

CURRICULUM VITAE

Part A. PERSONAL INFORMATION

CV date	25/09/2020
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First and Family name	LUIS ROBERTO ALVAREZ FERNANDEZ	
Researcher codes	WoS Researcher ID	
	SCOPUS Author ID	
	Open Researcher and Contributor ID (ORCID)	0000-0002-8747-7690

A.1. Current position

Name of University/Institution	UNIVERSIDAD NEBRIJA		
Department	INGENIERIA INDUSTRIAL		
Address and Country	PIRINEOS 55 28040 MADRID		
Phone number	+34914521100	E-mail	ralvarez@nebrija.es
Current position	Professor	From	01/09/2002
Key words			

A.2. Education

PhD	University	Year
PhD	UNED INDUSTRIAL ENGINEERING	2009

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

JCR (22 papers, 14 Q1, 3Q2, 3Q3, 2Q4)

two thesis supervised

H index 12

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

EDUCATION AND PROFESSIONAL EXPERIENCE

Born on February 6, 1968, he studied Industrial Engineering, specializing in Production Organization and Electrical Engineering, both at the School of Engineering in Gijón. Subsequently, he received a PhD in Industrial Engineering in Metrology and Industrial Quality from the UNED and a Master's degree in Occupational Risk Prevention from the IMF Institute in Madrid.

TEACHING

I began my teaching experience at the Nebrija University in the 2001/2002 academic year. Given my training in the fields of Business Organization Engineering and Electrical Engineering, as well as my PhD in Manufacturing Engineering and Master in Occupational Risk Prevention, I have taught a wide variety of subjects (Electrical Machinery, Electrical Technology, Circuit Analysis) in the area of Electrical Engineering; (Statistics, Innovation and Quality Control Techniques, Ergonomics and Safety) in the area of Business Organization Engineering; (Manufacturing Technology and Machinery Technology) in the area of Manufacturing Processes. I have also taught the subject Research Methodology in the Master's Degree in Industrial Design, as well as Electric Vehicles in the area of automotive engineering. In the teaching field, I have developed a notable amount of Final Projects and End of Degree and Master's Works. I have also been actively collaborating with UNED since 2010 in the direction of these projects.

RESEARCH

I started my research activity during the PhD programme. In the research period prior to the reading of my thesis I published my first two JCRs and attended my first international conferences. After reading my thesis I joined two research projects of the National Plan developed by the research group of manufacturing process engineering of UNED with which I continue collaborating since 2009, year in which I got my PhD.

I have also maintained parallel lines of research with the vehicle engineering research group at Nebrija University in the context of two research projects.
My research activity has been recognised with a six-year research period from 2008 to 2013.

UNIVERSITY MANAGEMENT

Since I joined the Universidad Nebrija I have held the following management positions:

- Coordinator of the area of final projects/ graduation projects (from 2004 to the present)
- Director of the Nebrija Innovation Chair (2002-2004 years)
- Coordinator of the electrical engineering area (from 2004 to the present)
- Coordinator of the course of adaptation to the degree of mechanical engineering (from 2010-2014)
- Coordinator of the electronic engineering adaptation course (2010-2014)
- Director of the Nebrija Global Campus department (2 years)
- Director of the Degree in Mechanical Engineering (2014-2019)

Part C. RELEVANT MERITS

C.1. Publications (including books)

R. Domingo, R. Alvarez, M. Peña, R. Calvo
Materials flow improvement in a lean assembly line: a case study
2007 Assembly Automation, Vol. 27 Issue 2, pp 141 – 147
5 YEAR IMPACT FACTOR 0.501 (Q4)

R. Álvarez, M. Peña, R. Calvo, R. Domingo
Redesigning an assembly line through lean manufacturing tools
International Journal of Advanced Manufacturing Technology
August 2009, Volume 43, Issue 9-10, pp 949-958
5 YEAR IMPACT FACTOR 1.423 (Q2)

R. Alvarez, R. Domingo, M. Sebastian
The Formation of Saw Toothed Chip in a Titanium Alloy
Journal of Mechanical Engineering 57(2011)10, 739-749
5 YEAR IMPACT FACTOR 0.607 (Q2)

