

**Jose L. Blanco**  
Curriculum Vitae

**Current position**

Jefe de Investigación Pesquera, Empresa Pesquera CORPESCA, Iquique, Chile  
Director of Research, Instituto de Investigación Pesquera del Norte, Iquique, Chile

**Personal Data**

**Date of Birth:** August 3, 1957

**Place of Birth:** Chile

**Nationality:** Chilean and Spaniard

**Languages:** Spanish and English

Phones: (757) 544 9897 (home) - (757) 683 5556 (office)

eMail: [jblancog@odu.edu](mailto:jblancog@odu.edu) ; [jose.blanco.garcia@gmail.com](mailto:jose.blanco.garcia@gmail.com)

Web page: <http://www.ccpo.odu.edu/~jlblanco>

**Education**

- Ph.D. in Oceanography - Old Dominion University, OEAS, Norfolk, VA. USA (2004).
- Professional degree of Oceanographer - Universidad Católica de Valparaíso, Valparaíso, Chile (1984)
- B.S. Physics - Universidad Católica de Valparaíso, Chile (1977)

**Research Interests**

The main research approach and interest is ... Large-scale Ocean circulation. Physical processes on coastal areas (upwelling, buoyancy, estuaries, bays) their variability and relation with biological productivity. .... Ecosystem analyses of factors affecting water quality and fish habitat and focus on results applicable to resource the analysis of observations from moored instruments and ship-based surveys. Real-time ocean observing systems, remote sensing, time series and climate variability.. Offshore wind resource assessment..

**Skills**

- Demonstrated planning, decision-making, and problem-solving capabilities
- Execution (on time & under budget), Leadership, Team building, Focused Results
- Extensive experience in Projects management
- Experience in multidisciplinary/multinational research environments
- Experience in the use of software for data bases, image processing, graphics design, text editors, etc. in Windows and UNIX environment. Programmer in Matlab and FORTRAN
- Comprehensive experience in the operation of meteorological and oceanographic instruments (ADCP, CTD, towed profiling instrument (acrobat), optical instruments, etc.)
- Experience in the processing and use of satellite information (SST, altimetry, wind, and color)
- Experience in the design and deployment of moorings
- Participant in and organizer of more than 50 large oceanographic expeditions along the coast of Chile and Antarctic Peninsula, and a large number of 1-2 days oceanographic cruises at coastal areas in Chile, Colombia, Honduras, Mexico and USA

## Professional Experience

- Oct 2010 - Present      Director of Research, Instituto de Investigación Pesquera del Norte, Iquique, Chile
- Sep 2007 – Sep 2010    **Research Scientist** - Old Dominion University, Norfolk, VA. I worked on the following projects: -“Offshore Wind, Waves and Currents Environment Characterization” funded by Virginia Coastal Energy Research Consortium; -“Mid-Atlantic Ocean Model Calculations” with Princeton University and -“Seabed Scour Considerations” with Fugro Atlantic, funded by the US Minerals Management Service; - “Surface Current Mapping in the Lower Chesapeake Bay” funded by Mid-Atlantic Regional Coastal Ocean Observing System (MARCOOS); and -“Carrying Capacity of Titicaca Lake” (PI) funded by Hispanic Peruvian Cooperation Fund, Peru.
- 1999 – Present        **Senior consultant** - Data Analysis, Scientific Reviews, Synthesis documents, Circulation studies. Consultantship to institutions in Chile, Colombia, USA and Peru:
- Centro Control Contaminación del Pacífico (CCCCP), Tumaco, Colombia
  - Instituto de Fomento Pesquero (IFOP), Valparaíso, Chile;
  - Fundación CEQUA, Punta Arenas, Chile;
  - Servicio Hidrográfico y Oceanográfico de la Armada (SHOA), Valparaíso, Chile;
  - United Nations Industrial Development Organization (UNIDO), Valparaiso, Chile;
  - Global Environmental Facility (GEF), Punta Arenas, Chile;
  - Universidad Católica del Norte, Sede Coquimbo, Chile;
  - FUGRO, USA
  - PROPECCA, Peru
  - Old Dominion Research Foundation
- Apr 2005 – Aug 2007    **Post-Doctoral Research Associate** - NASA WFF, Wallops Island, VA  
Coordination, execution and data processing of seasonal cruises along the Mid-Atlantic Bight, biweekly cruises off Wallops Island. Calibration and operation of optical Instruments. Installation of a bottom mounted ADCP on the continental shelf.
- Sep 2004 - Mar 2005    **Professor** – Universidad del Mar, Puerto Angel, Oaxaca, Mexico  
- Taught Introduction to Oceanography and Physical Oceanography to students of Oceanology and Marine Sciences.
- May 2000 - Sep 2004    **Research Assistant** - Old Dominion University - CCPO, Norfolk, VA, USA  
- Work with the principal investigator writing proposals, collecting and processing oceanographic data and writing research papers.
- 1991-2000              **Principal Investigator** - Instituto de Fomento Pesquero, Valparaíso, Chile  
- Write proposals, coordination with other disciplines, collect and process oceanographic data, and write research reports.
- 1987-1991              **Logistics and Project Manager** – Instituto Antartico Chileno, Chile  
- Coordination and implementation of the Chilean Antarctic research program. Project Management, Work with interdisciplinary and international teams.
- 1983-1986              **Principal Investigator** - Instituto de Fomento Pesquero, Santiago, Chile  
- Write proposals, coordination with other disciplines, collect and process oceanographic data, and to write research reports.
- 1980-1982              **Research assistant** - Instituto de Fomento Pesquero, Santiago, Chile  
- Write proposals, coordination with other disciplines, collect and process oceanographic data, and to write research reports.
- 1978-1980              **Research assistant** - Universidad Católica de Valparaíso, Valparaíso, Chile  
- Work with the principal investigator in the collection and processing of oceanographic data.

