

Part A. PERSONAL INFORMATION		CV date	14/09/2022
First and Family name	Pedro Partal		
Researcher codes	Open Researcher and Contributor ID (ORCID**)	https://orcid.org/0000-0003-0141-0733	
	SCOPUS Author ID (*)	55396691100	
	WoS Researcher ID (*)	K-6868-2014	

A.1. Current position

Name of University/Institution	Universidad de Huelva		
Department	Chemical Engineering-Pro ² TecS		
Address and Country	ETSI, Campus del Carmen, Avda. de las Fuerzas Armadas, s/n 21071, Huelva		
Phone number	E-mail	partal@uhu.es	
Current position	Full Professor	From	29/10/2009
Key words	Rheology, Product Engineering, emulsion, bitumen modification, foods, polymers, bioplastics		

A.2. Education

PhD, Licensed, Graduate	University	Year
Bachelor in Chemistry (industrial specialization)	Seville	1991
PhD in Chemistry	Seville	1995

A.3. General indicators of quality of scientific production (see instructions)

Total number of citations: 3746 (WoS)	
Average number of citations in the last 5 years: 331 (WoS)	
Total number of publications: 126 (WoS)	
Total number of publications in the first quartile (Q1): 86 (JCR)	
h-index: 37 (WoS)	
Thesis supervised in the last 10 years: 7	
Number of six-year research periods: 4	Transfer of knowledge: 1
Date of the last six-year research period: 06/06/2018	Transfer of knowledge: 15/04/2020

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

Professor of Chemical Engineering since 2009, at the Chemical Engineering Department of the University of Huelva. He was born in Sevilla in 1968. He received his bachelor's degree in Industrial Chemistry from University of Sevilla (Spain) in 1991 and completed his PhD in 1995. He became Director for Research Affairs at University of Huelva from 2000 to 2003 and Director of the R&D Centre on Food Technology of the University of Huelva, CIDERTA, in 2004. More recently, he has been Director of Chemical Engineering Department of the University of Huelva (2015-2019). His teaching and research activities are related to PhD studies on "Complex Fluid Engineering", CFD and Heat Transfer at the University of Huelva. As researcher of the Pro²TecS Centre of the University of Huelva, his work focuses on Chemical Product Design and Engineering, with specific interest in the microstructure, rheology, formulation and processing of structured chemical products (emulsions, structured food, gels, biopolymers, bioplastics, bitumen, lubricants, surfactants, etc.). He has been Principal Investigator in at least 50 research projects sponsored by public Entities and by the industry, leading different industrial projects that represent over €2 million total budget, developed with both national and international companies. Likewise, he has been principal investigator in five projects belonging to the Spanish R&D National Plan (MAT2001-0066-C02-02, MAT2004-06299-C02-02, MAT2007-61460, MAT2010-21404-C02-01 and MAT2011-29275-C02-01); in an EU project of the FP7-PEOPLE-2013-ITN and in three industrial projects



funded by Mineco-INNPACTO (IPT-2012-0316-370000) and Junta de Andalucía (AOPJA GGI3000/IDIH) and IDEA 802C1800001).

He is coauthor of more than 120 papers in published in relevant journals, coauthor of a review on Food and Emulsion Rheology, coauthor of several chapters in specialized books (WP-Woodhead Publishing y EOLSS), coeditor of a book on rheology entitled "Progress in Rheology: Theory and Applications", and author of numerous communications in International Conferences. He has been external examiner of the National Evaluation and Foresight Agency (Ministry of Science and Innovation, Spain) in Food Technology (2000-2009), The Academy of Sciences for the Developing World-TWAS (Italia) NSF-National Science Foundation (USA), University of Nottingham, etc.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications (see instructions)

Delgado-Sanchez C.; Cuadri, A.A.; Navarro, F.J.; **Partal P.** Formulation and processing of novel non-aqueous polyethylene glycol-in-silicone oil (o/o) phase change emulsions. SOLAR ENERGY MATERIALS AND SOLAR CELLS. 221, 110898, 1-10 (2021).

