



# Alvaro Boiero

Civil Engineer – MSc Earth Sciences



## WHO I AM

*My name is Alvaro Boiero, I am a Civil Engineer and I have a Master degree in Earth Sciences. I am also lecturer of Soil Mechanics.*

*I am currently at the Polytechnic University of Catalonia - BARCELONATECH, where I am a PhD candidate in Geotechnical Engineering. Here I am working on research related to ground improvement, which encompasses the analysis of shear strength, stiffness, and sustainable development in ground improvement activities.*

*Furthermore, I participate as invited lecturer in specialized professional courses.*

*In addition, I have a blog called "geo", in which I periodically publish relevant information on the main topics of Geotechnical Engineering.*

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## Work Experience

- 2022 - Today**     **CONSULTANT**  
**Geotechnical Engineering**  
<https://geo-webonline.com/>  
Geotechnical Engineering Consultancy and Geotechnical Studies
- 2020 - Today**     **SÍSMICA ADIESTRAMIENTO**  
**Invited Lecturer**  
<https://www.sismica-adiestramiento.com/>  
Foundations - Slope Stability – Geotechnical Projects
- 2009 – 2022**     **ANDRÉS BELLO CATHOLIC UNIVERSITY (Caracas, Venezuela)**  
**Lecturer**  
<https://www.ucab.edu.ve/>  
Slope Stability and Excavations (graduate course in Geotechnics)  
Soil Mechanics Laboratory (undergraduate course of Civil Engineering)
- 2008 – 2022**     **AMUNDARAY INGENIERÍA GEOTÉCNICA, C.A.**  
**Head of Geotechnical Engineering**  
Geotechnical Engineering Consultancy and Geotechnical Studies  
<https://www.aig-ca.com.ve/>  
Coordination and supervision of geotechnical projects. Project control. Personnel in charge 20-25 people, in geotechnical studies developed both onshore and offshore. Budget control. Marketing.
- 2005 – 2008**     **INGENIERÍA GEOTÉCNICA PREGO, C.A.**  
**Geotechnical Engineer**  
Geotechnical Engineering Consultancy and Geotechnical Studies  
<https://www.ingeprego.com/>  
Coordination and supervision of geotechnical exploration programs, on-site supervision of geotechnical and geophysical activities, laboratory tests interpretation, preparation of geotechnical reports and design of geotechnical projects.
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## Education

2022 - Currently

**POLYTECHNIC UNIVERSITY OF CATALONIA - BARCELONATECH**  
**PhD Candidate in Geotechnical Engineering**

<https://www.upc.edu/ca>

Participation in the projects TPH-CIMNE/UPC and REROOT related to ground improvement using low carbon composites, as well as bioengineering applications. *Performance of laboratory tests and analysis of results.*

2011 – 2016

**SIMÓN BOLÍVAR UNIVERSITY**  
**MSc in Earth Sciences**

<https://www.usb.ve/>

Grade work with honors (EXCELLENT Mention). Title: *Obtaining a Rational Methodology for Geotechnical Characterization.*

2000 – 2005

**UNIVERSITY OF ORIENTE**  
**Civil Engineer**

<https://www.udo.edu.ve/>

Honorable Mention MAGNA CUM LAUDE (grade point average 8.88 – 10.00). 1st place in the graduating class of 40 graduates.

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## Personal Capabilities and Skills

- SPANISH / ENGLISH languages.
  - Well-founded technical criteria. Handling of specialized software.
  - Leadership. Achievement and self-improvement orientation. Commitment. Loyalty.
  - Proactivity. Leadership. Coordination and management of work teams. Budget follow-up and control. Negotiation.
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# Publications

- Boiero, A., Romero, E., Arroyo, M. and Spagnoli, G. (2022) **“Interface direct shear test simulating post-grouting pile installation with novel binders”**. 9<sup>TH</sup> International SUT OSIG Conference - *Innovative Geotechnologies for Energy Transition*. London. Abstract accepted.
  - Boiero, A. (2021) **“Development of a Rational Methodology for Soil Geotechnical Characterization”**. 6<sup>TH</sup> International Conference on Geotechnical and Geophysical Site Characterization (ISC'6). Paper ID: ISC2020-12. Available at <http://isc6.org/images/Cikkek/Sessions/ISC2020-12.pdf>. Budapest, Hungary.
  - Boiero, A. (2021) **“Use of Vibrocompaction Method for Soil Improvement: case of the Port of La Guaira”**. Venezuelan Geotechnical Congress 2021. Caracas, Venezuela.
  - Boiero, A., Oliver, J. y Amundaray, J. (2019) **“Geotechnical Forensic Engineering: Settlement of Structures in Industrial Facilities in Puerto La Cruz, Venezuela”**. Proceedings of the XVI Pan-American Conference on Soil Mechanics and Geotechnical Engineering (XVI PCSMGE), pp. 2593-2600. Cancún, México.
  - Boiero, A.; Oliver, J. y Amundaray, J. (2018) **“Geotechnical Forensic Engineering: Settlement of Structures in Industrial Facilities in Puerto La Cruz, Venezuela”**. XXIV Argentinian Seminar of Soil Mechanics and Geotechnical Engineering. Salta, Argentina.
  - Boiero, A. y Rosales, C. (2016) **“Estimation of Elastic Parameters for the Computation of Immediate Settlements for Frictional and Cohesive Soils”**. Bulletin of the Venezuelan Society of Geotechnical Engineering. 1st Digital Edition. Caracas, Venezuela.
  - Amundaray, J. and Boiero, A. (2011) **“Collapsible Clayey Soils in the North-Eastern Region of Venezuela”**. 2011 Pan-Am CGS Geotechnical Conference. Toronto, Canada.
  - Boiero, A. y Amundaray, J. (2010) **“Soil-Structure Interaction of Vibrating Equipment”**. XIX Seminar of the Venezuelan Society of Geotechnical Engineering. Caracas, Venezuela.
  - Boiero, A., Amundaray, J., Grases, J. y Tamargo, L. (2008) **“Evaluation of Liquefaction Potential, Subsoil Improvement Techniques and Obtaining the Seismic Response Spectrum”**. Conference 50th Anniversary of the Venezuelan Society of Geotechnical Engineering. Caracas, Venezuela.
  - Boiero, A., y De Gouveia, G. (2006) **“Determination and Analysis of Seismic Response Spectra in the Bolivar, Urbaneja, Sotillo and Guanta Municipalities”**. VIII Venezuelan Congress of Seismology and Seismic Engineering. Valencia, Venezuela.
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## Awards

- Degree thesis with distinction EXCELLENT in order to obtain the degree of Master in Earth Sciences. Title: *Obtaining a Rational Methodology for Geotechnical Characterization*.
- Recognition for Teaching at UCAB, awarded for being part of the 20% of the best evaluated professors of the Faculty of Engineering of in the period October 2018 - February 2019.
- Recognition for Teaching at UCAB, awarded for being part of the 20% of the best evaluated professors of the Faculty of Engineering of in the period October 2015 – February 2016.
- Honorable Mention MAGNA CUM LAUDE (grade point average 8.88 – 10.00). 1st place in the graduating class of 40 graduates.

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## Complementary Activities

- Member of the Venezuelan Society of Geotechnical Engineering (2008).
- Member of the Venezuelan Association of Engineers (2005).
- Developer of “geo”. Webpage: <https://geo-webonline.com/> (2021).

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## Contact Information



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