD in electrical engineering, mathematics, and computer science	University of La Rioja	2002

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

- 112 papers in Journals indexed in Journal Citation Report (JCR) and 154 in WoS with 1624 citations, 236 works indexed in Scopus with 2321 citations, and 480 works indexed in GoogleScholar with 3567 citations.
- H index of 19 by web of science (JCR), h index 23 by Scopus, and 29 by Google Scholar
- H10 index of 48 by web of science (JCR), 71 by Scopus, and 90 by Google Scholar
- Advisor of 35 doctoral theses, 2 of them with national award of CEA-IFAC

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

Prof. Emilio Jimenez Macias is a full Professor at Department of Electrical Engineering in the University of La Rioja (Spain), where he is also currently head of the official research group Design Modeling and Simulation in Science and Engineering (DeM&S), Coordinator of the System Engineering and Automation Area, and Director of the Master on Industrial Engineering. He has been President of the Federation of European Simulation Societies (EUROSIM) during 2016-2019, as well as President of the Spanish Modelling and Simulation Group in Eurosim (2015-2018), and he is the Spanish representative in the Discrete Event and Hybrid Systems Technical Committee (TC 1.3) of IFAC (International Federation of Automatic Control). His main research areas include Simulation, Systems Engineering and Automation, Industry 4.0, Renewable Energy and Environmental Impact. He has published 112 papers in Journals indexed in JCR (with 1624 cites, h-index 19 and h10-index 48), and 236 works indexed in Scopus (with 2321 cites, h-index 23 and h10-index 71), has participated in more than 40 research projects, has advised 35 PhD Thesis, is author in 70 patents, has organized 10 international conferences, and has received several awards for his main research works.

A little more in detail:

- Participation in 2 Ibero-American Projects, 5 European Projects (Principal researcher in 1), 3 National Projects (CICYT), 7 Regional projects, and 63 OTRI research projects (Art. 83) (Principal researcher in 21 of them). Participation in special actions (DPI2002-11505-E, DPI2002-11517-E, DPI2004-21096-E) of the National Programs.
- 3 recognized 6-year research periods "sexenios de investigación" (2000-2017).
- 1 recognized 6-year transfer period "sexenios de transferencia" (2004-2009)

- 112 papers indexed in JCR, 61 of them in journals of the 1st third (T1) and 50 of them of the 1st quarter (Q1) in their categories.
- 14 research bibliographical publications with ISBN: 6 books, 2 chapters, and 6 articles used in teaching for PhD courses.
- 230 research articles in congresses, attendance at more than 50, 6 special tracks organized, 15 participations as Chairman of sessions, and 50 in International Program Committees.
- Collaboration in 17 engineering and architecture projects; professional Guipúzcoa Award by the Industrial Technical Foundation.
- Research Awards: Extraordinary Doctorate Award by the UR; Award to the best annual research work in Simulation, by CEA (Spanish Automatic Committee) belonging to IFAC; "Best Paper Award" from the European Modeling and Simulation Symposium (EMSS 2009).
- Advisor of 30 doctoral theses, 2 of them with national award of CEA-IFAC
- Inventor in 1 PCT, 1 European, and 71 additional national patents.
- Awards from the Social Council of the UR for Knowledge Transfer in 2009, 2011, 2013, 2015 and 2018 editions, and Award for best consolidated research group in 2017 edition.
- Organizer of 3 International Symposiums in the UR, in 2011, 2012 and 2015.
- Organizer of 8 top-level International Congresses (As General Co-Chairman and Program Co-Chairman), the largest in Europe on Simulation: European Modeling and Simulation Symposium 2013 (Athens), 2014 (Bordeaux), 2015 (Genoa), 2016 (in Cyprus) and 2018 (in Budapest).
- Evaluator and Associate Editor in dozens of JCR journals, Member of IEEE, ...
- National Coordinator of the Modeling and Simulation Group of CEA-IFAC
- Spanish representative in EUROSIM, the European Federation of Simulation Research Groups, since 2007.
- President of EUROSIM for the period 2016-2019, and therefore organizer of the EUROSIM 2019 International Conference in Spain.

Part C. RELEVANT MERITS

C.1. Publications (including books)

- 95 articles indexed in JCR, 50 of them in journals of the 1st third (T1) and 41 of them of the 1st quarter (Q1) in their categories, from which only a brief sample from the last 5 years is selected here (due to extension requirements); the rest can be found in internet (WoS, Scopus,...):
- P. Escobar, E. Martínez, J.C.Saenz-Díez, E.Jiménez, J.Blanco. Modeling and Analysis of the Electricity Consumption Profile of the Residential Sector in Spain, Energy and Buildings <https://doi.org/10.1016/j.enbuild.2019.109629>
- Latorre-Biel, J.-I., Jiménez, E., García, J.L., Martínez, E., Jiménez, E., Blanco, J.; Replacement of electric resistive space heating by an air-source heat pump in a residential application. Environmental amortization; (2018) Building and Environment, 141, pp. 193-205. DOI: 10.1016/j.buildenv.2018.05.060
- Martínez, E., Latorre-Biel, J.I., Jiménez, E., Sanz, F., Blanco, J.; Life cycle assessment of a wind farm repowering process; (2018) Renewable and Sustainable Energy Reviews, 93, pp. 260-271. DOI: 10.1016/j.rser.2018.05.044
- Latorre-Biel, J.-I., Jiménez-Macías, E., De La Parte, M.P.; Equivalent and efficient optimization models for an industrial discrete event system with alternative structural configurations; (2018) Complexity, 2018, art. no. 5341346. DOI: 10.1155/2018/5341346
- Azofra, D., Saenz-Díez, J.C., Martínez, E., Jiménez, E., Blanco, J.; Ex-post economic analysis of photovoltaic power in the Spanish grid: Alternative scenarios; (2016) Renewable Energy, 95, pp. 98-108. DOI: 10.1016/j.renene.2016.04.005
- Azofra, D., Martínez, E., Jiménez, E., Blanco, J., Azofra, F., Saenz-Díez, J.C.; Comparison of the influence of photovoltaic and wind power on the Spanish electricity prices by means of artificial intelligence techniques; (2015) Renewable and Sustainable Energy Reviews, 42, pp. 532-542. DOI: 10.1016/j.rser.2014.10.048