C. González-Bravo, J. Claver, R. Alvarez, R. Domingo
Cold formed S250GD+Z steel cross section profile for timber upgrading
Steel Research International Volume 81, Issue 9 (2012)
5 YEAR IMPACT FACTOR 0.450 (Q3)

S. Aguado, R. Alvarez, R. Domingo
Model of efficient and sustainable improvements in a lean production system through processes of environmental innovation.
Journal of Cleaner Production 47 (2013)
5 YEAR IMPACT FACTOR 3.587 (Q1)

R. Alvarez, A. Lopez, N. de la Torre
Evaluating the effect of a driver's behaviour on the range of a battery electric vehicle
Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering Vol. 229 no. 10, (2015): 1379-1391
5 YEAR IMPACT FACTOR 0.895 (Q3)

R. Alvarez, S. Zubelzu, G. Díaz, A. Lopez
Analysis of low carbon super credit policy efficiency in European Union greenhouse gas emissions.
Energy 82 (2015): 996-1010.
5 YEAR IMPACT FACTOR 5.153 (Q1)

S. Zubelzu; R. Álvarez
Urban planning and industry in Spain: A novel methodology for calculating industrial carbon footprints.
Energy Policy 83 (2015): 57-68
5 YEAR IMPACT FACTOR 3.394 (Q2)

- S. Zubelzu, R. Álvarez, A. Hernández
Methodology to calculate the carbon footprint of household land use in the urban planning stage.
Land Use Policy 48 (2015): 223-235.
5 YEAR IMPACT FACTOR 3.095 (Q1)
- R. Martinez, F. Clar, R. Alvarez
Propuesta de vehículo accesible inspirado en el benchmarking como método de diseño.
DYNA 41 (2016) 19-24 (Q4)
- R. Álvarez, F. Beltran, I. Villar
A new approach to battery powered electric vehicles: A hydrogen fuel-cell-based range extender system.
International Journal of Hydrogen Energy 41.8 (2016): 4808-4819.
5 YEAR IMPACT FACTOR 3.659 (Q1)
- B. Junquera, B. Moreno, R. Álvarez
Analyzing consumer attitudes towards electric vehicle purchasing intentions in Spain: Technological limitations and vehicle confidence.
Technological Forecasting & Social Change, 109 (2016):6-14
5 YEAR IMPACT FACTOR 2.364 (Q1)
- S. Zubelzu, R. Álvarez
A simplified method to assess the influence of the power generation mix in urban carbon emissions.
Energy 115 (2016): 875-887.
5 YEAR IMPACT FACTOR 5.153 (Q1)
- S. Corbera, J.L. Olazagoitia, J. A. Lozano and R. Álvarez
Optimization of a butterfly valve disc using 3d topology and genetic algorithms
Structural and Multidisciplinary Optimization, October 2017, Volume 56, Issue 4, pp 941–957
IMPACT FACTOR: 2.208 (Q1)
- R. Alvarez, S. Corbera, F. Beltrán and J. A. Lozano
Fuel optimization strategy for hydrogen fuel cell range extender vehicles applying genetic algorithms.
Renewable and Sustainable Energy Reviews, 81, pp.655-668 (2018)
IMPACT FACTOR: 8.050
5-YEAR IMPACT FACTOR: 9.122 (Q1)
- R. Álvarez.
A more realistic approach to electric vehicle contribution to greenhouse gas emissions in the city.
Journal of Cleaner Production 172 (2018) pp. 949-959
IMPACT FACTOR: 3.587 (Q1)
- S. Corbera, R. Alvarez, J. A. Lozano
Integration of cutting time into the structural optimization process: application to a spreader bar design.
Structural and Multidisciplinary Optimization, (2018). pp 1-21.
IMPACT FACTOR: 2.208 (Q1)
- J. A. Vallejo-Pinto, L. Garcia-Alonso, R. Álvarez, I. Mateo-Mantecón
Iso-emission map: A proposal to compare the environmental friendliness of short sea shipping vs road transport.
Transportation Research Part D: Transport and Environment 67 (2019) pp 596-609
IMPACT FACTOR: (Q1)
- R. Álvarez.
Method for assessing the environmental benefit of road transport electrification and its influence on greenhouse gas inventories
Journal of Cleaner Production
IMPACT FACTOR: 3.587 (Q1)
- A. Lopez, F. Muñoz, R. Álvarez
An analytic expression for the inverse involute
Mathematical Problems in Engineering

