# FULL CURRICULUM VITAE ET STUDIOURUM

Updated December 2014

## ANGELO CAMERLENGHI

Born in Bergamo, Italy, 26 August 1960 Married, with 3 children. Laurea, Milano, Earth Sciences MS, College Station TX, Geological Oceanography Doctorate, Milano, Earth Sciences

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#### **Present Position:**

Director, Geophysics Research Section Istituto Nazionale di Oceanografia e di Geofisica Sperimentale OGS Borgo Grotta Gigante 42/C 34010 Sgonico, Trieste, Italy e-mail: acamerlenghi@ogs.trieste.it

Mother language: Italian Fluent in English Fluent in Spanish, Basic knowledge of Catalan

# PROFESSIONAL BACKGROUND

Assistant Curator at the Civic Museum of Natural Sciences E. Caffi, Bergamo, Italy from May 1985 to May 1986.

<u>Research Assistant</u> at the Ocean Drilling Program, 1000 Discovery Dr., Texas 77843 from September 1986 to September 1988.

<u>Assistant Secretary</u> at the ESCO (ESF Scientific Consortium for ODP) Secretariat, Department of Earth Sciences, University of Milano, from July 1989 to September 1991.

<u>Junior Researcher</u> (Ricercatore) at Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) from December 1991 to December 1996 with a 3+2 years contract.

<u>Senior Researcher</u> (Primo Ricercatore) with permanent position at Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Borgo Grotta Gigante 42/C, I-34010 Sgonico (TS) Italy (OGS) from December 30 1996 to August 30 2004.

Research Professor and Associate Professor ICREA, with permanent position at Istitució Catalana de Recerca i Estudis Avançats, C/o Departament d'Estratigrafia, P. i Geociències Marines Universitat de Barcelona / Facultat de Geologia, from September 2004 to July 2012.

<u>Contract Professor, University of Trieste,</u> Department of Mathematics and Geosciences, Course: Marine Geology, since 2012.

#### **EDUCATIONAL BACKGROUND**

<u>Laurea</u> *cum laude* in Earth Sciences at the Department of Earth Sciencesm University of Milano, Italy, on November 15 1984. Thesis: "Evoluzione Geologica Post-Messiniana e Geomorfologia del Bacino di Sora (Valle del Liri)" (Post-Messinian Geological Evolution and Geomorphology of Sora Basin (Liri Valley)". Scientific advisors: M.B. Cita and M. Coltorti.

Master of Sciences in Geological Oceanography at the Department of Oceanography of Texas A&M University, College Station, Texas on December 17 1988. Thesis: "Subsurface Dissolution of Evaporites in Eastern Mediterranean Sea". Scientific advisor: W.R. Bryant.

Research Doctorate in Earth Sciences at the Department of Earth Sciences University of Milano, Italy, on July 17 1991. Thesis: "Il Diapirismo d'Argilla sulla Dorsale Mediterranea" (Mud Diapirism on the Mediterranean Ridge). Scientific advisor: M.B. Cita.

#### RESEARCH FELLOWSHIPS

Fullbright from September 1986 to September 1988 (at Texas A&M University, College Station, Texas)

#### TEACHING EXPERIENCE AND ACADEMIC ADVISORSHIPS

- 1989-1999 <u>Co-tutor (thesis co-advisor)</u> of three students in of the Degree in Geology, Department of Earth Sciences, University of Milano, and two students in the Degree of Geological Sciences of the University of Trieste. Theses in various fields of Marine Geology and Geophysics.
- 1990-1991 <u>Laboratory of Geology</u>, Degree in Natural Sciences, Department of Earth Sciences, University of Milano (course lead by prof. M.B. Cita),
- 1993-1996 <u>Co-tutor (thesis co-advisor)</u> in the Research Doctorate program in Earth Sciences of the University of Parma (Prof. L. Torelli, Student M. Rebesco). Title: The Sediment Drifts of the Pacific Margin of the Antarctic Peninsula: Seismo-stratigraphic analysis of the Continental Rise.
- 1996 <u>Invited Lecturer</u> at the International School of Earth and Planetary Sciences (CNR and University of Siena). Scientific Committee: G.Ranalli, C.A.Ricci, F.Ricci Lucchi, V. Trommsdorff). 12-20 September 1996. Sedimentay Basins Models and Constraints. Convenor. S. Cloetingh.
- 1997-1998 <u>Contract Professor</u> within the Marine Geology course of Degree in Natural Sciences of the Department of Earth Sciences of the University of Milano.
- 1999 <u>External Examiner</u> of the one PhD program in Earth Sciences at the University of Birmingham (UK). Internal Examiner: Prof. D.H.W. Hutton, Supervisor: Prof. G. Westbrook. Student: Richard Haydin Summer.

