

EDUCATION

Ph.D. in Environmental and Water Emphasis,
University of Georgia (in course)
M.S. in Environmental Engineering and
Water Resources,
Technological University of Bolívar (2020)
B.S. in Environmental Engineering,
Technological University of Bolívar (2017)

PROFESSIONAL CERTIFICATION

Licensed Environmental Engineer in
Colombia

CONTACT INFORMATION

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**UNIVERSITY OF
GEORGIA**

Compound Inundation Team
for Resilient Applications

Professional Appointments

2022	Assistant Professor Department of Environmental Engineering Fundación Universitaria Tecnológico Comfenalco, Cartagena-Colombia
2020-2022	Consultant Engineer Department of Wastewater Environmental Public Establishment (EPA-Cartagena, in Spanish), Cartagena – Colombia
2019 – 2020	Project Engineer Department of Environmental Management Ecolavados S.A.S, Cartagena – Colombia
2018 – 2019	Environmental Engineer AMBIOTEC S.A.S, Bogotá – Colombia
2018	Water Resources Engineer COA Diseños & Ingenierías S.A.S, Cartagena – Colombia

Publications

Refereed Journal Article

- González-Álvarez, Á., Herrera-Piñeres, M., & **Viloria-Marimón, O. M.** (2022). Sensitivity of peak flow response to imperviousness increase in a tropical Caribbean ungauged urban catchment. *Urban Water Journal*, 19(5), 509-519, doi: <https://doi.org/10.1080/1573062X.2022.2044864>
- González-Álvarez, Á., Molina-Pérez, J., Meza-Zúñiga, B., **Viloria-Marimón, O. M.**, Tesfagiorgis, K., & Mouthón-Bello, J. A. (2020). Assessing the performance of different time of concentration equations in urban ungauged watersheds: case study of Cartagena de Indias, Colombia. *Hydrology*, 7(3), 47, doi: <https://doi.org/10.3390/hydrology7030047>
- **Viloria-Marimón, O. M.**, González-Álvarez, Á., & Mouthón-Bello, J. A. (2019). Analysis of the behavior of daily maximum rainfall within the department of Atlántico, Colombia. *Water*, 11(12), 2453, doi: <https://doi.org/10.3390/w11122453>
- González-Álvarez, Á., **Viloria-Marimón, O. M.**, Coronado-Hernández, Ó. E., Vélez-Pereira, A. M., Tesfagiorgis, K., & Coronado-Hernández, J. R. (2019). Isohyetal maps of daily maximum rainfall for different return periods for the Colombian Caribbean Region. *Water*, 11(2), 358, doi: <https://doi.org/10.3390/w11020358>

Thesis/Dissertation

- **Viloria-Marimón, O. M.** (2020). "Study of the Behavior of the Daily Maximum Rainfall Regime in the Colombian Caribbean Region.". M.S. Thesis, Universidad Tecnológica de Bolívar, Cartagena, Col.
- **Viloria-Marimón, O. M.** & Echeverría González M. M. (2017). "Estimation of emissions from motorcycles in the city of Cartagena de Indias.". B.S. Thesis, Universidad Tecnológica de Bolívar, Cartagena, Col.

Engineering Projects

Some representative projects where Orlando Viloria has participated include:

- Stormwater management System Design for Recreational Zone in Pasacaballos (Cartagena, Col) (2018).
- Hydrological Analysis for Solar Panel Park Project in the Municipality of Urra. (2018).

AWARDS & HONORS

- *Master's thesis awarded the academic maximum distinction (2020).*
- *Scholarship for master's studies in engineering (2018).*
- *Bachelor degree, cum laude (2017).*

CONFERENCE ACTIVITY

Presentations

- *Estimation of emissions from motorcycles in the city of Cartagena de Indias. Presenter at the XII Colombian congress of transit and transportation. Universidad de los Andes, 2017 (Bogotá, Colombia).*

TEACHING EXPERIENCE

Fundación Universitaria Tecnológico Comfenalco, Cartagena-Colombia

- *Undergraduate Course, Instructor – Monitoring and Control of the Quality of Water (Fall 2022)*
- *Undergraduate Course, Instructor – Monitoring and Control of the Quality of Air (Fall 2022)*
- *Undergraduate Course, Instructor – Atmospheric Pollution (Fall 2022)*
- *Undergraduate Course, Instructor – Design of Water Treatment Systems (Fall 2022)*
- *Undergraduate Course, Instructor – Design of Atmospheric Control Systems (Fall 2022)*

Universidad de Cartagena (UDC), Cartagena – Colombia

- *Graduate Course, Co-Instructor – Road Drainage (Fall 2020)*
- *Graduate Course, Co-Instructor – Road Drainage (Fall 2021)*

Technological University of Bolívar (UTB, in spanish), Cartagena – Colombia

- *Undergraduate Course, Co- Instructor – Chemistry (Spring 2019)*

Research Experience

Graduate Research Assistant

- *University of Georgia - Compound Inundation Team for Resilient Applications (CITRA). Compound Floods Maps for Coastal Watersheds in Puerto Rico (2023 - Present)*
- *Universidad Tecnológica de Bolívar - Environmental and Hydraulic Systems Research Group (GISAH in Spanish) (Cartagena, Col.). Study of the Behavior of the Daily Maximum Rainfall Regime in the Colombian Caribbean Region (2018 – 2020).*

Software & Programming Languages

Proficient in ArcGIS, HEC-RAS, HEC-HMS, Global Mapper, PCSWMM, AutoCAD, and Python.

Languages

- *Spanish – Fluent*
- *English – Proficient*