

1. Faculty Name

- a. Gusatvo Vargas-Silva, Ph.D.

2. Education

- a. Ph.D Mechanical Engineering, University of the Basque Country, San Sebastian (Spain), 2010
- b. M.Sc., Materials Engineering, Pontificia Bolivariana University, Medellin (Colombia), 2003
- c. B.S., Mechanical Engineering, Pontificia Bolivariana University, Medellin (Colombia), 1997

3. Academic Experience

- a. Angelo State University, Visiting Associate Professor, 2019-present
- b. University of the Basque Country, San Sebastian (Spain), Associate Professor, 2017 – 2019
- c. University of the Basque Country, San Sebastian (Spain), Assistant Professor, 2012 – 2017
- d. University of the Basque Country, San Sebastian (Spain), Auxiliary Professor, 2011 – 2012
- e. University of the Basque Country, Research Assistant, 2010-2011
- f. University of Zaragoza, Zaragoza (Spain), Research Assistant, 2003-2006
- g. EAFIT University, Medellin (Colombia), Part-Time Auxiliary Professor, 2001-2002
- h. Pontificia Bolivariana University, Medellin (Colombia), Auxiliary Professor, 1998-2003

4. Non-Academic Experience

- a. 2006-2010, Technical Director Research, Technological Development, and Innovation Department, AH Associates Architects, Pamplona (Spain)

5. Certifications or Professional Registrations

- a. None

6. Current Membership in Professional Organizations

- a. Member, Spanish Association of Composites, AEMAC
- b. Member, American Society of Mechanical Engineers, ASME

7. Honors and Awards

- a. 2010, Finalist of the Official Basque-Navarrese Architects Association (COAVN) Awards, Design Category. Title: *Alveoglass, Glass panel with alveolar core with application in architecture and construction*. Authors: M.A. Alonso del Val, R. Hernández-Minguillón, P. Branchi-Borrell, G. Vargas-Silva.

- b. 2010, Best Work in Sustainable Architecture, KNX Awards Spain 2010. Title: *Integration of fiber optic sensors in a KNX network and its remote monitoring*. Authors: J.A. Nazabal, G. Vargas, R. Hernandez, C. Fernandez, F. Falcone, M. López-Amo.

8. Service Activities

- a. External reviewer of research projects, Pontifical Catholic University of Peru. Promotion and Evaluation of Research Office, Oct. 2018
- b. Journal Reviewer: Composites Part B (Elsevier), Journal of Polymer Engineering (De Gruyter), Composite, Structures (Elsevier), Journal of Composite Materials (SAGE), Polymer Testing (Elsevier), Polymer Composites (Wiley), Applied Composite Materials (Springer), Chemical Physics Letters (Elsevier), Materials Sciences and Applications Journal (Scientific Research), and Journal of Mechanics in Medicine and Biology (World Scientific).

9. Publications and Presentations

- a. G. Vargas, G. Calzada. *Euler: The mathematician* (in Spanish) (2011) 128 p., El Rompecabezas Publishers, Madrid (Spain). ISBN: 978-84-15016-21-2.
- b. G. Vargas, J. Trifol, I. Algar, A. Arbelaiz, G. Mondragon, S.C.M. Fernandes, F. Mujika, A. Eceiza. “Nanostructured composite materials reinforced with nature-based nanocellulose”, In: *Natural Filler and Fibre Composites, Development and Characterisation* (2015) pp. 75-85, Editor: S. Syngellakis, WIT Press, Southampton (UK). ISBN: 978-1-78466-147-2.
- c. U. Tamayo Orbegozo, G. Vargas-Silva. (2019) Biomimetic economy: human ecological-economic systems emulating natural ecological systems. *Social Responsibility Journal*, <https://doi.org/10.1108/SRJ-09-2018-0241>
- d. J.J. Beato-López, G. Vargas-Silva, J.I. Pérez-Landazábal, C. Gómez-Polo. (2018) Giant Stress-Impedance (GSI) sensor for diameter evaluation in cylindrical elements. *Sensors & Actuators Part A: Physical*, 269, 269-275.
- e. G. Vargas. Mechanical strategies of arborescent plants: structural teachings of trees (in Spanish). (2017) *Ingeniare- Chilean Journal of Engineering*, 25, 510-523.
- f. G. Vargas, F. Mujika. Greenstick fracture in composite pultruded rods. (2017) *Composites Part B: Engineering*, 110, 106-115.
- g. G. Vargas, J.Á. Ramos, J. De Gracia, J. Ibarretxe, F. Mujika. (2015), In-plane shear behaviour of multiscale hybrid composites based on multiwall carbon nanotubes and long carbon fibres. *Journal of Reinforced Plastics and Composites* 34, 1926-1936.

10. Professional Development Activities

- a. Workshop on Plant Biomimetics: Green Inspiration, Global Innovation Day 2016, Innobasque, Bilbao (Spain), Jun. 2016.