

Part A. PERSONAL INFORMATION**CV date**

01/07/2024

First and Family name	Ana María Lacasta		
Social Security, Passport, ID number		Age	
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0002-9060-6043	
	SCOPUS Author ID (*)	6701373972	
	WoS Researcher ID (*)	J-1063-2014	

A.1. Current position

Name of University/Institution	Universitat Politècnica de Catalunya		
Department	Architectural Technology/ Barcelona School of Building Construction (EPSEB)		
Address and Country			
Phone number	934016816	E-mail	ana.maria.lacasta@upc.edu
Current position	Full professor (Catedrática Universidad)	From	2017
Espec. cód. UNESCO	3312.08 / 3312.12 / 3305.90 / 2210.90		
Key words	Bio-based materials. Acoustics. Thermal and fire characterization.		

A.2. Education

PhD	University	Year
PhD in Physics	Universitat de Barcelona	1994

A.3. General indicators of quality of scientific production

- Number of publications in JCR journals: 73 (56 Q1)
- h-index: 26 (WoS)
- Number of times cited: 2023
- Participation in competitive projects: 29
- Principal investigator in competitive projects: 10
- Patents: 1
- Finished doctoral theses: 4
- Research merit recognition (*sexenios*): 5

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

I received my Ph.D. in Physics in 1994 from the Universitat de Barcelona. My activity has been mainly developed in the Physics Department of the Universitat Politècnica de Catalunya (UPC), first as an assistant professor and, from 1997, as a lecturer. Since June 2017 I'm Full Professor in the Department of Architecture Technology of UPC.

Throughout the years I have carried out experimental research on characterization and optimization of materials, in combination with theoretical developments and numerical simulations. I have been responsible for the EPSEB fire laboratory from 2007 to 2021 and I'm currently responsible for the Acoustic and Energy Saving Laboratory.

In 2009 I promoted the creation of an interdisciplinary research group in the field of science and technology in building (GICITED group), currently consolidated, of which I am responsible. Since its creation, in the year 2015, I am also responsible for the Network LIGNOMAD- "Network for the promotion of wood and other lignocellulosic materials in the construction sector". At present the LIGNOMAD network integrates 13 research groups and has the collaboration of different companies in the sector.

I am currently the coordinator of the doctoral program in "Architectural Building Construction and Urbanism Technology".

Part C. RELEVANT MERITS

C.1. Publications (selection)

1. Arias-Cárdenas, B., Lacasta, A. M., Haurie, L. (2024). Bibliometric analysis of research on thermal, acoustic, and/or fire behaviour characteristics in bio-based building materials. *Construction and Building Materials*, 432, 136569.
Index measuring impact (JCR-Science Edition): 7.4; Quartile: Q1
2. Mahpour, A. R., Sadrolodabae, P., Ardanuy, M., Haurie, L., Lacasta, A. M., Rosell, J. R., Claramunt, J. (2023). Serviceability parameters and social sustainability assessment of flax fabric reinforced lime-based drywall interior panels. *Journal of Building Engineering*, 76, 107406.
Index measuring impact (JCR-Science Edition): 7.144; Quartile: Q1
3. Aza-Medina, L. C., Palumbo, M., Lacasta, A. M., González-Lezcano, R. A. (2023). Characterization of the thermal behavior, mechanical resistance, and reaction to fire of totora (*Schoenoplectus californicus* (CA Mey.) Sojak) panels and their potential use as a sustainable construction material. *Journal of Building Engineering*, 69, 105984.
Index measuring impact (JCR-Science Edition): 7.144; Quartile: Q1
4. Bosch, M., Lacasta, A. M., Berigüete, F. E., Alva, A., Cantalapiedra, I. R. (2023). Green Roofs and Other Nature-Based Solutions in Barcelona: Environmental Benefits, and Physical and Mental Well-Being. *Building Engineering Facing the Challenges of the 21st Century: Holistic Study from the Perspectives of Materials, Construction, Energy and Sustainability*, 511-532.
5. Sadrolodabae, P., Hosseini, S. A., Claramunt, J., Ardanuy, M., Haurie, L., Lacasta, A. M., de la Fuente, A. (2022). Experimental characterization of comfort performance parameters and multi-criteria sustainability assessment of recycled textile-reinforced cement facade cladding. *Journal of Cleaner Production*, 356, 131900.
Index measuring impact (JCR-Science Edition): 11,072; Quartile: Q1
6. R.M. Novais, L. Senff, J. Carvalheiras, A.M. Lacasta, I.R. Cantalapiedra, J.A., Simple and effective route to tailor the thermal, acoustic and hygrothermal properties of cork-containing waste derived inorganic polymer composites. *Journal of Building Engineering*, 42, 102501 (2021).
Index measuring impact (JCR-Science Edition): 3,379; Quartile: Q1
7. R.M. Novais, J. Carvalheiras, L. Senff, A.M. Lacasta, I.R. Cantalapiedra, J. Giro-Paloma, J.A. Labrincha, Multifunctional cork-alkali-activated fly ash composites: A sustainable material to enhance buildings' energy and acoustic performance. *Energy and Buildings*, 210, 109739 (2020).
Index measuring impact (JCR-Science Edition): 4,495; Quartile: Q1
8. L. Haurie, M.P. Giraldo, A. M. Lacasta, J. Montón, R. Sonnier, Influence of different parameters in the fire behaviour of seven hardwood species. *Fire Safety Journal*, 107, 193-201 (2019).
Index measuring impact (JCR-Science Edition): 1,888; Quartile: Q2
9. M. Palumbo, A.M. Lacasta, M.P. Giraldo, L.Haurie, E. Correal. Bio-based insulation materials and their hygrothermal performance in a building envelope system (ETICS). *Energy and Buildings*, 174, 147-155 (2018).
Index measuring impact (JCR-Science Edition): 4,067; Quartile: Q1
10. M. Palumbo, A.M. Lacasta, A. Navarro, M.P. Giraldo, B. Lesar. Improvement of fire reaction and mould growth resistance of a new bio-based thermal insulation material. *Construction and Building Materials* 139, 531–539
Index measuring impact (JCR-Science Edition): 2.421; Quartile: Q1
11. A.M. Lacasta, A. Penaranda, I.R. Cantalapiedra, C. Auguet, S. Bures, S., M. Urrestarazu. Acoustic evaluation of modular greenery noise barriers. *Journal: Urban Forestry & Urban Greening*, 20, 172-179 (2016)
Index measuring impact (JCR-Science Edition): 2.001; Quartile: Q1

