

Helvio Prevelato Gregório

Curriculum Vitæ

Professional Profile

Senior Environmental Consultant and Physical Oceanographer with 20 years of experience in aquatic environmental studies, environmental impact assessment, monitoring, numerical modeling, oil-spill risk and emergency planning, and technical coordination. Led or contributed to more than 100 projects in Brazil and abroad across ports and nautical facilities, oil and gas, conservation units, and aquatic impact assessment.

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–Present **HP Gregório Consulting**, *Brazil/USA (remote)*, Senior Environmental Consultant
Coordinates physical-environment studies and technical deliverables involving EIA/RIMA, environmental monitoring, oil-spill emergency plans, numerical modeling, environmental risk analysis, and technical opinions.
- 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 in Admiralty Bay, Antarctica, during the summer. Activities: Scientific initiation. Fellowship: National Council for Scientific and Technological Development (CNPq), Brazil
 - Water Quality Modelling for Admiralty Bay Project, King George Island, Antarctica. Activities: 456 hours of scientific research at the Brazilian Antarctic Station Comandante Ferraz. Fellowship: CNPq, Brazil

- Water Quality Modelling for Admiralty Bay Project, South Shetland Islands, Antarctica. Activities: 275 hours of scientific research aboard the Brazilian Navy oceanographic support ship Ary Rongel. Fellowship: CNPq, Brazil
- Water Quality Modelling for Admiralty Bay Project, Antarctica. Activities: Scientific initiation. Fellowship: CNPq, Brazil
- DEPROAS/BR Project, Campos and Santos Basins, Brazil. Activities: 204 hours aboard the oceanographic research vessel W. Besnard. Fellowship: CNPq and Petrobras

Skills

Languages	Portuguese (Native Speaker); English (advanced); Spanish (intermediate/advanced)
Coding	Python, MATLAB, JavaScript, Google Apps Script, C/C++, Fortran, HTML, CSS, SQL
Software	Microsoft Office, Google Workspace, QGIS, Delft3D, SWAN, Visual Plumes, ECOMSED
Consulting	EIA/RIMA, environmental diagnostics and impact assessment, oil-spill emergency and area plans, environmental risk analysis, technical opinions, environmental mapping, and monitoring program design.
Numerical Modeling	Hydrodynamics; near- and far-field water quality; effluent, oil, and sediment dispersion; waves; drilling fluids and cuttings; topography; and acoustic propagation.
Monitoring and Data	Metocean data collection, analysis, visualization, and interpretation; monitoring of water, sediments, discharges, currents, tides, winds, and waves; preparation of technical reports.

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. <i>Virtual Oceans. Scientific American Brazil Special Edition</i> , v. 3, p. 31-34. (in Portuguese)

Projects

Professional	With 20 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 HERE .
Personal	▪ Gueacast: Operational wave forecasting system for Baixada Santista, São Sebastião, and Ubatuba, São Paulo, Brazil. Available at gueacast.hpgregorio.net. ▪ Ressacast: Experimental operational coastal-hazard forecasting system combining total sea level and wave power to identify periods of increased coastal-impact potential. Available at ressacast.hpgregorio.net. ▪ When2Board: Interactive exploration of decades of historical wave, wind, and weather data to identify the best season for water sports worldwide. Available at when2board.hpgregorio.net.

Teaching and Lecture

- 2025 Lecture: Environmental Impacts — Relationship between Local and Global Pressures - National Science and Technology Week (SNCT 2025) - Federal Institute of Education of São Paulo (IFSP) - Caraguatatuba, Brazil
- 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