**Teaching Experience:** Introduction to Oceanography  
Introduction to Physical Oceanography  
Seminaries - Austral Ocean – Regional Oceanography  
Time series analysis

**Publications** (available online at <http://www.ccpo.odu.edu/~jlblanco>)

- Morse, R. E.; J. Shen; J. L. Blanco; W. S. Hunley; S. Fentress; M. Wiggins; M. R. Mulholland. 2011. Environmental and Physical Controls on the Formation and Transport of Blooms of the Dinoflagellate *Cochlodinium polykrikoides* Margalef in the Lower Chesapeake Bay and its Tributaries. *Estuaries and Coasts*. DOI 10.1007/s12237-011-9398-2
- Torres, R.; M. Frangópulos, M. Hamame, V. Montecino, C. Maureira, G. Pizarro, B. Reid, A. Valle-Levinson, J. L. Blanco. 2011. Nitrate to silicate ratio variability and the composition of micro-phytoplankton blooms in the inner-fjord of Seno Ballena (Strait of Magellan, 54°S), *Continental Shelf Research*, Volume 31, Issues 3-4, Fjord Oceanography of the Chilean Patagonia, Pages 244-253, DOI: 10.1016/j.csr.2010.07.014.
- Mulholland, M., R. Morse, G. Boneillo, P. Bernhardt, K. Filippino, L. Procise, J. L. Blanco, et al., 2009. Understanding Causes and Impacts of the Dinoflagellate, *Cochlodinium polykrikoides*, Blooms in the Chesapeake Bay, *Estuaries and Coasts*. 32 (2009) 734-747.
- Fuenzalida, R., W. Schneider, J. L. Blanco, J. Garcés-Vargas y L. Bravo. Chile-Perú Current System and Water Masses between Caldera and Easter Island. 2007. (In Spanish) *Ciencia y Tecnología del mar (CONA)*, Chile 30(2)1:16.
- Valle-Levinson, A., J. L. Blanco and M. Frangópulos. 2007. Depth-dependent overtides from internal tide reflection in a glacial fjord. *Estuaries and Coasts* 30(1)1:10.
- Valle-Levinson, A., J. L. Blanco and M. Frangópulos. 2006. Frontogenesis in a Magellan glacial fjord. *Ocean Dynamics* 56(3-4)217-227. DOI 10.1007/s10236-005-0048-8.
- Atkinson, L. P., J. Huthnance and J. L. Blanco. 2005. Circulation, Mixing and the Distribution of Re-Mineralized Nutrients. In: Robinson, A. R. and K. H. Brink. *The Sea* 13:227-267
- Escribano, R., S. Rosales and J. L. Blanco. 2004. Understanding upwelling circulation off Antofagasta (northern Chile): A three-dimensional numerical-modeling approach. *Continental Shelf Research* 24(1): 37-53.
- Valle-Levinson, A. and J. L. Blanco. 2004. Observations of wind influence on Exchange flows in a Strait of the Chilean Inland Sea. *Journal of Marine Research*. 62, 721-741
- Blanco, J.L., P. Barría, J. Castillo and L.P. Atkinson (2002). Response of anchovy (*Engraulis ringens*) off Northern Chile to the 1997-1998 El Niño-La Niña sequence. *Invest. Mar., Valparaíso*, 30(1): 107-108.
- Atkinson, L. P.; A. Valle-Levinson, D. Figueroa, R. De Pol-Holz, V. Gallardo, W. Schneider, J. L. Blanco and M. Schmidt. 2002. Oceanographic observations in Chilean coastal waters between Valdivia and Concepcion. *Journal of Geophysical Research*, 107(C7), 10.1029/2001JC000991
- Blanco, J. L; M. E. Carr; A. Thomas and P. T. Strub. 2002. Oceanographic conditions off northern Chile during the 1996 La Niña and 1997-1998 El Niño: Part 1: Hydrographic conditions. *Journal of Geophysical Research* vol 107 No. C3, 10.1029/2001JC001002.
- Carr, M. E.; P.T. Strub; A. Thomas and J.L. Blanco. 2002. Evolution of 1997-1999 El Nino conditions off the western coast of South America: a remote sensing perspective. *Journal of Geophysical Research*, Vol 107. No. C12, 3236
- Valle-Levinson, A., J.L. Blanco, J. J. Fierro. 2002. Observations of wind effects on exchange flows in a channel constriction of the Chilean Inland Sea. In the 2nd Meeting on the Physical Oceanography of Sea Straits, Villefranche, 15 th -19 th April 2002.
- Blanco, J. L; A. Thomas; M. E. Carr and P. T. Strub. 2001. Seasonal Climatology of Hydrographic Conditions in the Upwelling Region off Northern Chile. *Journal of Geophysical Research*. Vol 106 No. C6, 11,451-11,467.