- 1999 <u>Lecturer of the course of Geosciences</u> at the International Maritime Academy di Trieste. Introduction Review of most common acoustic tools and basic terminology, Overview on the activity of the R/V OGS-Explora, Methods of seafloor sampling, Sediment analyses.
- 2001-2003 <u>Co-tutor (thesis co-advisor)</u> of a students in the Research Doctorate program in Polar Sciences (Prof. C.A.Ricci; student A. Caburlotto) of the University of Siena. Title: Reconstruction of the Plio-Quaternary sediment processes of the Wilkes Land continental slope and rise (East Antarctica).
- Member of the Reading and Examining Board of one Doctor of Sciences program of the University of Ghent (Belgium) in 2001. Supervisor: Prof. M.DeBatist; Student S. Ceramicola. Thesis in Depositional, stratigraphic and structural response to rifting activity in Akademichesky Ridge Accomodation Zone using high-resolution seismic reflection and core data.
- 2004 <u>Contract Professor</u> in the Programa de Doctorado en Ciencias del Mar, of the de la Universidad Politécnica de Catalunya, (UPC) el Consejo Superior de Investigaciones Científicas (CSIC) y la Universidad de Barcelona (UB). 20 hours in the course of 'Antarctic Mrine Geology'.
- Member of the 'Doctoral Thesis Committee' entitled "El Promontorio Balear: morfología submarina y recubrimiento sedimentario" by Juan Acosta Yepes. Supervisor Prof. Miquel Canals i Artigas, within the Programa de Doctorat de "Ciències de la Terra" of the University of Barcelona.
- 2007-2011 Part time <u>Associate Professor at the University of Barcelona</u>, Faculty of Geology. Course: Fluid circulation in Marine Sediments, for the European Master Program of Oceanography and Management of the Marine Environment.
- 2006-present <u>Co-director of the Doctoral Program</u> of Sergio Costa Planells, within the Doctorate in Marine Sciences of the University of Barcelona. Thesis on fluid circulation in marine sediments surrounding the Balearic Promontory.
- 2007-present Co-director of the Doctoral Program of Mayte Pedrosa Gonzalez, within the Doctorate in Marine Sciences of the University of Barcelona. Thesis on the sedimentary evolution and seafloor morphology of the Storfjiorden trough mouth fan (Svalbard).
- Member of the 'Doctoral Thesis Committee' entitled "Post-Rift Sedimentary Evolution of the Central Bransfield Basin (Antarctic Peninsula)" by Margarita García García. Yepes. Supervisors Dr. Gemma Ercilla y Belen Alonso, within the Programa de Doctorat de "Ciències de la Terra" of the University of Barcelona.
- Member of the 'Doctoral Thesis Committee' entitled "Sedimentology and Geochemistry of gas hidrate-rich sediments from the Oregon margin (Ocean Drilling Program Leg 204)" by Elena Piñero Melgar. Supervisors Dr. Eulàlia Gràcia Mont and Dr. Francisca Martínez Ruíz, y Belen Alonso, within the Programa de Doctorat de "Ciències de la Terra" of the University of Barcelona.
- Member of the 'Doctoral Thesis Committee' entitled "Frequency and Sedimentology of Hoocene Seismo-turbidites on teh Cascadia Subduction Zone and Northern San Andreas Fault Continental Margins off North America)" by Julia Gutiérrez Pastor. Supervisors Dr. Carlota Escutia Dotti and Dr. Hans Nelson, within the Programa de Doctorat de "Ciències de la Terra" of the University of Granada.

- 2009-2010 <u>Director of the Master Program</u> of Cristina Sanchez Cervera within the European Master Program of Oceanography and Management of the Marine Environment (University of Barcelona). Thesis on the sedimentary ad geochemical evidence of fluid flow from the Algero-Balearic Abyssal Plain sediments.
- 2009-2011 <u>Director of the Master Program</u> of Francesc Palmer within the European Master Program of Oceanography and Management of the Marine Environment (University of Barcelona). Thesis on the digital data base of submarine landlides in the Mediterranean Sea.
- 2011-2014 <u>Co-director of the Doctoral Program</u> of a the Doctoral Program of Jaume Llopart within the Doctorate in Marine Sciences of the University of Barcelona. Thesis on the geotechnical characteristics and causes of submarine ladslides of the Storfjiorden trough mouth fan (Svalbard).
- 2012-present Contract Professor for the couser fo Marine Geology, Department of Mathematics and Geosciences, University of Trieste.
- 2013-present Member of the Council of the International Doctorate school Fluid Mechanics and Earth Sciences (FMES), University of Trieste, ICTP, and OGS.

# CO-ORDINATION AND MANAGEMENT OF RESEARCH STRUCTURES AND ACTIVITIES

Within the Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS).

- 1997-2004. Co-ordinator of the Research Unit "Interpretation of Geophysical Data (INTE)" within the Department of Geophysics of the Lithosphere. The INTE Research Unit is composed of 6 staff researchers 3 contract researchers, and 2 doctorate students. The task of the research unit is to undertake in scientific autonomy research projects aimed at the understanding of sedimentary and geodynamic processes through the integrated interpretation of geophysical and geological data. The INTE Unit interprets seismic reflection and refraction data, well data (stratigraphy and logs), bathymetric and sedimentological data. The INTE Unit manages a Multisensor Core Logger.
- 1997 <u>Co-Proponent</u> of the high and intermediate resolution multi-channel seismic reflection system of OGS.
- Member of the OGS Committee for the decisions related to the Research Vessel OGS-Explora.
- 1999-2000 OGS representative within the Geo-Italia Working Group established at the 31<sup>st</sup> International Geological Congress of Rio de Janeiro.
- 2002-2004 <u>Alternate OGS member</u> of the Scientific programme Committee of the 32<sup>nd</sup> International Geological Congress of Florence 2004.
- 2004-2005 <u>Chairman</u> of IODP-Italia (National Committee for the Italian Participation to the Integrated Ocean Drilling Program ).

