REPÚBLICA ARGENTINA

INFORME NACIONAL PRESENTADO A LA
ASOCIACIÓN INTERNACIONAL PARA LAS
CIENCIAS FÍSICAS DEL OCÉANO –IAPSO–

XXIV ASAMBLEA GENERAL DE LA
UNIÓN GEODÉSICA Y GEOFÍSICA
INTERNACIONAL – UGGI –
Perugia, Italia, 2 – 13 julio de 2007

ARGENTINA REPUBLIC

NATIONAL REPORT PRESENTED TO THE
INTERNATIONAL ASSOCIATION FOR THE
PHYSICAL SCIENCES OF THE OCEANS –IAPSO–

XXIV GENERAL ASSEMBLY OF THE
INTERNATIONAL UNION OF GEODESY AND
GEOPHYSICS – IUGG –
Perugia, Italy, 2 – 13 July, 2007

COMITÉ NACIONAL DE LA UNIÓN GEODÉSICA Y
GEOFÍSICA INTERNACIONAL

NATIONAL COMMITTEE OF THE INTERNATIONAL UNION
OF GEODESY AND GEOPHYSICS

BUENOS AIRES. ARGENTINA
2007
The main function of the IUGG National Committee is representing the Union in Argentina.

It is chaired by the Military Geographic Institute Director, and assisted by two Vice Presidents, a General Secretary and a Secretary Assistant.

The current (2007) head staff is as follows:

President: Cnl. VGM Eng. Alfredo Augusto Stahlschmidt
Executive 1st Vicepresident: Dr Corina Risso
2nd Vicepresident: Dr Nora Sabbione
General Secretary: Surv. Rubén Carlos Ramos
Secretary Assistant: Surv. Sergio Rubén Cimbaro
Treasurer: MD Silvia Blanc

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**National Committee of the International Association for the Physical Sciences of the Oceans**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Period</th>
</tr>
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<tbody>
<tr>
<td>Silvia Blanc</td>
<td>President</td>
<td>(2004 - 2008)</td>
</tr>
<tr>
<td>Gerardo M. Perillo</td>
<td>President</td>
<td>(2000 - 2004)</td>
</tr>
<tr>
<td>Silvia S. Ginsberg</td>
<td>Secretary</td>
<td>(01/2004 - 04/2006)</td>
</tr>
<tr>
<td>Walter Dragani</td>
<td>Secretary</td>
<td>(04/2006 - 01/2008)</td>
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<tr>
<td>Walter Dragani</td>
<td>Co-Secretary</td>
<td>(01/2004 - 04/2006)</td>
</tr>
<tr>
<td>Claudia G. Simionato</td>
<td>Co-Secretary</td>
<td>(12/2006 - 01/2008)</td>
</tr>
<tr>
<td>Marta E. de Milou</td>
<td>Secretary</td>
<td>(2000-2004)</td>
</tr>
<tr>
<td>Diana Cuadrado</td>
<td>Co-Secretary</td>
<td>(2000-2004)</td>
</tr>
</tbody>
</table>
Currently, the Argentinean National Committee of IAPSO (CNIAPSO) has 87 Members whose nationality is Argentina.

Most of them carried their research work on Physical Oceanography and related sciences at different national institutes, centres, laboratories and universities.

Some of them are temporarily abroad, working at foreign institutes, centres, laboratories and universities.

Therefore, the present National Report has been organised in order to include the activities of both type of Members. First, the reported activities are listed by institute, including the ones corresponding only to CNIAPSO’s Members that have worked within it. Secondly, the activities corresponding to individual researchers, temporarily abroad, are listed.
### INDEX