- Morales, C., J. L. Blanco, M. Braun and N. Silva. 2001. Chlorophyll-a distribution and associated oceanographic condition off northern Chile during the summer and autumn 1994 and seasonal comparison for period 1993-1994. *J. Mar. Biol. Ass. UK* 81: 193-206 (2001).
- Thomas, A., J. L. Blanco, M.E. Carr, P.T. Strub and J. Osses. 2001. Oceanographic conditions off Northern Chile during the 1996 La Nina and 1997-1998 El Nino. Part 2: Satellite-measured chlorophyll and temperature patterns. *Journal of Geophysical Research*, Vol 106, No.C1, 899-915.
- Valle-Levinson, A., J. Moraga, J. Olivares, J. L. Blanco. 2000. Tidal and residual circulation in a semiarid bay: Coquimbo bay, Chile. *Continental Shelf Research* 20 (2000) 2009-2028.
- Uribe, E., y J. L. Blanco. 2001. Capacidad de los sistemas acuáticos para el sostenimiento de cultivo de pectinidos: El caso de *Argopecten purpuratus* en la bahía Tongoy, Chile. En: *Los Moluscos Pectinidos de Iberoamerica: Ciencia y Acuicultura*. A.N. Maeda-Martinez (ed.) 2001, Cap.12.
- Pizarro, G. J. L. Iriarte, V. Montecinos, J. L. Blanco y L. Guzman. 2000. Phytoplanktonic biomass distribution and maximum primary production in southern fjords and channels 47-50S) during October 1996. *Ciencia y Tecnología del Mar, CONA*. 23: 25-47 (In Spanish).
- Pizarro, L., J.L. Blanco, R. Martinez and A.R. Pineda. 2000. Meteorological and oceanographic adjustment in the Southeast Pacific during the La Nina 1999. Second jointed regional cruise, May 1999. South Pacific Permanent Commission (CPPS). Special Publication, 2000.
- Morales, C., S. Hormazabal and J. L. Blanco. 1999. Inter-annual variability in the meso-scale distribution of the upper boundary of the oxygen minimum layer off northern Chile (18-24S): Implications for the pelagic system and biogeochemical cycling. *Journal of Marine Research* 57, 909-932.
- Fuenzalida, R, J. L. Blanco; R. Nuñez; S. Hormazabal. 1999. Efectos oceanográficos y meteorológicos durante el evento El Niño 1997-98, en la zona de Iquique (20° S). *Rev. Invest. Cient. Tecnol.*, 5: 56-59., Antofagasta, Chile.
- Blanco, J.L., L. Pizarro, T. de la Cuadra, G.A. Camacho, R. Martinez y J. Quintana. 1998. Oceanographic and meteorological characteristics of the Southeast Pacific during the decline of El Nino 1997-98. Jointed regional cruise of May 1998. Contribution of the South Pacific Permanent Commission (CPPS) for the International year of the Oceans. Special Publication, 1998.
- Morales, C., J. L. Blanco, M. Braun, H. Reyes and N. Silva. 1996. Chlorophyll-a distribution and associated oceanographic condition in the upwelling region off Chile during the winter and spring 1993. *Deep-Sea Research I*, 43(3):267-289.
- Morales, C., M. Braun, H. Reyes, J.L. Blanco and A.G. Davies. 1996. Anchovy larval distribution in the coastal zone off northern Chile: the effect of low dissolved oxygen concentration and of a cold-warm sequence (1990-1995). *Investigaciones Marinas*. Valparaíso, Chile, 24: 77-96.
- Moraga, J., A. Valle-Levinson and J.L. Blanco. 1995. Hydrography and sea surface dynamics on the coastal region of the South-eastern Pacific (30S). *Investigaciones Pesqueras*. (Chile) 38: 55-73. (In Spanish)
- Alcocer, C., R. Kelly, M. Mendez, J. Carreno y J.L. Blanco. 1988. Alteraciones climáticas y oceanográficas asociadas al evento El Niño. *IFOP. Cienc. y Tec. del Mar, CONA* 12. 1988.
- Kelly, R. y J.L. Blanco. 1986. Hidrografía del estrecho Bransfield durante el verano austral 1985 (SIBEX-Fase II). *Ser. Cient. INACH*(35) :7-30; 1986.
- Kelly, R. y J.L. Blanco. 1986. Características oceanográficas de la zona norte de Chile durante la declinación de El Niño 1982/83. *Invest. Pesq. (Chile)*. 33:77-90.
- Kelly, R., J.L. Blanco y C. Martinez. 1986. Fluctuaciones ambientales de baja frecuencia y su relación con el índice gonádico de *Sardinops sagax* en el norte de Chile. *Boletín ERFEN* N° 20 Ene-Mar 1986.
- Blanco, J.L. y M. Diaz. 1985. Características Oceanográficas y desarrollo de "El Niño" 1982/83 en la zona norte de Chile. En: *Taller Nacional Fenómeno El Niño 1982/83*. Santiago. *Invest. Pesq. (Chile) Número Especial* (32):191-193; 1985
- Kelly, R., J.L. Blanco y M. Diaz. 1985. Hidrografía del estrecho Bransfield durante el verano austral 1984 (SIBEX-Fase I). *Ser. Cient. INACH* (33):15-48;1985.
- Kelly, R. y J.L. Blanco. 1984. Estudio Oceanográfico de las aguas del norte de Chile durante febrero y marzo de 1983. *Rev. Com. Per. Pacífico Sur*, (15):179-201, 1984.
- Kelly, R. y J.L. Blanco. 1984. Proceso de surgencia en punta Nugurne, Chile (lat. 36°S), marzo 1983. *Invest. Pesq. (Chile)* 31:89-94.

