

Date of the CVA

08/12/2020

Section A. PERSONAL DATA

Name and Surname	Octavio Ángel Fenollar Gimeno		
DNI	21672185K	Age	40
Researcher's identification number	Researcher ID	L-1567-2014	
	Scopus Author ID	18036957300	
	ORCID	0000-0003-4323-7414	

* Obligatorio

A.1. Current professional situation

Institution	UNIVERSITAT POLITÈCNICA DE VALÈNCIA		
Dpt. / Centre	D. Ingeniería Mecánica y de Materiales / E.P.S. de Alcoy		
Address			
Phone		Email	ocfegi@epsa.upv.es
Professional category	Profesor/a Titular de Universidad	Start date	2019
Keywords			

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
INGENIERÍA Y PRODUCCIÓN INDUSTRIAL	UNIVERSIDAD POLITÉCNICA DE VALENCIA	2011
MASTER UNIVERSITARIO EN INGENIERÍA MECÁNICA Y MATERIALES	UNIVERSIDAD POLITÉCNICA DE VALENCIA	2008
INGENIERO DE ORGANIZACIÓN INDUSTRIAL	UNIVERSIDAD POLITÉCNICA DE VALENCIA	2004
INGENIERO TÉCNICO INDUSTRIAL, ESPECIALIDAD EN MECÁNICA	UNIVERSIDAD POLITECNICA DE VALENCIA	2002

A.3. General quality indicators of scientific production

PhD (Director): 3

Total Articles: 46 JCR

Total citations: 1364 of 1044 Documents (JCR)

Average citations: 16.1 citations/article (JCR)

Index h: 22 JCR 23 SCOPUS

Section B. SUMMARY OF THE CURRICULUM

Dr. Octavio Angel Fenollar Gimeno develops his teaching activity in the Department of Mechanical and Materials Engineering, in the area of Materials Science and Metallurgical Engineering. He currently holds a position as University Professor since February 2019. His research activity is developed at the Institute of Materials Technology of the Polytechnic University of Valencia since April 2006.

Dr. Fenollar is the author of more than 45 articles published in journals listed in the JCR of various topics, focused on the development of sustainable materials. The main lines of research have been the surface modification of polymeric substrates through plasma technology, and those focused on obtaining polymeric materials with less environmental impact. In this sense, it is worth highlighting works aimed at the use of agro-industrial waste, the use of polymers of natural and/or biodegradable origin, and composite materials with a marked ecological component (resins and/or natural fibers), and biodegradable materials reinforced for 3D printing.

He has actively participated in two European projects, one about the revaluation of waste and PET packaging (REVALPET), and the second in a 3D printing Project.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores

- 1 **Scientific paper.** L. Quiles-Carrillo; O. Fenollar; R. Balart; S. Torres-Giner; M. Rallini; F. Dominici; L. Torre. 2020. A comparative study on the reactive compatibilization of melt-processed polyamide 1010/polylactide blends by multi-functionalized additives derived from linseed oil and petroleum eXPRESS Polymer Letters. 14, pp.583-604. ISSN 1788-618X. DOI: <https://doi.org/10.3144/expresspolymlett.2020.48>.
- 2 **Scientific paper.** Christian Mauricio Cobos; Octavio Fenollar; Juan López Martínez; Santiago Ferrandiz; Luis Garzón. 2020. Effect of Maleinized Linseed Oil (MLO) on thermal and rheological properties of PLA/MWCNT and PLA/HNT nanocomposites for additive manufacturing Rapid Prototyping Journal. pp.1-7. ISSN 1355-2546. DOI: 10.1108/RPJ-08-2019-0217.
- 3 **Scientific paper.** Juan Ivorra-Martínez; Isabel Verdu; Octavio Fenollar; Lourdes Sanchez-Nacher; Rafael Balart; Luis Quiles-Carrillo. 2020. Manufacturing and Properties of Binary Blend from Bacterial Polyester Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) and Poly(caprolactone) with Improved Toughness Polymers. 12, pp.1118. ISSN 2073-4360. DOI: 10.3390/polym12051118.
- 4 **Scientific paper.** Agüero-Rodríguez, Ángel; Quiles-Carrillo, Luis; Jorda-Vilaplana, Amparo; Fenollar, Octavio; Montanes, Nestor. 2019. Effect of different compatibilizers on environmentally friendly composites from poly(lactic acid) and diatomaceous earth Polymer International. 68, pp.893-903. ISSN 0959-8103. DOI: 10.1002/pi.5779.
- 5 **Scientific paper.** Montanes, Nestor; Quiles-Carrillo, Luis; Ferrándiz Bou, Santiago; Fenollar, Octavio; Boronat, Teodomiro. 2019. Effects of Lignocellulosic Fillers from Waste Thyme on Melt Flow Behavior and Processability of Wood Plastic Composites (WPC) with Biobased Poly(ethylene) by Injection Molding Journal of Polymers and the Environment. ISSN 1566-2543. DOI: 10.1007/s10924-019-01388-0.
- 6 **Scientific paper.** Oliver-Borrachero, Bernardo Antonio; Sanchez-Caballero, Samuel; Fenollar, Octavio; Sellés Cantó, Miguel Ángel. 2019. Natural-Fiber-Reinforced Polymer Composites for Automotive Parts Manufacturing Key Engineering Materials. 793, pp.9-16. ISSN 1013-9826. DOI: 10.4028/www.scientific.net/KEM.793.9.
- 7 **Scientific paper.** Samper, María-Dolores; Ferri, José Miguel; Carbonell-Verdu, Alfredo; Balart, Rafael; Fenollar, Octavio. 2019. Properties of biobased epoxy resins from epoxidized linseed oil (ELO) crosslinked with a mixture of cyclic anhydride and maleinized linseed oil eXPRESS Polymer Letters. 13, pp.407-418. ISSN 1788-618X. DOI: 10.3144/expresspolymlett.2019.34.
- 8 **Scientific paper.** Angel Angüero; Maria del Carmen Morcillo; Luis Quiles-Carrillo; Rafael Balart; Teodomiro Boronat; Diego Lascano; Sergio Torres-Giner; Octavio Fenollar. 2019. Study of the Influence of the Reprocessing Cycles on the Final Properties of Polylactide Pieces Obtained by Injection Molding Polymers. 11, pp.1908. ISSN 2073-4360. DOI: 10.3390/polym11121908.
- 9 **Scientific paper.** Cobos, Christian Mauricio; Garzón, Luis; López-Martínez, Juan; Fenollar, Octavio; Ferrándiz Bou, Santiago. 2019. Study of thermal and rheological properties of PLA loaded with carbon and halloysite nanotubes for additive manufacturing Rapid Prototyping Journal. 25, pp.738-743. ISSN 1355-2546. DOI: 10.1108/RPJ-11-2018-0289.
- 10 **Scientific paper.** Ferri, J.M.; Garcia-Garcia, D.; Carbonell-Verdu, A.; Fenollar, Octavio; Balart, Rafael. 2018. Poly(lactic acid) formulations with improved toughness by physical blending with thermoplastic starch Journal of Applied Polymer Science. 135, pp.45751. ISSN 0021-8995. DOI: 10.1002/app.45751.