#### Centre, Institute, University, etc.

1. CENPAT: Centro Nacional Patagónico  
   *(National Patagonic Centre)*  
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2. CGCyC: Centro de Geología de Costas y del Cuaternario. FCEyN – UNMDP  
   *(Coastal Geology and Quaternary Centre)*  
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3. CIMA: Centro de Investigaciones del Mar y la Atmósfera  
   *(Centre for Oceanic and Atmospheric Research)*  
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4. IAA: Instituto Antártico Argentino  
   *(Argentinean Antarctic Institute)*  
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5. IADO: Instituto Argentino de Oceanografía  
   *(Argentinean Institute of Oceanography)*  
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6. INIDEP: Instituto Nacional de Investigaciones Pesqueras  
   *(National Institute of Fisheries Research)*  
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7. SENID: Servicio Naval de Investigación y Desarrollo —  
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8. SHN: Servicio de Hidrografía Naval  
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9. Individual researchers.  
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XIII Colloquy of Oceanography joint to V National Congress on Marine Sciences.  
December 2003.  
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XIV Colloquy of Oceanography joint to VI National Congress on Marine Sciences.  
December 2006.  
Page 80
1.- ASSOCIATION:  IAPSO

2.- INSTITUTION:

Centro Nacional Patagónico  - CENPAT -
– National Patagonia Centre –

Mission: - To provide an appropriate environment in order to enable Scientific-Technological Research & Development activities, including the necessary administrative staff, building and all types of required facilities.

- To contribute with the academic formation of researchers, technicians, under-graduate and graduate young students who have been awarded with fellowships.

- To manage co-operative relationships among governmental offices, universities, productive sectors and different services within the region.

- To keep in contact with national and international scientific institutions, as well as productive organisations with analogous interests.

The CENPAT is conducted by its Director whose mission is to co-ordinate the research plans, projects and programmes that are locally carried out, namely, in the region, the country and abroad.

3.- NAMES: Members of CNIAPSO that work at this institution:

José Luis Esteves   (PhD in Oceanology)     esteves@cenpat.edu.ar
Adán E. Pucci      (PhD in Chemistry)      aepi@infovia.com.ar
Andrés Luján Rivas (MD in Oceanography)    andres@cenpat.edu.ar

4.- FIELD WORK:

ESTEVEZ, José Luis    Marine Chemistry. Water Pollution.
PUCCI, Adán E.        Coastal and Marine Geology  (Currently, retired)
RIVAS, Andrés         Physical Oceanography
5.- PUBLICATIONS:


6.- CONGRESS:
V National Congress of Marine Sciences and XIII Colloquy of Oceanography
(organised by the Argentinean National Committee of IAPSO), Mar del Plata, Buenos Aires, Argentina, 8 – 12 December, 2003.

- Baldoni, A., Bogazzi, E., Rivas, A. L., Martos, P., Reta, R., Orensan, J. M., Lasta, M. and Dell’Arciprete, P. “Association between the areas of Patagonia scallop’s (scallop) concentration (Zygochlamys patagonica) and the South Western Atlantic fronts”. Abstracts 69.

- Esteves, J. L., Solis, M. E., Rodriguez, V. and Willers, V. “Ushuaia and Golondrinas bays – Coastal water quality and water influx. (January 2001)”.


- Massara Paletto, V., Commendatore, M. and Esteves, J. L. “Anthropic and biogenic hydrocarbons in Nueva Bay (Patagonia, Argentina)”.

- Paparazzo, F. E., Schloss, I., Solis, M., Ruiz-Pino, D., Poisson, A., Bianchi, A., Balestrini, C. and Esteves, J. L. “Nutrients fluctuations in the Argentinean Continental Shelf south of 42° S”.


- Vazquez, N. N., Gil, M. N, Esteves, J. L. and Amin, O. A. “Zn, Cu, Pb and Cd pollution in intertidal sediments of the coastal zone of Beagle channel, Tierra del Fuego, Argentina”.

- Williams, G., Esteves, J. L. and Gagliardini, D. A. “Oceanographic phenomena detection through satellite information and meteorological forecast (North patagonic gulfs). Preliminary data”.

- Willers, V., Narvarte, M. and Esteves, J. L. “Imposex in Buccinanops globulosum of the northern zone of Patagonia”.

Brazilian Congress of Oceanography, organised by Brazilian Association of Oceanography and Vale do Itajaí University. Itajaí. Santa Catarina. Brazil, 10-15/10/2004:

- Hasan, E. J., Gil, M. N. and Esteves, J. L. “Subtidal sediment characterisation through nutrient exchange at sediment-water interface in Nueva Bay (Golfo Nuevo, Chubut, Argentina)”.