Senise, S; Carrera, V; Cuadri, AA; Navarro, F J; **Partal, P.** Hybrid Rubberised Bitumen from Reactive and Non-Reactive Ethylene Copolymers. POLYMERS, 11, 1974, 1-24 (2019)

Yuliestyan, A; Gabet, T; Marsac, P; Garcia-Morales M.; **Partal, P.** Sustainable asphalt mixes manufactured with reclaimed asphalt and modified-lignin-stabilized bitumen emulsions. CONSTRUCTION AND BUILDING MATERIALS, 173, 662-671 (2018)

Felix, M.; Martinez, I.; Romero, A.; **Partal P.**; Guerrero A. Effect of pH and nanoclay content on the morphology and physicochemical properties of soy protein/montmorillonite nanocomposite obtained by extrusion. COMPOSITES PART B-ENGINEERING, 140, 197-203 (2018)

Senise, S; Carrera, V; Navarro, FJ; **Partal, P.** Thermomechanical and microstructural evaluation of hybrid rubberised bitumen containing a thermoplastic polymer. CONSTRUCTION AND BUILDING MATERIALS, 157, 873-884 (2017)

Yuliestyan, A.; Garcia-Morales, M.; Moreno, E.; Carrera V.; **Partal P.** Assessment of modified lignin cationic emulsifier for bitumen emulsions used in road paving MATERIALS & DESIGN, 131, 242-251, (2017)

Perez, J. P.; Martinez-Boza, F. J.; **Partal, P.** Stability assessment of non-aqueous polymer dispersions through viscous flow and linear viscoelastic rheological tests. POLYMER TESTING, 50, 164-171 (2016).

Yuliestyan, A; Cuadri, AA; Garcia-Morales M.; **Partal, P.** Influence of polymer melting point and Melt Flow Index on the performance of ethylene-vinyl-acetate modified bitumen for reduced-temperature application. MATERIALS & DESIGN, 96, 180-188 (2016)

Diañez, I; Martinez, I; **Partal, P.** Synergistic effect of combined nanoparticles to elaborate exfoliated egg-white protein-based nanobiocomposites. COMPOSITES PART B-ENGINEERING, 88, 36-43 (2016)

Carrera, V; Cuadri, AA; Garcia-Morales, M ; **Partal, P.** The development of polyurethane modified bitumen emulsions for cold mix applications. MATERIALS AND STRUCTURES. 48, 3407-3414 (2015).

C.2. Research projects

Project Reference: PID2020-116905RB-I00

Title: O²emulHEAT-Development of phase change Oil-in-Oil emulsions with enhanced rheological, heat storage and heat transfer properties



Participants: Universidad de Huelva
Principal Investigator: Fco. Javier Navarro Domínguez y [Pedro Partal López](#)
Afiliation: UNIVERSIDAD DE HUELVA
Funding Body: Ministerio de Ciencia e Innovación
Duration: from: 01/09/2021 to: 30/08/2024
Budget UHU: € 174.119 **Project state:** approved

Project Reference: 802C1800001
Title: Joint Innovation Unit (UIC-GREENASPHALT)
Participants: Universidad de Huelva y Eiffage Infraestructuras
Principal Investigator: [Pedro Partal López](#)
Afiliation: UNIVERSIDAD DE HUELVA
Funding Body: Agencia de Innovación y Desarrollo de Andalucía IDEA (Junta de Andalucía)
Duration: from: 01/07/2020 to: 30/06/2023
Budget UHU: € 522,906.77 **Project state:** approved

Project Reference: RETOS-2017- CTQ2017-89792-R
Title: Study of thermorheologically advanced dispersions designed for heat transport applications
Principal Investigator: F. Javier Navarro Domínguez y Francisco J. Martínez Boza
Funding Body: Ministerio de Economía, Industria y Competitividad.
Duration: from: 01/01/2018 to: 31/12/2020
Budget (euros): €137,940.00 **Project state:** approved

Project Reference: RETOS-2014 CTQ2014-56980-R
Title: Rheological design of sustainable fluids enhanced with nanoparticles for improved oil and gas drilling and recovery
Principal Investigator: Francisco J. Martínez Boza
Funding Body: Ministerio de Economía y Competitividad.
Duration: from: 01/01/2015 to: 31/12/2017
Budget (euros): €199,650.00 **Project state:** approved

Project Reference: FP7-PEOPLE-2013-ITN Project number 607524
Title: SUP&R ITN– Sustainable Pavements & Railways Initial Training Network
Principal Investigator: [Pedro Partal López](#)
Funding Body: EU Marie Curie Actions-Initial Training Networks (ITN)
Duration: from: 1/10/2013 - to 30/09/2017
Budget UHU (euros): €229,981.62 **Project state:** approved