- 1994-2002 Member of the Scientific Board of the CNR Research Institute GeoMare Sud, Naples, Directed by prof. B. D'Argenio)
- 1995-2003 <u>Member</u> of the CNR Committee for the co-ordination for the Italian activities within the Ocean Drilling Program.

# Within the Italian National Program for Antarctic research (PNRA)

- 1993-1996. Member of the Committee "Structure and Evolution of Peri-Antarctic Basins and Margins of the Antarctic Plate" chaired by Prof. E. Bonatti, replaced by Dr. N. Zitellini.
- 1996-1998. <u>Project Co-ordinator</u> "Geophysical Investigations of the Glacial Depositional System of the Pacific Margin of the Antarctic Peninsula" within the Thematic Area chaired by dr. G. Brancolini.
- 1999-2004. Member of the Geology Committee chaired by Prof. C. Ghezzo.

# Within the Ocean Drilling Program (ODP) and Integrated Ocean Drilling Program (IODP)

- 1990. ESCO (ESF Consortium of Ocean Drilling) <u>Delegate</u> to the Cascadia Detailed Planning Group, Quinault (WA) USA, 11-13/8 1990.
- 1992-1995 ESCO (ESF Consortium of Ocean Drilling) <u>Delegate</u> to the ODP Site Survey Panel.
- 1996 <u>Member</u> of the ANTOSTRAT Detailed Planning Group (College Station TX, 29-31/5/1996)
- 1998 <u>Co-Chief Scientist</u> of ODP Leg 178 (Antarctic Peninsula), 12/2 9/4/1998.
- 2004-2005 Italian <u>Delegate</u> in the ECORD Science Support and Advisory Committee (ESSAC).
- 2005 <u>Organizing and Scientific Committee member</u> of the ESF Magellan Series Workshop: Scientific Ocean Drilling behind the assessment of geo-hazards from submarine slides. Barcelona, 25-27 October 2006.

# 2006-present Member of the Spanish Committee for IODP.

2007 <u>Steering Committee member</u> of the IODP-IMI Workshop on Geohazards, Portland, Oregon (USA), August 26-30 2007.

# Within the activities promoted by the European Commission.

- 1998-present. <u>Expert Evaluateur</u>, DGXII AG, Science, Research & Development (n. EE19981A23852)
- Participation to the Planning Workshop "Geomarine Research Using Advanced Deep Water and Deep Seismic Acquisition Techniques", Geomar, Kiel, Germany, 6-7 May 1991.
- 1998 <u>Participation</u> to the FP V Planning Workshop "Extreme Marine Environments", Geomar, Kiel, Germany, 19-22 November 1998.

Participation to the FP V Planning Workshop on Challenges for Academia and Oil Industry in Deepwater Margin Studies, Tromsø, Norway, 18-20/3/1999.

# Other Activities

- 2006–present Member of the Scientific Board of MARUM, University of Bremen Germany.
- Member of the <u>Review Panel</u> of the ESF EuroCore program EUROMARC.
- 2009 Present Member of the ERICON (European Research Icebreaker Consortium Aurora Borealis) Science Advisory Panel, ESAP as expert in Seafloor Processes and Natural Hazards. http://www.eri-aurora-borealis.eu/en/home/

#### MAIN RESEARCH PROJECTS AND ACTIVITIES

Within the Ocean Drilling Program (ODP) and the Integrated Ocean Drilling Program (IODP)

- 1987 <u>Shipboard Marine Technician</u>, ODP Leg 115 (Indian Ocean), 13/5 2/7 1987.
- Shipboard Sedimentologist, ODP Leg 146 (Cascadia Margin), 20/9 22/11 1992.
- 1993-1995 Principal Proponent of ODP Drilling Proposal N. 330 Rev. "Time progressive Continental Collision: The Mediterranean Ridge Accretionary Complex in the Eastern Mediterranean (Phase-1 Shallow Drilling). This proposal has been accepted by ODP and included in the drilling program of ODP Leg 160 (1995).
- 1995-1998 <u>Co-proponent</u> of ODP Drilling Proposal N. 425 "Antarctic Peninsula Pacific Margin: Antarctic Glacial History and Causes of Sea Level Changes". This proposal has been accepted by ODP and included in the drilling program of ODP Leg 178 (Antarctic Peninsula).
- 1998 <u>Co-chief Scientist</u> of ODP Leg 178 (Sea-Level Change and Glacial History, Antarctic Peninsula).
- Principal proponent of ESF Magellan Series Workshop: 'Scientific Ocean Drilling behind the assessment of geo-hazard from submarine slides, Barcelona, October 25-27 2006. ESF Grant 1106 of €18.000,00.
- 2007-present Principal proponent of IODP proposal #715: Geohazards from Submarine Landslides (MEDSLIDES). Presently under review.
- 2008-present Co-proponent of IODP proposal #748: Multi methodological testing of landslide trigger mechanisms at the Ligurian slope (Western Mediterranean): the Nice Airport Landslide (NAIL). Presently under review. Principal proponent Sylvia Stegmann (MARUM, Bremen).
- 2008-present Co-proponent of IODP Ancillary Proposal Letter: Nankai Trough Submarine LandSLIDE history (NanTroSLIDE). Main proponent Michael Strasser (MARUM, Bremen). Drilld as IOSP Exp. 333 (2010-2011).

