

Helvio Prevelato Gregório

Curriculum Vitæ

Education

- 2010 - 2014 **PhD. in Physical Oceanography**, *University of São Paulo*, Oceanographic Institute.
2007 - 2009 **MSc. in Physical Oceanography**, *University of São Paulo*, Oceanographic Institute.
2002 - 2006 **BSc. (W/Hons) in Oceanography**, *University of São Paulo*, Oceanographic Institute.

Relevant Professional Experience

- 2014 - actual **HP Gregorio Consultancy**, *Brazil/USA - remote*, Environmental Consultant.
2011 - 2014 **Mineral Engineering and Environmental**, *São Paulo, Brazil*, Oceanographer.
2010 - 2010 **Consortium GeoHidroEco**, *Bogotá, Colombia*, Oceanographer.
2007 - 2011 **Hidromares Environmental Assessment and Oceanography**, *Santos, Brazil*, Oceanographer.
2007 - 2007 **Applied Science Association South America**, *São Paulo, Brazil*, Oceanographer.

Relevant Research Experience

- 2004 - 2011 **Laboratory of Coastal Hydrodynamic - University of São Paulo, Brazil:**
- > Peregrino Environmental Monitoring and Calcareous Algae Project. Activities: Data Analysis. Fellowship: Statoil
 - > Pro-Abrolhos Project. Activities: Data Analysis. Fellowship: Petrobras
 - > Study of currents of Admiralty Bay, Antarctica, during the summer. Activities: Scientific Initiation. Fellowship: National Council for Research and Development - Brazil
 - > Water Quality Modelling for Admiralty Bay Project, King George Island, Antarctica. Activities: 456 h scientific research in Brazilian Antarctic Estation Comandante Ferraz. Fellowship: National Council for Research and Development - Brazil
 - > Water Quality Modelling for Admiralty Bay Project, South Sheetlands Islands, Antarctica. Activities: 275 h scientific research in Oceanographic Support Ship Ary Rongel/Brazil Navy. Fellowship: National Council for Research and Development - Brazil
 - > Water Quality Modelling for Admiralty Bay Project, Antarctica. Activities: Scientific Initiation. Fellowship: National Council for Research and Development - Brazil
 - > Deproas|BR Project. Campos and Santos Basins, Brazil. Activities: 204 h in Oceanographic Ship W. Besnard. Fellowship: National Council for Research and Development - Brazil and Petrobras

Skills

- Languages** Portuguese (Native Speaker); English (advanced); Spanish (intermediate/advanced)
- Programming** Python, MatLab, Javascript, Google Apps Script, C/C++, Fortran, HTML, CSS, SQL
- Software** Microsoft Office, Google's Collaboration Suit, QuantumGIS, DEFT3D, SWAN, VisualPlumes, EcomSED
- General** Designing and analyzing numerical models, covering hydrodynamics, water quality, oil, sediment, and waves. Specializing in environmental impact analysis and developing environmental programs with a focus on physical aspects. Proficient in metocean data analysis, visualization, and interpretation. Skilled in environmental risk analysis, emergency planning, and the preparation of technical reports about aquatic environments.

Publication

- PhD Diss.** Subinertial Oscillations in the South Brazil Bight: Numerical Studies (in portuguese)
- MSc Thesis** Numerical Modeling of Sewage Plume Dispersion for the Santos Outfall (in portuguese)
- UG Thesis** Study of Water Masses and Currents of Admiralty Bay, Antarctica, During the Summer (in portuguese)
- Paper** *Castro, B. M., Pereira, A. F. & Gregório, H. P. 2009. Virtual Oceans. Scientific American Brazil Special Edition, v. 3, p. 31-34.* (in portuguese)

Projects

- Professional** With over 15 years of experience in the field, I have been involved in more than 100 projects throughout my career. My expertise spans a diverse range of projects, including scientific assessments, diagnoses, environmental modeling, licensing, and environmental monitoring. A comprehensive list of the projects that I have been involved in, responsibilities, and contractors can be viewed at <https://en.hpgregorio.net/contributions>.
- Personal**
- > Guaecast: operational wave forecast system for Baixada Santista, São Sebastião and Ubatuba, SP, Brazil. Available at <https://guaecast.hpgregorio.net>.
 - > When2board: Interactive historical analysis of wave, wind, and weather data to determine the best time of year for water sports around the world. Available at <https://when2board.hpgregorio.net>.

Teaching and Lecture

- 2014 Lecture: Environmental Risk Management Related to Oil Spill - Oil Spill Brazil Conference & Exhibition - São Paulo, Brazil
- 2010 Short Course: Hydrodynamic and Dispersion Modelling Applied to Environmental Studies (12 h) - V Thematic Week of Oceanography - São Paulo, Brazil
- 2008 Short Course: Applied Physical Oceanography (12 h) - IV Brazilian Symposium of Oceanography - São Paulo, Brazil
- 2006 Short Course: Understanding Oceanography - Physical Oceanography (12 h) - I Thematic Week of Oceanography - São Paulo, Brazil

Awards

- 2013 1st Place in MarinExplore Earth Day Data Challenge
- 2006 1st Place Undergraduate Thesis - Oceanographic Institute of University of São Paulo