Project Reference: IPT-2012-0316-370000
Title: Rodaduras urbanas sostenibles
Principal Investigator: [Pedro Partal López](#) **Afiliation:** UNIVERSIDAD DE HUELVA
Funding Body: Ministerio de Economía y Competitividad
Duration: from: 1/01/2013 - to: 31/12/2014
Budget UHU (euros): €81,314.40 **Project state:** approved

Project Reference: MAT2011-29275-C02-01
Title: Formulation and processing of active packaging materials based on bioplastics and antimicrobial volatile agents
Principal Investigator: [Pedro Partal López](#) **Afiliation:** UNIVERSIDAD DE HUELVA
Funding Body: Ministerio de Ciencia e Innovación
Duration: from: 1/01/2012 - to: 31/12/2014
Budget (euros): €49,999.62 **Project state:** approved

C.3. Contracts, technological or transfer merits

Title: Formulation and characterization SBS-modified bitumens
Principal Investigator: [Pedro Partal López](#) **Afiliation:** UNIVERSIDAD DE HUELVA
Funding Body: Dynasol Elastomeros SAU
Duration: from: 01/09/2019 to: 31/08/2021 **Budget (Euros):** €127,050.00



Title: Research and development of new sustainable pavements with improved mechanical and acoustic performance

Principal Investigator:: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: SACYR CHILE

Duration: from: 20/04/2017 to: 30/06/2018 **Budget** (Pesos Chilenos): 30,400,000 clp (€41.000)

Title: Development of advanced Heat Transfer Fluids (HTF) applicable in parabolic trough technology

Principal Investigator: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: Abengoa Solar New Technologies S.A.

Duration: from: 1/06/2012 to: 31/03/2015 **Budget (euros):** €566,099.79

Title: Integrated demonstration of industrial CO2 reduction processes through carbonation and product recovery. ReCO2Val Project

Principal Investigator: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: Eiffage Infraestructuras, S.A.U.

Duration: from: 01/01/2014 to: 30/11/2014 **Budget (euros):** €54,450.00

Title: Reuse of agricultural plastic waste in the manufacture of bituminous mixture for use in roads using dry process technology (PLASTIC-ROAD)

Principal Investigator: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: Agencia de Obra Pública de la Junta de Andalucía

Duration: from: 22/06/2012 to: 31/03/2014 **Budget (euros):** €406,600.00

Title: Development of advanced asphalt-based roofing membranes through reactive modification

Principal Investigator: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: The Garland Company, Inc. (USA)

Duration: from: 01/03/2012 to: 28/02/2013 **Financiación recibida (en dólares USA):** \$65,600.00

Title: Foaming technology of bitumen at low temperature

Principal Investigator: [Pedro Partal López](#) **Afiliación:** UNIVERSIDAD DE HUELVA

Funding Body: Repsol S.A.

Duration: from: 01/03/2011 to: 28/02/2013 **Budget (euros):** €141,600.00

C.4. Patents

Inventors: .Martín-Alfonso, M.J; Martínez Boza F. J.; [Partal P.](#); Navarro F. J.

Title: Equipment for measuring rheological properties in fluids

Application Number: P201830949 **Reference:** PII-2018-0006

Date: 02 October 2018 **Applicant:** Univerisidad de Huelva **Priority Country:** Spain

Inventors: A. Páez, E. Moreno, E. Romero; F.J. Martínez-Boza; [P. Partal](#); F.J. Navarro, C. Gallegos, Bardesi, A

Title: Process for continuous preparation of submicronic bitumen emulsions

Application Number: EP2213704 **Date:** 28/01/2010

Applicant: Repsol YPF S.A. **Priority Country:** Spain

Inventors: D. Gómez-Martínez; M. García-Morales, [P. Partal](#); C. Gallegos

Title: Applicable material for obtaining biodegradable films for bags by extrusion and blow moulding, and method of preparation

Application Number: ES2352291 **Date:** 17/02/2011

Applicant: Plásticos Alhambra, S.L. **Priority Country:** Spain

Inventors:S. GIL, F.J. Martínez-Boza, F.J. Navarro, [P. Partal](#), et al.

Title: Device for measuring creep properties in solid-fluid compaction processes

Application Number: ES239501 **Date:** 24-05-2011

Applicant: DITECPESA, S.A. and Universidad de Huelva **Priority Country:** Spain