

# Lina Garcia-Suarez

Ph.D. Candidate, Dalhousie University, Halifax, Canada

## EXPERIENCE

- 2018-2019      Research Assistant, Universidad del Norte, Colombia**  
Modelled water quality and ocean dynamics in coastal areas of the Caribbean Sea (Santa Marta and Puerto Colombia, Colombia). Studied of dynamics and properties of shear, stratification, turbulence, and mixing near of a submarine outfall.
- 2014-2019      Project Consultant, Aquabiosfera, Colombia**  
Planned and led oceanographic and seawater/sediment quality studies. Conducted consultations for environmental monitoring and assessment of coastal and offshore areas in Colombia.
- 2011-2014      Research Assistant, Marine Research Institute *Jose Benito Vives de Andreis* (INVEMAR), Colombia**  
Assessed of seawater and marine sediment quality for environmental consulting and research projects. Developed and performed validation of analytic techniques for quantification of deep sediments pollutants. Participated in several research cruises as responsible of water and sediment sampling.

## EDUCATION

- 2019 - Present      Ph.D in Oceanography, Dalhousie University**  
Long-term projections of biogeochemical dynamics in the northwest North Atlantic Ocean and the effects on shelf ecosystems and local fishery. Supervisor; Dr. Katja Fennel
- 2017 - 2019      M.Sc. Applied Physics emphasis in Physical Oceanography, Universidad del Norte, Colombia**  
Modelled the environmental benefits of a submarine outfall. Case study: Puerto Colombia - Caribbean Sea. Supervisor: Dr. Oscar Alvarez.
- 2012 - 2013      Diploma in Applied Statistics, Universidad del Norte, Colombia**  
Multivariate statistics and design of experiments in seawater and marine sediments quality assessment.
- 2004 - 2010      B.Eng. Chemical Engineering, Universidad del Valle, Colombia**  
Production of ethanol and lactic acid using *Corynebacterium glutamicum*.

## **SCHOLARSHIPS AND AWARDS**

### **Kathy Ellis Memorial Book Prize**

2020

Highest overall average in first year oceanography core courses. Dalhousie University

### **Professor F. Ronald Hayes International Scholarship**

2019

Scientific Committee on Oceanic Research. Department of Oceanography, Dalhousie University

### **Nova Scotia Graduate Scholarship**

2019 - 2023

Full Ph.D. funded scholarship recipient. Dalhousie University

## **FIELDWORK EXPERIENCE**

(Most recent scientific cruises)

- 2018**      **Researcher, Aquabiosfera & Ecopetrol, Caribbean Sea**  
CTD data collection and seawater, sediments, plankton, and benthos sampling.  
Regional cruise. Duration: 12 days. Boat: R/V Maria Jose II (Serport)
- 2016**      **Researcher, Aquabiosfera & Anadarko Colombia Company, Caribbean Sea**  
CTD data collection and seawater and sediments,  
Regional cruise. Duration: 23 days. Boat: R/V Don Rodrigo (Serport)
- 2014**      **Researcher, Aquabiosfera & Anadarko Colombia Company, Caribbean Sea**  
CTD data collection and seawater, sediments, plankton, and benthos sampling.  
Regional cruise. Duration: 32 days. Boat: R/V Proteus (TDI Brooks)

## **PROFESSIONAL DEVELOPMENT**

**2018**

- Processing of metocean data applying UNESCO-COI-IODE standards and practices CTD data collection and seawater, sediments, plankton, and benthos sampling. Colombia
- Introduction to hydrodynamic models and statistical tools for modelling validation. Chile
- Ocean modelling using the Coastal and Regional Ocean Community Model- (CROCO). Chile

**2016**

- Methodologies for evaluation and control of marine pollution and environmental impact assessment in coastal zones. Colombia
- Multivariate ordination statistical methods for the analysis of marine environmental impacts. Colombia