- Niencheski, L. F., Esteves, J. L., Freitas, U. and Torres, A. “Hydro environment of Lagoa Dos Patos (RS) and Golfo Nuevo (Patagonia): hydro chemical studies for environmental management.”
- **PORSEC2004** (Pan Ocean Remote SEnsing Conference), Univ. de Concepción, Chile, 2004:
  - Gagliardini, D. A. and **Rivas, A.L.**. “Environmental characteristics of San Matías gulf obtained from Landsat-Tm and ETM+ data”.

- **XIº Latin American Congress of Marine Science and XXVº National Congress of Marine Science of Chile.** 16-20 May, 2005.
  - Torres, I., Gil, N., Amin, O. and **Esteves, J. L.** “Environmental quality evaluation of Encerrada bay (Ushuaia, Tierra del Fuego Province, Patagonia, Argentina. Preliminary data”.
  - Williams, G., Gagliardini, D. A. and **Esteves, J. L.** “San Matías gulf: physical and chemical characterization using in situ oceanographic data and satellite images landsat TM/ETM”.

  - Vázquez, N. N., **Esteves, J. L.**, Narvarte, M. A., Comoglio, L. and Amin, O. “Physiological answers of mussels to pollution”.

- **VI National Congress of Marine Sciences and XIV Colloquy of Oceanography** (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.
  - **Esteves, J. L.**, Gil, M. N. and Amin, O. “First data of heavy metals in Los Estados Island (Tierra del Fuego archipelago Argentine)”.
  - Ferrando, A., **Esteves, J. L.** and Elías, R. “Marobenthonic and environmental indicators: a multivariate analysis in sandy beaches (Puerto Madryn, 43º S, 65º W)”.
  - Lezcano, A. and **Rivas, A.** “Spatial high resolution maps of sea surface temperature”.
  - Paparazzo F.E., Schloss I., Solís M. and **Esteves, J. L.** “Chemical characteristics of tidal fronts in Argentinean Continental Shelf and the biological implications”.
  - Pisoni J. P and **Rivas, A. L.** “Thermal fronts at the Argentinean Continental Shelf using TSM satellite data”.
  - **Rivas, A. L.** “Quantitative estimation of thermal fronts’ influence on the surface concentration of chlorophyll at Patagonia shelf”.
  - **Rivas, A. L.** “Thermal fronts surface concentration of chlorophyll at Patagonia shelf from satellite data”.
  - **Rivas, A. L.** “Spatial-temporal variability of the SST in the South Western Atlantic”.

- **Commendatore, M.G., Esteves, J. L.,** Nievas, M. L. and Solana, V. P. “Península Aristizábal I. Hydrocarbons in sediments and hydrocarbons waste characterization”.
- de Freitas, U., Niencheski, L. F., **Esteves, J. L.** and Rodilla, M. “Benthonic metabolism in an aquaculture area (Lagoa dos Patos - Brazil)”.
- **Esteves, J. L.**, Gil, M. N. and Amin, O. “First data of heavy metals in Los Estados Island (Tierra del Fuego archipelago Argentine)”.
- Rivas, A. L. “Quantitative estimation of thermal fronts’ influence on the surface concentration of chlorophyll at Patagonia shelf”.
- **Rivas, A. L.** “Thermal fronts surface concentration of chlorophyll at Patagonia shelf from satellite data”.
- **Rivas, A. L.** “Spatial-temporal variability of the SST in the South Western Atlantic”.
• Sastre V., Santinelli, N., Solis, M., **Esteves, J. L.** Ferrario M., Ciccarone, P. and Perez, L. “Toxic algae bloom in coastal waters of Chubut Province”.

• Tonini, M. H., Palma, E., **Rivas, A. L.** “Circulation and dynamics of Patagonia gulfs: 3D barotropic model”.

- Williams, G. and **Esteves, J. L.** “San Matías gulf: temporal and spatial variation of temperature and nutrient and chlorophyll “a” concentration in the water column”.

- Williams, G., Gagliardini, D., **Rivas, A. L.**, Sapoznik, M., Narvarte, M., González, R. “Environmental characterisation of San Matías gulf (Argentina) using AVHRR and SeaWiFS information”.