Within the Programma Nazionale di Ricerche in Antartide (PNRA)

Principal Investigator of the following Projects:

Structural Evolution of the Pacific Margin of the Antarctic Peninsula: Progressive collision between trench and ridge. PNRA Annual Executive Plan (PEA) 1993-94. PNRA Contribution of 90 MLIT (€46,500.00).

Giant Sedimentary Deposits by Bottom Currents on the Pacific Margin of the Antarctic Pensinula (SEDANO). In co-operation with the British Antarctic Survey. PNRA Annual Executive Plans (PEA) 1994-95 and 1995-96. Total PNRA Contribution of 235 MLIT ( $\[ \in \]$ 121,000.00) plus 30 days ship time of R/V OGS-Explora.

Sediment Drifts of the Antarctic Offshore (SEDANO-II) in co-operation with the British Antarctic Survey. Annual Executive Plans (PEA) 1996-97. Total PNRA Contribution of 199 MLIT (€102,800.00) plus 30 days ship time of *R/V OGS-Explora*.

ODP (Ocean Drilling Program) Leg 178. In co-operation with the British Antarctic Survey and Hamilton College. Annual Executive Plans (PEA) 1997-98 and 1998-99. Total PNRA Contribution of 164 MLIT (€84,700.00) plus 7 days ship time of *R/V OGS-Explora*.

High Resolution Morphological Mapping of a Complete Glacial Depositional System of the Antarctic Peninsula (SEDANO-IIIB) in co-operation with the Spanish Antarctic Program (University of Barcelona, M. Canals). Annual Executive Plans (PEA) 1999-2000. Total PNRA Contribution of 80 MLIT (€41.300.00). Ship: BIO-Hesperides.

Tests of Seismic Reflection Investigations on Antarctic Subglacial Lakes. Annual Executive Plans (PEA) 2001-02 and 2002-03. Total PNRA Contribution of 70 MLIT (€36,200.00).

<u>Co-proponent and associate investigator of various projects</u> funded by PNRA to E. Lodolo (PI) for the study of the gas hydrate province of the south Shetland Margin (project BSR) and to M. Rebesco for the seismic study of the seafloor of the former Larsen Ice Shelf in the Weddell Sea (Project Larsen) in co-operation with the US Polar Program (E. Domack, Hamilton College).

Within the International Polar Year (IPY) 2007-2009.

Coordinator of IPY Activity #367 Neogene ice streams and sedimentary processes on high-latitude continental margins (NICE STREAMS).

Within the programmes funded by the European Commission

Principal investigator (OGS Partner) of the MAST-II project <u>An Integrated Investigation of the Fluid Flow Regime of the Mediterranean Ridge</u> (MEDRIFF) (Contract MAS2-CT92-0037 MEDRIFF), 1993-1996. EC Contribution of €69,000.00.

Principal investigator (OGS Partner) of the FP V project <u>Techniques for the Quantification of Methane Hydrate in European Continental Margins</u> (HYDRATECH) (Contract EVK3-CT-2000-00043), 2001-2003. EC Contribution of €121,153.00.

Participant (OGS Partner PI Laura De Santis) in the FP V project <u>The Stratigraphical</u> <u>Development of the Glaciated European Margin</u> (STRATAGEM) (Contract EVK3-CT-1999-00011), 2000-2002. EC Contribution of €155,061.00.

Principal investigator (OGS Partner) of the of the FP V Research Training Networks "European Deep Ocean Margins: A New Training-Through-Research Frontier (EURODOM) (Contract HPRN-CT-2002-00212), 2003-2006. EC Contribution of: €196,200.00.

Principal proponent at OGS within the Integrated Project Hotspot Ecosystems Research on the Margins of European Seas (HERMES), co-ordinated by Phyl Weaver, 2005-2008

(budget allocated €200,120.00). Note. The contract has remained at OGS after my move to Barcelona. I am now participant in HERMES through the University of Barcelona.

Co-ordinator of Marie Curie action (intra-European fellowships) Geological Assessment of Gas Hydrates in the Mediterranean Sea (HYDRAMED) due starting October 1st 2004 at OGS (Contract MEIF-CT-2003-501814). Contribution to OGS of €197,239.00. Note: Following the appointment at ICREA, I have passed the co-ordination to dr. Umberta Tinivella, OGS.

Spanish member in the Management Committee of COST Action ES0902 - <u>Permafrost</u> and gas hydrate related methane release in the Arctic and impact on climate change: <u>European cooperation for long-term monitoring</u> (PERGAMON). 2009-2013. Rough total contribution of €260,000.00. Action Coordinator Jens Greinert (NIOZ, NL).

Participant in the EC FP7. ENV.2009.2.2.1.6 Coordinating and supporting action The <u>Deep Sea & Sub-SeafloorFrontier</u> (DS³F). 2009-2012. Approximate funding of €1,000,000.00 Coordinator A. Kopf (MARUM, Bremen).

Principal proponent of the EU 7th FWP EUROFLEETS (Towards an Alliance of European Research Fleets) project Salt deformation and sub-salt fluid circulation in the Algero-Balearic abyssal plain (SALTFLU). 2010-2013. The funding of this project through the award of 11 days of ship time of the R/V OGS-Explora, equivalent to 330,000.00 Euros. Cruise scheduled in 2011.