- 11 Scientific paper.** Montanes, Nestor; Garcia-Sanoguera, David; Segui Llinares, Vicente Jesús; Fenollar, Octavio; Boronat, Teodomiro. 2018. Processing and Characterization of Environmentally Friendly Composites from Biobased Polyethylene and Natural Fillers from Thyme Herbs *Journal of Polymers and the Environment*. 26, pp.1218-1230. ISSN 1566-2543. DOI: 10.1007/s10924-017-1025-2.
- 12 Scientific paper.** Quiles-Carrillo, Luis; Blanes-Martínez, M.M.; Montanes, Nestor; Fenollar, Octavio; Torres-Giner, S.; Balart, Rafael. 2018. Reactive toughening of injection-molded polylactide pieces using maleinized hemp seed oil *European Polymer Journal*. 98, pp.402-410. ISSN 0014-3057. DOI: 10.1016/j.eurpolymj.2017.11.039.
- 13 Scientific paper.** Daniel Garcia-Garcia; Octavio Fenollar; Vicent Fombuena; Juan Lopez-Martinez; Rafael Balart. 2017. Improvement of Mechanical Ductile Properties of Poly(3-hydroxybutyrate) by Using Vegetable Oil Derivatives *Macromolecular Materials and Engineering*. 302, pp.1-12. ISSN 1438-7492. DOI: 10.1002/mame.201600330.
- 14 Scientific paper.** Ferri, J.M.; Jordà Sempere, José Jorge; Montanes, Nestor; Fenollar, Octavio; Balart, Rafael. 2017. Manufacturing and characterization of poly(lactic acid) composites with hydroxyapatite *Journal of Applied Polymer Science*. ISSN 0021-8995. DOI: 10.1177/0892705717729014.
- 15 Scientific paper.** Ferri, J.M.; Garcia-Garcia, D.; Montanes, Nestor; Fenollar, Octavio; Balart, Rafael. 2017. The effect of maleinized linseed oil as biobased plasticizer in poly (lactic acid)-based formulations *Polymer International*. 66, pp.882-891. ISSN 0959-8103. DOI: 10.1002/pi.5329.
- 16 Scientific paper.** A. Valdés; O. Fenollar; A. Beltrán; R. Balart; Fortunati, Elena; J.M. Kenny; MC Garrigos. 2016. Characterization and enzymatic degradation study of poly(ε-caprolactone)-based biocomposites from almond agricultural by-products *Polymer Degradation and Stability*. 132, pp.181-190. ISSN 0141-3910. DOI: 10.1016/j.polymdegradstab.2016.02.023.
- 17 Scientific paper.** S. Torres-Giner; N. Montanes; O. Fenollar; D. Garcia-Sanoguera; R. Balart. 2016. Development and optimization of renewable vinyl plastisol/wood flour composites exposed to ultraviolet radiation *Materials & Design* (1980-2015). 108, pp.648-658. ISSN 0261-3069. DOI: 10.1016/j.matdes.2016.07.037.
- 18 Scientific paper.** J. M. Ferri; O. Fenollar; A. Jorda-Vilaplana; D. Garcia-Sanoguera; R. Balart. 2016. "Effect of miscibility on mechanical and thermal properties of poly(lactic acid)/polycaprolactone blends" *Polymer International*. 65, pp.453-463. ISSN 0959-8103. DOI: 10.1002/pi.5079.
- 19 Scientific paper.** J.M. Ferri; M.D. Samper; D. García-Sanoguera; M.J. Reig; O. Fenollar; R. Balart. 2016. Plasticizing effect of biobased epoxidized fatty acid esters on mechanical and thermal properties of poly(lactic acid) *Journal of Materials Science*. 51, pp.5356-5366. ISSN 0022-2461. DOI: 10.1007/s10853-016-9838-2.
- 20 Scientific paper.** Ferrero-Penadés, Begoña; V. Fombuena; O. Fenollar; T. Boronat; R. Balart. 2015. Development of natural fiber-reinforced plastics (NFRP) based on biobased polyethylene and waste fibers from *Posidonia oceanica* seaweed *Polymer Composites*. 36, pp.1378-1385. ISSN 0272-8397. DOI: DOI 10.1002/pc.23042.
- 21 Scientific paper.** M.D. Samper-Madrigal; O. Fenollar; F. Dominici; R. Balart; J.M. Kenny. 2015. The effect of sepiolite on the compatibilization of polyethylene/thermoplastic starch blends for environmentally friendly films *Journal of Materials Science*. 50, pp.863-872. ISSN 0022-2461. DOI: 10.1007/s10853-014-8647-8.

C.2. Participation in R&D and Innovation projects

- 1 3D PRINTING SUPPORT SERVICE FOR INNOVATIVE CITIZENS** (2019-1-IE02-KA203-000693) COMISION DE LAS COMUNIDADES EUROPEA. Santiago Ferrándiz Bou. (Universitat Politècnica de València). From 01/09/2019. 45.866 €.
- 2 DESARROLLO DE MATERIALES SIMIL PAPEL DERIVADOS DE RESIDUOS AGROINDUSTRIALES PARA LAS INDUSTRIAS DE ARTES GRAFIAS Y PACKAGING** (INNVAL10/18/026) AGENCIA VALENCIANA DE LA INNOVACION. David García Sanoguera. (Universitat Politècnica de València). From 01/01/2018. 58.309,28 €.

- 3** Reciclaje y revalorización de botellas de leche en materiales innovadores (REVALPET) (EFA064/15 REVALPET) Programa INTERREG V A ☐ España-Francia-Andorra (POCTEFA) 2014-2020. María Dolores Samper Madrigal. (UPC). From 01/11/2016.

C.3. Participation in R&D and Innovation contracts

C.4. Patents