#### **b) Manuscript in preparation**

- Mulholland, M. R., Bernhardt, P. W., Filippino, K. C., Blanco, J. L., Mondragon, E., Moisan, P.H., and Zehr, J. P.  $N_2$  fixation and *nifH* gene diversity in the coastal mid-Atlantic Ocean: Impact on marine nitrogen budgets.
- Blanco, J. L. Inter-annual and spatial variability of the wind field along the South America coast.
- Blanco, J. L., L. P. Atkinson, C. Makinen and T. A. Moisan. Wind Variability over the Middle Atlantic Bight and its effects on the Coastal Circulation.
- Blanco, J. L., L. P. Atkinson, C. Makinen and T. A. Moisan. Circulation variability at the wallops coastal observatory laboratory.

#### **c) Others documents (Thesis)**

- Blanco, J. L. 2004. Inter-Annual to Inter-Decadal Variability of Upwelling and Anchovy Population off Northern Chile. A Dissertation submitted to the Faculty of Old Dominion University as Requirement for the Degree of Doctor of Philosophy in Oceanography. Old Dominion University, December 2004.
- Blanco, J. L. 1984. Circulation characteristics over the continental shelf off Talcahuano. Thesis for Professional degree of Oceanographer. Escuela de Ciencias del Mar. Universidad Católica de Valparaíso. 1984. (In Spanish)

#### **d) Others documents (Technical reports and presentations)**

During my work in the Instituto de Fomento Pesquero (Chilean Fisheries Research Institute), I wrote many technical reports (app 80) as result of my research. Also, during my career I have participated in a large number of seminars and meetings around the world. That information it not included here.

#### **Peer Review**

For many years I have been peer reviewer of papers submitted to journals, and proposal submitted to Funding organizations in USA, Mexico and Chile. **Journals** - Progress in Oceanography, Journal of Physical Oceanography, Journal of Marine Research, Deep Sea Research, Ciencia y Tecnología del Mar. **Proposals** - National Science Foundation, New York Sea Grant, Fondo de Ciencia y Tecnología (FONDECYT), Fondo de Investigación Pesquera.

#### **Professional societies**

Sociedad Chilena de las Ciencias del Mar. Since 1984  
American Geophysical Union (AGU). Since 2002  
Marine Technology Society (MTS). Since 2009

May 2011