7.- COURSES:

  ▪ Course on Chemical Oceanography by Dr **J. L. Esteves**, 2\textsuperscript{nd} Cycle for Biologists. National University of Patagonia “San Juan Bosco” (each year).

  ▪ Course on Physical Oceanography by MD **A. L. Rivas**, Advanced Cycle for Biologists. National University of Patagonia “San Juan Bosco” (each year).

  ▪ Course on Physics II by MD **A. L. Rivas**, Advanced Cycle for Biologists. National University of Patagonia “San Juan Bosco” (each year).


  ▪ Course on “Integrated coastal management”, by Dr Isabel Moreno Castillo, with Balear Island University, co-ordinated by Dr **J. L. Esteves**, organised by Balear Island University, Orion Association, National University of Patagonia, CENPAT and Patagonia Natural Foundation. Puerto Madryn. Chubut. Argentina. 4-19 February, 2006.

8.- ADDRESS:

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ARGENTINEAN NATIONAL REPORT 2003-2007
XXIV IUGG GENERAL ASSEMBLY
Perugia (Italy), July 2 - July 13, 2007

1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Centro de Geología de Costas y del Cuaternario - CGCyC –
dependiente de la Facultad de Ciencias Exactas y Naturales,
Universidad Nacional de Mar del Plata
– Coastal Geology and Quaternary Centre –
with the Faculty of Exact and Natural Sciences, National University
of Mar del Plata.

Mission: The Coastal Geology and Quaternary Centre (CGCyC) was created on 1979
through an Agreement between the Scientific Investigations Commission of Buenos Aires
Province (C.I.C.) and National University of Mar del Plata (UNMdP). On 1985 the CGCyC
started to exclusively depend on UNMdP, in particular, on its Faculty of Exact and Natural
Sciences. From its creation, it is characterised by its strong interest in research, teaching
and services to the community through the transference of its knowledge.

3.- NAMES: Members of CNIAPSO that work at this institution:

Germán Ricardo Bértola (PhD in Geology) gbertola@mdp.edu.ar
Federico Ignacio Isla (PhD in Geology) fisla@mdp.edu.ar

4.- FIELD WORK:

BÉRTOLA, Germán Ricardo Geological Oceanography
ISLA, Federico Ignacio Isla Geological Oceanography

5.- PUBLICATIONS:

Articles in International and National Journals.

• Bértola, G. and Cortizo L. (2006): “Sand transport in active and hung littoral dunes in the
(1):174-184. ISSN 0004-4822.

Coast between Peñas and Ewan capes, Argentina Journal of the Argentinean Geological
Association, 61, 1, 81-92.


6.- CONGRESS:

• *9º Argentinean Congress of Bio- Stratigraphy and Palaeontology*. Córdoba, 18-22 September, 2006:
  - Espinosa, M. A. and Isla, F. I. “Environmental evolution related to an obstruction of a tide-channel in the Walker Stream, Bahía San Blas, Buenos Aires”.

• *VI National Congress of Marine Sciences and XIV Colloquy of Oceanography* (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006:
  - Isla, F. I. and Bértola, G. R. “Sand distribution in the infra-littoral beaches: possibility of repopulating Villa Gesell and Quequén beaches”.
  - Isla, F. I. “Multipurpose artificial reefs: their possibilities of settling at the Argentinean coast”.

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- Madirolas, A., Lasta, M., Trepode, M., Alavarez Colombo, G. L., Iantanos, N. and Isla, F. I. “Morphological characteristics of the submarine cannons of the northern Patagonia”.


7.- COURSES:

- **2006**: Cycle for Biologists, National Univ. of Mar del Plata. (Each year). Courses on:
  - “Teledetection” by F. I. Isla. First semester.

8.- ADDRESS:

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  Universidad Nacional de Mar del Plata
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9.- WEB PAGE: [www.mdp.edu.ar/exactas/geologia/cgcyc](http://www.mdp.edu.ar/exactas/geologia/cgcyc)
1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Centro de Investigaciones del Mar y la Atmósfera (CIMA / CONICET-UBA)

– (Centre for Oceanic and Atmospheric Research) –

Mission: CIMA (Centre for Oceanic and Atmospheric Research), is an institution supported by CONICET (National Council for Scientific and Technological Research of Argentina) and UBA (University of Buenos Aires). It is located at the University of Buenos Aires main building, close to the Department of Atmospheric and Oceanic Sciences not far from downtown.