IMPACT FACTOR (Q3)

R. Álvarez, S. Corbera, F. López

A probabilistic approach for determining the influence of urban traffic management policies on energy consumption and greenhouse gas emissions from a battery electric vehicle
Journal of Cleaner Production 236, 117604 (2019)

IMPACT FACTOR (Q1)

F. Lopez, R. Álvarez

Predictive model for energy consumption of battery electric vehicle with consideration of self-uncertainty route factors
Journal of Cleaner Production 276, 124188 (2020)

IMPACT FACTOR (Q1)

C.2. Research projects and grants

Title: ECONOMIC, ENERGY AND ENVIRONMENTAL SUSTAINABILITY OF TITANIUM ALLOY TURNING

Financing entity: National R&D&I Plan National Programme for Industrial Design and Production. DPI2008-06771-C04-02. Participating Entities: UNED's manufacturing process engineering area. Duration: 2008-2011 Principal Investigator: Rosario Domingo Navas. Participation: Collaborating researcher

Title: EFFICIENCY AND SUSTAINABILITY ANALYSIS OF HOLE MACHINING FOR ASSEMBLY SYSTEMS FOR POLYMERIC MATERIALS AND ORGANIC MATRIX COMPOSITES IN A LIFE CYCLE

Financing entity: National R&D&I Plan National Programme for Industrial Design and Production. DPI2011-27135. Participating Entities: UNED's manufacturing process engineering area. Duration: 2012-2015. Principal Investigator: Rosario Domingo Navas

Title: NEW DRIVER'S COMMAND FOR PHYSICALLY DISABLED PEOPLE. Financing entity: IMSERSO. Reference: 28/06. Participating Entities: Nebrija University and IMSERSO. Duration: 2006-2007. Principal Investigator: Alberto López Rosado

Title: SIMULATION OF A VALVE WITH HIGH BENEFITS Financing entity: SIGEVAL Reference: SIGEVAL-DN100. Participating Entities: Nebrija University and SIGEVaAL Duration: 2014. Principal Investigator: José Luis Olazaogitia.

C.3. Contracts, technological or transfer merits

NEW DRIVER'S COMMAND FOR PHYSICALLY DISABLED PEOPLE. Financing entity: IMSERSO. Reference: 28/06. Participating Entities: Nebrija University and IMSERSO. Duration: 2006-2007. Principal Investigator: Alberto López Rosado

SIMULATION OF A VALVE WITH HIGH BENEFITS Financing entity: SIGEVAL Reference: SIGEVAL-DN100. Participating Entities: Nebrija University and SIGEVaAL Duration: 2014. Principal Investigator: José Luis Olazaogitia.

DESIGN OF A DRIVING CONTROL FOR PHYSICALLY DISABLED PERSONS Financial Institution: IMSERSO Reference: 28/06 Participating Institutions Nebrija University and IMSERSO Duration: 2006-2007 EIGHT MONTHS Main Researcher: Alberto López Rosado

STUDY OF ELECTRIC MOTORBIKES FOR LAST MILE DELIVERY CHARACTERIZATION OF COMPONENTS. Financing entity: REVOOLT-E Participating entities: Nebrija University Duration: 2018 Main Researcher: Roberto Alvarez

APPLICATION BASED ON ARTIFICIAL INTELLIGENCE FOR THE PROCESSING OF LARGE VOLUMES OF INFORMATION FOR ELECTRIC MOTOR CONTROL Funding entity: ALI Participating Entities: Nebrija University Duration: 2019. Principal Investigator: Roberto Alvarez

DEVELOPMENT OF A CARBON FOOTPRINTING TOOL AND PROPOSALS FOR MITIGATION APPLIED TO URBAN PLANNING IN THE COMMUNITY OF MADRID Duration 6 months