#### Within projects funded by the Industry

Research Contract with SINTEFF Civil and Environmental Engineering (Norway) within the project Ormen Lange Verification on Seabed Stability, Activity 7 - Gas Hydrates. 2000-2003. Project funded by Norsk Hydro for the evaluation of the stability of the Norwegian Margin above the Ormen Lange gas field. Sinteff total contribution of Contribution of €36,553.85.

Associate research Contract with the University of Parma for the project <u>Study of the mechanisms of deformation of the Eastern Mediterranean accretionary wedge</u>. Project funded by ENI AGIP Division (Contratto AGIP n. 01-7909457/AB il 10/11/1998). Contribution to OGS of €10,325.00.

UB- GRC Geociències Marine team member in contract with ENDESA Distribución Eléctrica for seabed characterization between the islands of Mallorca, Ibiza, and Formentera prior to electrical cable deployment (<u>Asesoramiento para el reconocimiento estratégico complementario de los fondos marinos entre Mallorca e Ibiza, y entre Ibiza y Formentera</u>). (Contract ref. FBG 303242, 2005, of €30,000.00).

Within projects funded by the Spanish National Program of Scientific Research, Development, and Technologica Innovation (I+D+i)

Principal Investigator of the project The development of an Arctic ice stream-dominated sedimentary system: The southern Svalbard continental margin (SVAIS) (POL2006-07390/CGL) funded by the Dirección General De Investigación, Subdirección General De Proyectos De Investigación, Ministerio de Educación y Ciancias (MEC) under the Spanish activities for the International Polar Year (IPY). 2006 − 2009. Total Contribution: €272,250.00.

Principal Investigator of the Project <u>Perforación Cientifica Oceanica aplicada al riesgo de Deslizamientos submarinos</u> (CTM2006.27150-E) funded by the Secretaria General de

Politica Cientifica y Tecnologica, Ministerio de Educación y Ciancias (MEC) de España (Acción Complementaria). 2006-2007. Total Contribution €3,000.00.

Participant of the Project <u>Gestión del Programa Cientifico IODP en España</u> (PCI2005-A5-0155) funded by the Secretaria de Estado de Universidades e Investigación, Dirección General de Investigación, Subdirección General de Programas y Organismo Internacionales del Ministerio de Educación y Ciancias (MEC) de España. Coordinator M. Comas (CSIC-Univ. Granada, Spain). 2005-2007. Total Contribution €20,000.00.

Participant in the CONSOLIDER-INGENIO 2007 project Multidisciplinary research consortium on gradual and abrupt climate changes, and their impacts on the environment (GRACCIE). 2007-2011. Coordinated by J. Grimalt (CSIC Barcelona). Total Contribution €6.400.000.

Participant (coordinator since late 2009) of the Project Evolución de la DINámica SEDimentaria en márgenes continentales durante cambios de régimen climático (EDINSED) (CTM2007-64880/MAR) funded by the Programa Nacional de Ciencia y Tecnología Marinas del Ministerio de Educación y Ciencia (MEC) de España. Coordinado until 2009 por Roger Urgeles (University of Barcelona). 2007-2010. Total Contribution €58,000.00.

Principal Investigator of the project <u>Corrientes de hielo del Neogeno y procesos sedimentarios en margenes continentales polares (IPY - NICE STREAMS)</u> CTM2009-06370-E/ANT. 2009-2010. Total Contribution €45,000.00.

Principal Investigator of the project <u>Historia de la deglaciacion del mar de barents norte-occidental en sedimentos marinos de paleo-corrientes de hielo (DEGLABAR)</u>. CTM2010-17386 (subprograma ANT) funded by the Dirección General De Investigación, Subdirección General De Proyectos De Investigación, Ministerio de Ciencias y Innovación (MCIN). 2010 − 2013. Total Contribution: €230,000.00.

# Other projects

Marine and seismic and gravimetric surveys, and seafloor sampling in the Sheets 413 Borgo Grappa and 373 Cerveteri in co-operation with So.Pro.Mar. Year 2000. Project funded by the National Geological Survey. Contribution of 96 MLIT (€46,500.00).

Principal investigator in the first year of activity of the project Monitoring of the Eastern Mediterranean Climatic Event of the Last Decade (SINAPSI). Project funded by the Ministry of Research. Total Contribution of 39 MLIT (€20,100.00).

Principal Investigator for OGS of the Project Risposte dell'ambiente e degli ecosistemi alla variabilità climatica dell'Olocene in Trentino basata su serie di dati-proxy da sedimenti lacustri, latte di monte e tufo calcareo (OLOAMBIENT). Funded by the Provincia Autonoma di Trrento. Years 2002 − 2005. Total Contribution of €15,600.00).

Principal Investigator of the project <u>Deep Sedimentary Environment of the South Balearic Margin</u> (SBAL-DEEP) in cooperation with Istituto Nazionale di Oceanografia e di Geofisica Sperimentale (OGS) and the Instituto Español de Oceanografia (IEO). The project has been funded with 10 days of ship-time of the R/V OGS-Explora (20-30 September 2005), equivalent to about €180,000.00. The project is included in the research activity of the HERMES IP of the EU, and the WESTMED and SPACOMA Euro Margin projects of the ESF.