- Antonanzas, J., Jimenez, E., Blanco, J., Antonanzas-Torres, F.; Potential solar thermal integration in Spanish combined cycle gas turbines; (2014) Renewable and Sustainable Energy Reviews, 37, pp. 36-46. DOI: 10.1016/j.rser.2014.05.006

C.2. Research projects and grants (a brief sample)

Title: Remote expert virtual system enhancing human management capabilities and favors preservation, transfer and continuous evolution of knowledge for steelmaking operations

Institution: European Commission
Project reference: RFCS-02-2022-PDP
Principal researcher: Emilio Jiménez Macías
Duration: 01/07/2023 – 01/07/2026
Quantity (Euros): 300 500.00

Title: Restoring optimal soil functionality in degraded areas within organic vineyards

Institution: European Commission -INIA
Project reference: ReSolVe
Principal researcher: Javier Tardáguila Laso
Duration: 01/03/2015 – 28/02/2018
Quantity (Euros): 130.000

Title: Red temática del comité español de automática sobre modelado, simulación y optimización. Consolidación en Europa: Eurosím (translated as “Thematic network of the Spanish committee for automation on modeling, simulation and optimization. Consolidation in Europe: Eurosím”)

Institution: Spanish Ministry of Economy and Competitiveness
Project reference: 2015/00077/001 - REDES EXCELENCIA 2015
Principal researcher: Julio Blanco Fernández / Emilio Jiménez
Duration: 01/12/2015 - 30/11/2017
Quantity (Euros): 25.000

Title: VINEyardROBOT

Institution: European Commission
Project reference: Vinerobot (autonomous robots for wine production)
Quantity (Euros): 502.825 (financiación completa del Proyecto coordinado 2.714.078)
Participating Entities: UR. UPV. Avanzare S.L. Hochschule Geisenheim University (Germany). FORCE-A, Wall-YE y Vinerons de Buzet (France). SIVIS (Italia)
Duration: 01/12/2013 - 30/11/2016
Principal researcher: Javier Tardáguila Laso

Title: Técnicas formales de análisis y diseño de sistemas de eventos discretos e híbridos. aplicación a sistemas logísticos y de tiempo real

Institution: CICYT y FEDER, ref. DPI2006-15390
Duration: 01/10/2006 - 28/02/2010
Quantity (Euros): 291.368 €
Principal researcher: Prof. Manuel Silva Suárez
Number of researchers: 14

Title del proyecto: Redes de Petri Continuas e Híbridas: modelado, análisis y síntesis

Institution: CICYT y FEDER, ref. DPI-2003-06376
Duration: 01/10/2003 30/09/2006
Principal researcher: Prof. Manuel Silva Suárez
Number of researchers: 6

Title: Utilización de técnicas de inteligencia artificial y emisión acústica para la optimización del proceso automatizado de soldadura y análisis de estabilidad

Institution: Spanish Ministry of Science and Education
Project reference: DPI 2007-66679
Quantity (Euros): 33158
Institutions: Universidad de La Rioja

Duration: 01/10/2007 - 31/12/2010
Principal researcher: Mercedes Pérez de la Parte
Number of researchers: 3

C.3. Contracts

Participation in 63 research contracts, for a total of more than € 720,000, having been Principal Researcher in 21 of them

C.4. Patents

70 industrial patents of high interest, highlighting a European and a PCT patents, of which 59 are in industrial operation or have passed the prior examination of the OEPM (Spanish Office or Patents). One of the patents "Automatic procedure for tire inflation", awarded with the national award "Ponle Freno A3Media-Axa".

C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)

- Director of the Master on Industrial Engineering (26/03/2014 - 25/01/2018) and Director of the Bachelor on Industrial Electronics and Automation (17/02/2010 - 16/09/2014).
- Member of diverse scientific societies: IEEE, Eurosim, IFAC, CEA, SCS,...
- Spanish representative in the Discrete Event and Hybrid Systems Technical Committee (TC 1.3) of IFAC.
- Organizer of 3 International Symposiums in the UR, in 2011, 2012 and 2015.
- Organizer of 5 top-level International Congresses (as General Co-Chairman and Program Co-Chairman), the largest in Europe on Simulation: European Modeling and Simulation Symposium 2013 (Athens), 2014 (Bordeaux), 2015 (Genoa), 2016 (in Cyprus) and 2018 (in Budapest).
- Evaluator and Associate Editor in several JCR journals, Member of IEEE, ...
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- President of EUROSIM for the period 2016-2019, and consequently organizer of the EUROSIM 2019 International Conference in Spain (1st-6th July 2019).