Research activities at CIMA are mainly focused on Climate Modelling, Climate Regional Variability, Regional Effects of Anthropogenesis Effects on Climate, Shelf Seas Modelling and Dynamics, Numerical Weather Forecast and Climate Change. CIMA is the main, probably the only, research centre of Argentina fully devoted to atmosphere and ocean modelling.

3.- NAMES: Members of CNIAPSO that work at this institution:

Virna Loana Meccia       (MD in Oceanography)       virna@cima.fcen.uba.ar
Claudia Gloria Simionato (PhD in Oceanography)      claudias@cima.fcen.uba.ar

4.- FIELD WORK:

M ECCIA, Virna Loana                                        Physical Oceanography
SIMIONATO, Claudia Groria                                   Physical Oceanography

5.- PUBLICATIONS:

Articles in International and National Journals.


Technical Reports.


Other published articles.


6.- CONGRESS:

• V National Congress of Marine Sciences and XIII Colloquy of Oceanography (organised by the Argentinian National Committee of IAPSO), Mar del Plata, Buenos Aires, Argentina, 8 – 12 December, 2003.

- Meccia, V. L., Dragani, W. C., Schmidt, S. and Pousa, J. “Beach profile evolution during intense wind wave events at Pinamar”.


- Simionato, C. G. and Vera, C. C. “Surface wind variability over the Río de la Plata estuary in seasonal and inter-annual time scales on the base of the NCEP/NCAR reanalyses”. FREPLATA Symposium.


- Simionato C. G, Meccia V. L., Dragani W. C. and Núñez M. N. “Observations of internal waves in the estuary of Río de la Plata”.


- Simionato, C. G. Meccia, V. L., Dragani, W. C., Guerrero, R. and Núñez, M. “Río de la Plata’s estuary barotropic response to wind variability at synoptic and inter-seasonal scales”.


- Simionato C. G., Meccia V. L., Dragani W. C., Guerrero R. A. and Núñez M. N. “Barotropic response of the estuary of Río de la Plata to wind variability in the synoptic and Inter.-seasonal scales”.

- 8th International Conference on Southern Hemisphere Meteorology and Oceanography, Foz do Iguazú, Brazil, 23 – 28 April, 2006.


- Simionato, C. G., Meccia, V. L., Dragani, W. C. Guerrero, R and Núñez, M. “Recent advances in the knowledge of the Río de la Plata estuary circulation, forcings and variability”.


• VI National Congress of Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.


- Simionato, C. G., Berasategui, A., Meccia, V. L., Acha, M. and Mianzán, H. “A physical mechanism for the retention of eggs and early larvae in the Río de la Plata estuary”.

- Guerrero, R. , Lucas, A., Simionato, C. G. “Variability of oceanographic regimes in the Argentinean Continental Shelf north 42°”.

- Martín, P. B., campos, M. I., Dragani, W. C., Simionato, C. G., Nuñez, M. N. “Analysis of an extreme wind waves event on the Río de la Plata”.

7.- COURSES:


• One semester course on Introduction to Physical Oceanography by C. Simionato, 2nd year for Physical Oceanography Undergraduate Students at Univ. of Bs. As. (every year).

• One semester course on Ocean Dynamics by C. Simionato, 3rd. Year for Physical Oceanography Undergraduate Students at University of Buenos Aires (every year).

8.- ADDRESS:

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9.- WEB PAGE: www.cima.fcen.uba.ar
1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Instituto Antártico Argentino

– Argentinean Antarctic Institute –

Mission: The Argentinean Antarctic Institute (IAA) was created on April 17, 1951, making true one of the fundamental pillars dreamed by Cnel.Hernán Pujato for enhancing and extending the Argentinean presence in the Antarctic. At that time the IAA became the first scientific organization exclusively devoted to Antarctic matters and it preceded the Antarctic Treaty signature as well as the creation of the Scientific Committee on Antarctic Research (SCAR).