### SCIENTIFIC EDITORIAL ACTIVITY

Member of the Editorial Committee of the volume: Anoxic Basins of the Eastern Mediterranean. Results of the Third Conference, Bergamo (Italy) December 14-16 1988. Cita, M.B., Camerlenghi, A., and Corselli, C. (Editors), 1989. *La Ricerca Scientifica ed Educazione Permanente*, Suppl. N.72, Milano, 104 pp.

Member of the Editorial Review Board of the Scientific Results Volume 160, Proceedings of the Ocean Drilling Program: Robertson, A.H.F., Emeis, K.-C., and Richter, C. and Camerlenghi, A. (Eds.), 1998. Proc. ODP, Sci. Results, 160: College Station, TX (Ocean Drilling Program).

Member of the Editorial Review Board of the Scientific Results Volume 178, 'Proceedings of the Ocean Drilling Program: Barker, P.F., Camerlenghi, A., Acton, G.D., and Ramsay, A.T.S. (Eds.), 2001. Proc. ODP, Sci. Results, 178, online [http://www-odp.tamu.edu/publications/178\_SR/178sr.htm].

Member of the Editorial Advisory Board, Marine Geophysical Researches, Springer, Berlin, Germany. ISSN 0025-3235. Starting Volume 19 (N. 3), October 1997.

Member of the Editorial Advisory Board, Antarctic Sciences, Blackwell Science, University Press, Cambridge, UK. ISSN 0954 1020. Starting Volume 9 (N. 1), March 1997.

Member of the Editorial Advisory Board Marine Geology, Elsevier, Amsterdam, The Netherlands. ISSN 0025-3227. Starting Volume 204 (issues 1-2) 28 February 2004.

<u>Co-Editor of the book</u> <u>Contourites</u>, within the series <u>Developments in Sedimentology</u> (60) by Elsevier B.V. Amsterdam. Editors: M. Rebesco and A. Camerlenghi, Hardbound, 688 pages, publication date: NOV-2008 ISBN-13: 978-0-444-52998-5ISBN-10: 0-444-52998-5

<u>Associate Editor</u> *Italian Journal of Geosciences*, Società Geoogica Italiana, Roma. ISSN 2038-1719 beginning January 2010.

#### **OUTREACH AND EDUCATION ACTIVITY**

- 1999-2004 Scientific advisor and author of texts within the Agreement of Cooperation between OGS and CNR-IRPI to produce scientic documentaries. 5 documentaries produced and published by OGS and CNR (see list below).
- 2004. Co-ordinator of the project: <u>Documentals científics en ciències de la terra per a la televisió</u>: <u>Mare Nostrum, Terra Nostra</u>, funded by the Direcció general de Recerca, Generalitat de Catalunya (2004 ACDC 00016). Total Contribution of €1,900.00).
- 2003-present Member of the EGU Sub-Committee on Education (chaired by Carlo Laj) which organizes annualy at teh EGU General Assembly the *Geosciences Information for Teachers* (GIFT) Workshop. <a href="http://gift.egu.eu/committee-on-education.html">http://gift.egu.eu/committee-on-education.html</a>
- 2006-2010 Coordinator of the project: Geoscience information for teachers 1/2/3 (CataGIFT), funded by the Generalitat de Catalunya. Agència de Gestió d'Ajuts Universitaris i de Recerca with a grant of €8,400.00 (2006ARIE10062)

- in 2007, €4,000.00 (2007/ARIE/00047) in 2008 and €5,000.00 (2008ARIE00028) in 2009.
- 2008-2010 Coordinator of the project: Marenostrum, terranostra (co-funding of Catagift) funded by the Generalitat de Catalunya. Agència de Gestió d'Ajuts Universitaris i de Recerca, Finançament d'actuacions en l'àmbit de la divulgació científica (ACDC) with a grant of €5,000.00 (2008ACDC00058) and of €6,000.00 (2009ACDC00006)
- 2008-present Representative of the EGU Sub-Committee on Education in the <u>EGU sub-committee Outreach & Media</u>, chaired by Kostas Kourtidis.
- Speaker in the "Universitat dels nens i les nenes de Catalunya" (University of Catalan Kids) event organized by the association of public universities in Catlunya (19/10/2010).
- *Articles in Popular Science magazines and Documentaries*
- Paganoni, A. and Camerlenghi, A., 1987. La collezione di pietre ornamentali "A. Galletti". *Rivista del Museo Civico di Scienze Naturali "E. Caffi"*, Bergamo, 12:129 pp.
- Cita, M.B. e Camerlenghi, A., 1990. L'Ultima Tetide. *Oasis Mediterraneo*, 49 Suppl. 1:32-41.
- Perche' l'Antartide, versione italiana. Why the Antarctic, english version, 2000. VHS PAL, colore, 37 min. Directed by T. Mercuri, Scientific Advisorship: A. Camerlenghi, M. Parotto, F. Salvini, e F. Talarico. Produzione CNR-IRPI/OGS/MNA. On sale at the Museo Nazionale dell'Antartide, Sezione di Genova.
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- Verso il centro della Terra, 2002. VHS and DVD PAL, color, 35 min. Directed by T. Mercuri, Scientific advisorship by **A. Camerlenghi**. Produced by CNR-IRPI/OGS.
- Ghiacciai Bulldozers, 2004. VHS and DVD PAL, color, 32 min. Directed by T. Mercuri. Text and scientific advisorship by **A. Camerlenghi**. Produced by CNR-IRPI/OGS.
- Glaç: L'Historiador de la Terra, 2008. DVD PAL, Color, 27 min. Directed by D. Porbellini (Cultormedia). Catalan, Castellan, English. Featured in the GoeCinema Section, AGU General Assembly, Vienna, 2010 and in the Polar Cinema session of the IPY Oslo Science Conference, Oslo, Norway, 2010.
- R. Martinez y A. Camerlenghi: Aventura a l'Àrtic. Revista NAT, gener 2008, pag. 32-39.
- 20 thousand years. The history of the Earth's last great natural climate change, 2009. DVD PAL, Color, 28 min. Directed by D. Porbellini (Cultormedia). Catalan, Castellan, English. Featured in the GoeCinema Section, AGU General Assembly, Vienna, 2010 and in the Polar Cinema session of the IPY Oslo Science Conference, Oslo, Norway, 2010. Finalist of the "Science in Action" Festival, Granada, September 2010.