## TECHNICAL AND SCIENTIFIC PUBLICATIONS

- Garcia, L.;** Franco-Herrera, A.; Moreno, Y.; Hoyos, A.; Vega, D.; Martinez, M.P; Hernandez, L.; Fernandez, L.; Leon, V. & Alarcon, J. (2017). Monitoreo ambiental en el pozo Purple Angel C (bloque Purple Angel) antes de la perforación exploratoria. Technical report submitted to Anadarko Colombia Company sucursal Colombia & Anadarko Petroleum Company. Bogotá, D.C.: Aquabiósfera S.A.S.
- Cortes, F.; Franco-Herrera, A.; Zuniga, M; **Garcia, L.;** Tigreros, P; Martinez, M.P; Ortiz, S.; Plazas, R.; Posada, T. & Alarcon, J. (2017). Monitoreo de calidad de aguas, sedimentos y comunidades biológicas, antes, durante y después de la perforación del pozo Calasú 1 (APEM Fuerte Norte Technical report submitted to Anadarko Colombia Company sucursal Colombia & Anadarko Petroleum Company. Bogotá, D.C.: Aquabiósfera S.A.S.
- Ruiz, J.; Franco-Herrera, A.; Zuniga, M.; **Garcia, L.;** Tigreros, P.; Martinez. M.P; Ortiz, S.; Plazas, R.; Posada, T. & Alarcon, J. (2017). Monitoreo de calidad de aguas, sedimentos y comunidades biológicas, antes, durante y después de la perforación del pozo Kronos 1 (APEM Fuerte Sur). Technical report submitted to Anadarko Colombia Company sucursal Colombia & Anadarko Petroleum Company. Bogotá, D.C.: Aquabiósfera S.A.S.
- Cortes, F.; Franco, A.; Zuniga, M.; **Garcia, L.;** Vega, D.; Vanegas, J; Lopez, C.; Plazas, R.; Morales, C. & Arteaga, C. (2015) .Monitoreo de calidad de aguas, sedimentos y comunidades biológicas durante la perforación del pozo Calasú 1 (APEM Fuerte Norte). Technical report submitted to Anadarko Colombia Company sucursal Colombia & Anadarko Petroleum Company. Bogotá, D.C.: Aquabiósfera S.A.S.
- Cortes, F.A., **Garcia, L.;** Tigreros, P., Martinez, M., Cardenas, A., Bolano, M., Zubiria, W. & Ortiz, E. (2014). Caracterización ambiental del área de influencia de la prospección sísmica 2d dentro del bloque Guajira Offshore 1, Caribe colombiano. Coordinación de Servicios Científicos. INVEMAR. Technical report submitted to Repsol Exploración Colombia S.A. Santa Marta.
- Baez, A., **Garcia, L.;** Martinez, P., Parrado, P., Posada, T., Tigreros, P. & Uribe, C. (2014). Caracterización ambiental del área de interés del bloque Offshore Guajira #3, Caribe colombiano. Coordinación de Servicios Científicos. INVEMAR. Technical report submitted to Shell. Santa Marta.
- Marquez, J.C., **Garcia, L.;** Ramos, L., Martinez, P., Uribe, C., Fontalvo, E., Ruiz, J., Zubiria, W. & Gomez, L. (2013). Caracterización de aguas, sedimentos y comunidades marinas en el área de perforación exploratoria marina RC11 y sus áreas de mayor interés Siluro este y oeste, Caribe colombiano. INVEMAR. Technical report submitted to Ecopetrol. Santa Marta.
- Saenz, H.F., **Garcia L.;** Vega, D., Beltran, J.M., Martinez, M.P., Uribe, C., Bolano, M.P., Posada, T. & Herrera, F.A. (2013). Comunidades marinas, calidad de aguas y sedimentos en la zona próxima a los pozos exploratorios Mapalé-1 y Mapalé-2 (RC5), Caribe colombiano. Coordinación de Servicios Científicos. INVEMAR. Technical report submitted to Equion Energía Ltd. Santa Marta.
- Cortes, F., **Garcia L. &** Bolano, M. (2012). Caracterización de aguas, sedimentos y la comunidad macrozoobentónica en el área de influencia marina del terminal de pozos colorados, Santa Marta, Caribe colombiano. Coordinación de Servicios Científicos. INVEMAR. Technical report submitted to ECOPETROL. Santa Marta, D.T.C.H.