3.- NAMES: Members of CNIAPSO that work at this institution:

Gustavo Ferreyra (PhD in Oceanography)  gferreyra@dna.gov.ar
Irene Ruth Schloss  (PhD in Biology)  ischloss@dna.gov.ar
Gabriela V. Tosonotto  (MD in Oceanography)  gtossonotto@dna.gov.ar

4.- FIELD WORK:

FERREYRA, Gustavo  Biological Oceanography – UV effects on polar plankton communities
SCHLOSS, Irene Ruth  Biological Oceanography – Antarctic Food Webs, Climate Change
TOSSONOTTO, Gabriela V.  Antarctic Oceanography

5.- PUBLICATIONS:


Ferrero, E., Eöry, M., *Ferreyra, G. A.*


6.- CONGRESS:


  - Campana, G., Giorgi, A. and Schloss, I. R. “Effect of *Pomacea canaliculata*’s density on the structure of the periphyton”.


  - Schloss, I. R., Ferreyra, G. A., Ferrario, Me, Balestrini, C, Ruiz-Pino, D, Poisson, A. “The role of Biology in the fluxes of CO₂ between the sea and the atmosphere: global models and field data”.

- Ferreyra, G. A., Schloss, I. R., Ruiz Pino, D. and Poisson, A. “Fluxes of CO₂ between the atmosphere and the ocean in the South Atlantic and Antarctica: the role of the biologic bomb”.

- Ferreyra, G. A., Schloss, I. R., Sahade, T., Quartino, M., Momo, F. and Atencio, A. “Pelagic-benthonic coupling: Ten years synthesis at Caleta Potter (Antarctica)”.

- 2ᵈᵉ Inter-disciplinary Forum of Sciences related with the environment and Life Quality. Faculty of Exact Sciences, National University of Catamarca, Catamarca, Argentina. 10 and 11 December, 2003.

- Ferrero, E., Momo, F., Schloss, I. R. “A mathematical model for the primary producers and their consumers in Antarctic coastal ecosystems”.


- V Argentinean Symposium and 1ˢᵗ Latin-American Symposium on Antarctic Investigations, organised by the Argentinean Antarctic Institute. Buenos Aires, Argentina, 30 August - 3 September, 2004:


- Bianchi, A., Charo, M., Bianucci, L., Schloss, I. R., Ferreyra, G. A. “Spatial and inter-annual variability of CO₂ fluxes in the Weddell Sea. Its relation with the environmental variables”.


- Paparazzo F., Esteves J. L., Solis L., Schloss, I. R. “Evaluation of inorganic nutrients in the South Western Atlantic Ocean and Argentinean sea under the frame of ARGAU Project”.


- Schloss, I. R., Ferreyra, G., Ferrario, M., Balestrini, C. F., Almandoz, G., Poisson, A. “CO₂ fluxes between the sea and the atmosphere, the Biology role”.

- XXIX SCAR Meeting, Category: “Antarctica and the Global Climate System (AGCS)”. Hobart, Australia. 8–20 July 2006:

- Bertolin, L., Schloss, I. R., Tosonotto, G. V., Marenssi, S. “The effects of the collapse of the Larsen Ice Shelf (Antarctica) on phytoplankton growth”.

- VI National Congress of Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.
- Tossonotto, G. V. “CTD’s measurements next to Larsen ice-barrier, Antarctica”.

- Tossonotto, G. V. “The effects of Larsen ice-barrier collapse (Antarctica) related to phytoplankton development”.

7.- COURSES:


8.- ADDRESS:

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9.- WEB PAGE: www.dna.gov.ar
1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Instituto Argentino de Oceanografía - IADO -

Argentinean Institute of Oceanography –

Mission: IADO carries out scientific research on the Argentinean Sea and its resources, contributing to develop either researchers or technicians. It also advises public and private institutions about the feasibility of scientific programmes. It has a large library with a great amount of information on the subjects it is involved. It organises seminars and courses to divulge different topics related to Oceanography and environmental protection.

Regarding its link with the IUGG (UGGI), IADO is one of the institutes that has probably the major number of IAPSO’s Members in Argentina, among its researchers.