Hidden Corals, 2010. DVD PAL Color, 27 min. Directed by D. Porbellini (Cultormedia). Catalan, Castellan, English. Featured in the GoeCinema Section, AGU General Assembly, Vienna, 2011.

# **SCIENTIFIC AWARDS**

1999. Research Award *Felice Ippolito*, ex-aequo with Dr. F. Talarico, awarded by the Accademia Nazionale dei Lincei and by the National Committee of Antarctic Research.

#### PARTICIPATION IN OCEANOGRAPHIC CRUISES

Participation in 24 oceanographic cruises including 3 Legs of the Ocean Drilling Program. 6 times shipboard chief scientist. Total of 552 days of shipboard experience:

- 1981, Sep 12-26; 1982. Sep 17-Oct 3; 1984. Sep 4-24; 1986, Jul 15-Aug 13; 1989, Sep 22-Oct 7: *R/V Bannock*. Chief Scientist M.B.Cita. Coring, dredging, and bathymetric profiling in the Eastern Mediterranean. Special appointments onboard: core handling, core description, navigation and positioning.
- 1983, Apr 5-14. *R/V Tyro*. Chief Scientist: D. Jongsma. Piston and Box coring on the Mediterranean Ridge and in the Hellenic Trench. Special appointments onboard: core description and navigation.
- 1984, Apr 18-May 19. *R/V R.D. Conrad*. Chief Scientist: K.A. Kastens. SeaBeam, SeaMarc, and camera surveying on the Mediterranean Ridge and in the Hellenic Trench.
- 1987, May 15-Jul 2. *D/S Joides Resolution/SEDCO BP 470*. Chief Scientists: R. Duncan and I. Bachman. ODP Leg 115 (Indian Ocean). Special appointments onboard: marine technician.
- 1987, Aug 16-26: *R/V Bannock*. Chief Scientist: D. Bregant: CTD measurements and water sampling on Bannock Basin (Eastern Mediterranean). Special appointments onboard: Navigation and positioning.
- 1989, Apr 10-19: *R/V Bannock*. Chief Scientist: L. Mirabile. Single channel seismic reflection profiling on the mud diapirs of the Mediterranean Ridge. Special appointments onboard: navigation.
- 1989, Apr 28-May 15. *R/V Star Hercules*. Chief Scientist R. Ballard. JASON Project in the Tyrrhenina Sea. Special appointments onboard: geologist
- 1991, Jun 20 Jul 6. *R/V Marion Dufresne*. Chief Scientist G. deLange. MARFLUX program within MAST. Long piston coring, box coring, multicoring and water column sampling in the Eastern Mediterranean. Special appointments onboard: navigation.
- 1991, Sep 13-30: *R/V Bannock*. Single Channel Seismic reflection profiling on the Mediterranean Ridge (mud diapirs, deformation front, Bannock Basin). Special appointments onboard: chief scientist, navigation.
- 1992, Sep 25-Nov 22: *D/S Joides Resolution/SEDCO BP 470*. Scientific drilling on the Cascadia continental margin (Oregon). Chief Scientists: B. Carson and G. Westbrook. ODP Leg 146 (Cascadia Margin). Special appointments onboard: Sedimentologist.

