

Ana María LACASTA PALACIO, PhD / Physicist

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Current position

Full Professor at the Universitat Politècnica de Catalunya (UPC).

Education

Graduate in Physics, Universitat de Barcelona (UB), 1990

PhD in Physics, Universitat de Barcelona (UB), 1994

Academic and Professional Experience

Professor at the Barcelona School of Building Construction (EPSEB) of Universitat Politècnica de Catalunya (UPC) since 1990:

- From 1990 to 1994: Assistant Professor (*profesora asociada*) - Physics Department.
- From 1994 to 2017: Associate Professor (*Titular de Universidad*) - Physics Department.
- Since 2017: Full Professor (*Catedrática de Universidad*) – Department of Architecture Technology

Since 2007 she is charge of the EPSEB Fire Laboratory, from where she has led and participated in several research lines related to the fire behaviour of building materials.

In 2009 she promoted the creation of an interdisciplinary research group in the field of Science and Technology in Buildings (GICITED group), currently consolidated, of which she is responsible.

Since its creation, in the year 2015, she is the coordinator of the Network of Excellence LIGNOMAD - "Network for the promotion of wood and other lignocellulosic materials in the construction sector". At the moment, LIGNOMAD integrates 16 research groups of around Spain.

Subjects currently taught (Bachelor and Master degree)

- Building Materials
- Physical Phenomena in Building Construction
- Control and Evolution of Fires in Buildings

Current Management positions and International representation

- Vice-Director of Research, Doctoral Degree and Promotion of the Studies of EPSEB since 2017.
- Coordinator of the Doctoral program "Technology of Architecture, Building and Urban Planning" (DTAEU) since 2018.

Main research results

- Number of publications in JCR journals: 64 (49 Q1)
- h-index:20 (Web of Science)
- Contributions to Conferences: more than 60
- Participation in competitive projects: 24
- Principal investigator in competitive projects: 8
- Finished doctoral theses: 3

Selection of Recent Publications

1. 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).
Impact measuring agency: JCR-Science Edition. Index measuring impact: 4,067; Quartile: Q1
2. 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*, available online 3 August.
Impact measuring agency: JCR-Science Edition. Index measuring impact: 1,888; Quartile: Q2
3. A.M. Lacasta, A. Peñaranda, I.R. Cantalapiedra, Green Streets for Noise Reduction. In *Nature Based Strategies for Urban and Building Sustainability*, 181-190, Elsevier (2018).
4. M. Palumbo, A.M. Lacasta, Vegetal pith in *Performance of Bio-based Building Materials*, 156-186, Woodhead Publishing, Elsevier (2017)
5. 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 Construction and Building Materials* 139, 531–539
Impact measuring agency: JCR-Science Edition. Index measuring impact: 2.421; Quartile: Q1
6. 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)
Impact measuring agency: JCR-Science Edition. Index measuring impact: 2.001; Quartile: Q1
7. M. Palumbo, A.M. Lacasta, N. Holcroft, A. Shea, P. Walker. Determination of hygrothermal parameters of experimental and commercial bio-based insulation materials. *Construction and Building Materials* 124, 269-275 (2016)
Impact measuring agency: JCR-Science Edition. Index measuring impact: 2.421; Quartile: Q1
8. M. Palumbo, J. Formosa, A.M. Lacasta, Thermal degradation and fire behaviour of thermal insulation materials based on food crop by-products. *Construction & Building materials*. 79, pp. 34 - 39. (2015)
Impact measuring agency: JCR-Science Edition. Index measuring impact: 2.296; Quartile: Q1
9. M. Palumbo, J. Avellaneda, A.M. Lacasta, Availability of crop by-products in Spain: new raw materials for natural thermal insulation. *Resources, conservation and recycling*. 99, pp. 1 - 6. (2015)
Impact measuring agency: JCR-Science Edition. Index measuring impact: 2.692; Quartile: Q2

Research Projects currently in progress

Title: Soluciones sostenibles para envolventes de edificios (SBES)

Principal investigator: Ana M. Lacasta

Funding body: Ministerio de Economía y Competitividad

Reference: BIA2017-88401-R

Start date: 2018-2020

Title: Knowledge Alliance for Sustainable Mid-Rise and Tall Wooden Buildings (KnoWood)

Principal investigator: Laia Haurie

Funding body: European Comission (Erasmus +)

Reference: 600903-EPP-1-2018-1-DK-EPPKA2-KA

Start date: 2018-2021