C.2. Research projects and grants

Title: BioSAFE - Bio-sustainable solutions for the acoustic and fire improvement of building envelopes

Principal investigators: Ana M. Lacasta and Laia Haurie

Funding body: Ministerio de Economía y Competitividad

Reference: PID2020-117530RB-I00

Total amount: 175.087 €

Start date: 01/09/2021, 4 years

Role: principal investigator

Title: BCN proximity green: Plan for monitoring and evaluating the operation and impact of green covers and facades in the city of Barcelona

Principal investigators: Gabriel Pérez (UdL) / Ana M. Lacasta (UPC)

Funding body: Ajuntament de Barcelona

Reference: 21S09258-001

Total amount: 44,374 €

Start date: 10/12/2021, 18 months

Rolle: principal investigator

Title: BIOFIBRE - Sustainable construction with bio-composite materials

Principal investigator UPC: Laia Haurie

Funding body: European Comission (Erasmus +)

Reference: 2022-1-DK01-KA220-HED-00086641

Start date: 12/2022, 3 years

Role: investigator

Title: SBES - Sustainable solutions for building envelopes

Principal investigator: Ana M. Lacasta and Laia Haurie

Funding body: Ministerio de Economía y Competitividad

Reference: BIA2017-88401-R

Total amount: 70.180

Start date: 01/01/2018, 3 years

Role: principal investigator

Title: - SAVASCO - Structuring a cross-border sector for the valorisation of corn and sunflower stalks for the construction industry

Principal investigator: Camille Magniont (Université Toulouse III Paul Sabatier)

Funding body: Intereg-poctefa project (FEDER)

Reference: EFA353/19

Total amount: 866.299,92

Start date: 06/2020, 2 years

Role: investigator

Title: HybridTim . Design and construction on environmental high performance Hybrid Engineered Timber Buildings

Principal investigator UPC: Laia Haurie

Funding body: European Comission (Erasmus +)

Reference: 2020-1-DK01-KA203-075045- HybridTim

Start date: 09/2023, 3 years

Role: investigator

Title: GICITED - Grup interdisciplinari de Ciència i Tecnologia en l'Edificació

Principal investigator: Ana M. Lacasta

Funding body: AGAUR (Generalitat de Catalunya)

Reference: 2021 SGR 01405

Total amount: 40.000

Start date: 01/01/2022, 3.5 years

Role: principal investigator

C.4. Patents

A.M. Lacasta Palacio, M. Palumbo Fernandez, J. Avellaneda Diaz-Grande, A. Navarro Ezquerro, J.M Rosell Amigo,
Materiales aislantes térmicos a base de biomasa y gomas naturales.
Ref. P201431352. Presentation date: 18/09/2014 Concession date: 09/01/2017
Universitat Politècnica de Catalunya

C.5. PhD supervisions:

Uniones y elementos de conexión para estructuras con bambú: clasificación y desarrollo de un prototipo de conexión
Roberto Aguilar
Universitat Politècnica de Catalunya
Presentation date: 04/11/2022

Contribution to the development of new bio-based thermal insulation materials made from vegetal pith and natural binders:
Mariana Palumbo
Universitat Politècnica de Catalunya
Presentation date: 08/10/2015

Formulaciones de nuevos morteros y cementos especiales basadas en subproductos de magnesio
Joan Formosa Mitjans
Universitat Politècnica de Catalunya
Presentation date: 03/12/2012

Transport and diffusion on periodic and random surfaces
Maria Khoury Arvelo
Universidad: Universitat de Barcelona
Presentation date: 20/12/2010

C.6 Management positions and International representation

Assistant director of the Barcelona School of Building Construction (UPC), 2017- present

Assistant director of the Physics Department (UPC), 2014-2016

Management Committee, COST Action TU0904

Project IFER: Integrated Fire Engineering and Response, 2010 - 2014

Management Committee, COST Action FP1404

Project Fire safe use of bio-based building products, 2015 – 2018

Head of the research group GICITED - Interdisciplinary Group on Building Science and Technology, since 2009.

Head of network LIGNOMAD - Network to promote wood and other lignocellulosic materials in the construction sector, since 2015.

Head of the Fire Lab of the UPC, 2007-2021.

Head of the Acoustic Lab of the UPC, since 2022.

Coordinator of the doctoral programme in Architectural, Building Construction and Urbanism Technology, since 2018