- 1993, Sep 1-10: *R/V Urania*. Site survey data acquisition (High Resolution Seismics) in the Calabrian and Mediterranean Ridges for ODP proposal N. 330. Special appointments onboard: Chief Scientist.
- 1993, Sep 11-28: *R/V Urania*. Coring, Heat Flow measurements, high-resolution seismics, CTD lowerings in the Sirte Transect of the Mediterranean Ridge (CEC Program MEDRIFF). Special appointments onboard: Chief Scientist.
- 1995, Jan 22 Feb 26: *N/R OGS-Explora*. 7<sup>th</sup> Antarctic Expedition of PNRA, programs SEDANO (Sediment Drifts of the Antarctic Offshore) and SITE SURVEY ODP (Proposal # 425). Multichannel reflection seismics, coring, deployment of oceanographic moorings on the Pacific margin of the Antarctic Peninsula. Special appointments onboard: chief scientist.
- 1997, Feb 19 March 20: *N/R OGS-Explora*. 8<sup>th</sup> Antarctic Expedition of PNRA, programs SEDANO-II (Sediment Drifts of the Antarctic Offshore) and SITE SURVEY ODP (Proposal # 425). Multichannel reflection seismics, coring, deployment of oceanographic moorings and CTD casts on the Pacific margin of the Antarctic Peninsula. Special appointments onboard: chief scientist.
- 1998, Feb 12 Apr 9: *D/S Joides Resolution/SEDCO BP 470*. ODP Leg 178. Scientific drilling on the Pacific Margin of the Pacific margin of the Antarctic Peninsula co-chief scientist with P.F. Barker (BAS).
- 2000, May 10 Jun 1: *I/B R/V N.B.Palmer*. 11<sup>th</sup> Antarctic Expedition of PNRA, Program LARSEN ICE SHELF in co-operation with the US Polar Programs (Cruise NBP00-03, chief scientists E. Domack). Single channel seismic reflection with the OGS portable system, gravimetry and multi-beam bathymetry in the Western Weddell Sea, (Larsen Ice shelf-A and Prince Gustav Channel). Special appointments onboard: In charge of the seismics data acquisition.
- 2001, Nov 28 2002, Jan 11: *BIO Hesperides*. 12<sup>th</sup> Antarctic Expedition of PNRA, Program SEDANO-3 in co-operation with the Spanish Antarctic program (COHIMAR, chief scientists M. Canals). Multichannel reflection seismics with the OGS portable system (96 channels, 1200 m streamer, 2x GI guns), on the Pacific margin of the Antarctic Peninsula. Special appointments onboard: In charge of the seismic data acquisition.
- 2005, March 22-26. *M/N ODIN Finder* (G.A.S.). Seabed characterization (Side Scan Sonar, ROV, Mini-CPT) between Ibiza and Formentera and between Ibiza and Mallorca. Site Survey for cable deployment. Special appointments onboard: Representative of the Client (GESA-ENDESA).
- 2005, September 20 30, R/V *OGS-Explora*. Cruise SBAL-DEEP (Deep Sedimentary Environment of the South Balearic Margin). Multibeam, chirp, and multichannel seismic acquisition on the continental slope of the Southern Balearic margin and Algerian abyssal plain. Special appointments onboard: Chief Scientist.
- 2006, April 4 11A. RRS *Charles Darwin*. Cruise CD 178. Deep tow camera surveys in the Alboran Sea and 3D single channel seimsic reflection survey (PC-Cable system in the Ibiza Channel). Special appointments onboard: Assistant in seismic data acquisition.
- 28 mayo 1 Junio 2007. *BIO Hesperides*. Test Cruise of the new UTM Piston Corer offshore Cartagenas (Spain). Role onboard: observer and interested party.

- 2007, July 29 August 18. *BIO Hesperides*. Cruise SVAIS. Multibeam bathymetry, chirp and single channel seismic survey, piston coring o the SW continental margin of Svalbard (Spanish IPY activity). Special appointments onboard: Chief Scientist.
- 2007, October 6 –18. *BIO Hesperides*. Cruise EUROLEON. Multibeam bathymetry, chirp and single channel seismic survey, in the Valencia Trough (Western Mediterranean) within the HERMES project. Chief Scientist: M. Canals. Special appointments onboard: Seismic and multibeam data acquisition.
- 2009, March 24-29. *B/O Cornide de Saavedra*, Student cruise within the Master of Marine Sciences of the University of Barcelona in the Alboran Sea (Western Mediterranean). Special appointments onboard: Chief Scientist.

#### WRITTEN SCIENTIFIC PRODUCTION

147 scientific articles published, 100 of which listed in SCOPUS. Hirsch index (H = 26). Total citations: 1888.

See separate list

#### PRESENTATIONS TO MEETINGS AND CONVENTIONS

See separate list

#### PROFESSIONAL MEMBERSHIPS

American Geophysical Union from 1987 to 2010 Geological Society of America from 1987 to 2010 Academia Europaea, since 2004 European Geoecience Union, since 2007

#### RESEARCH INTERESTS

- 1) Geology and geophysics of continental margins, with special focus on polar depositional systems and sedimentary processes. In particular, my interest is towards the understanding the role the sediment transport mechanisms from continental shelf (riverice trough mouth) towards the abyssal plain via the continental slope areas.
- 2) Petro-physical aspects of sedimentary successions affecting the stability of submarine slopes and related geohazards. Trough seismic and logging data the aim is to identify mechanism of slope instability, such as the changes in stability conditions of gas hydrates, the diagenesis of biogenic silica, the under-compaction of sediments in general.
- 3) Geological setting and distribution of natural gas hydrates within the marine environment. The approach to the problem is bay inversion of geophysical data and

- modelling with the objective of quantifying the methane hydrate reservoirs and their potential of methane/carbon release to the hydrosphere and atmosphere following climatic changes.
- 4) Geological and geophysical setting of mud volcanoes. The approach is through the definition of the geometry of the mud volcanoes with geophysical means and by the understanding of the relationships with the geological setting.

I pursue a multidisciplinary approach to the problems addressed in my research. I privilege group work in which the role of individuals is properly recognised in the technological, experimental, theoretical and intellectual aspects. I like to dedicate a significant part of my time to the dissemination of science among non-specialists, and to teaching.

Trieste, December 2014

Aplo and