3.- NAMES: Members of CNIAPSO that work at this institution and at the National Southern University*, having a fluid interaction with researchers from IADO:

ALIOTTA, Salvador  
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ANGELES, Guillermo  
BEIGT, Débora  
BHON, Vanessa Yael  
CALO, Jorge*  
CAMPO de FERRERAS*, Alicia  
CARBONE, M. Elizabeth  
CUADRADO, Diana  
DIEZ, Paula G.  
FEDERICI, Gisela  
GELÓS, Eduardo  
GINSBERG, Silvia Susana  
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4.- FIELD WORK:

ALIOTTA, Salvador  Marine Geology
ANDRADE, J. Santiago  Oceanography
ANGELES, Guillermo  Oceanography
BEIGT, Débora  Geomorphology. Estuaries and coasts dynamics.
BHON, Vanessa Yael  Physical Oceanography.
CALO, Jorge*  Oceanography
CAMPO de FERRERAS, Alicia*  Geomorphology. Estuaries and coasts dynamics.
CARBONE, M. Elizabeth  Geomorphology. Estuaries and coasts dynamics.
CUADRADO, Diana  Marine Geology. Sediments transport.
FEDERICI, Gisela  Physical Oceanography. Sediments transport.
GELÓS, Eduardo  Marine Geology.
GINSBERG, Silvia Susana  Oceanography. Marine Geology.
LISAZOAIN, Guillermo  Oceanography. Marine Geology.
MARASCHIN, Silvio  Oceanography. Marine Physics
MARCOS, Ángel*  Oceanography
MARCOVECCHIO, Jorge  Marine Chemistry.
MARINI, M. Fabián  Physical Oceanography.
5.- PUBLICATIONS :


Perillo, G. M. E., Piccolo, M. C. and Marcovecchio, J. (2004): “Coastal oceanography of the western South Atlantic continental shelf (33° to 55°S.)”. In: Robinson A, Brink KH (eds), The Global Coastal Ocean: Interdisciplinary Regional Studies and Syntheses, V.14, Ch.9, Harvard University Press, Cambridge, Massachusetts, USA.


• Tonini, M. H., **Palma, E. D.** and Rivas, A. L. (2006). “A high-resolution model of

Other published articles.

- Booklets of IADO, illustrated with most relevant developed activities.


• **Piccolo, M. C.**, and **Contardi, E.** (2004): “Course for educators training on Methods of Scientific Research applied to Bahía Blanca estuary”. Presented at SEMBB and SEPBA.


• **Matano, R. P. and Palma, E. D.** “On the formation of shelf-break fronts”. EOS Trans.


6.- CONGRESS:

• CLIVAR/OOPC/IAI Workshop on the South Atlantic climate observing system. Angra dos Reis Brasil, 6-8 February, 2003:


• EGS-AGU-EUG Joint Assembly. Nice, France, 6 - 11 April, 2003:
  - Palma, E. D., Matano, R. P. and Piola, A. R 2A barotropic study of the Southwestern Atlantic Shelf circulation”.

• Workshop on the Dynamics of Fluid Mud Layers in Coastal Waters. Rio de Janeiro, Brazil, May, 2003:

• XXIII IUGG Assembly / IAPSO Symposium. Sapporo, Japan, 30 June-11 July, 2003:
  - Perillo, G. M. E., Pérez, D. E. and Piccolo, M. C. “Internal Waves in Highly Stratified Quequén River Estuary, Argentina”.

- IX Congresso da Associação Brasileira de Estudos Quaternarios y II Congresso do Quaternario de Países de Línguas Ibéricas. Recife, Brazil. 12 - 19 October, 2003:
  - Aliotta, S., Spagnuolo, J. and Farinati, E. “Geological evidences of the transgressive-regressive Holocene process at the entrance of Bahía Blanca estuary, Argentina”.

- Correa, I., Aliotta, S. and Weschenfelder. “Evidences of barrier structures in the access channel Los Patos lagoon”.


  - Aliotta, S., Giagante, D., Briceño, W. and Farinati, E. “Sediment logy and taphonomy of a Holocene marine deposit at the west of Bahía Blanca, Buenos Aires Province”.

- Amin, O., Comoglio, L., Asteasuain, R., Freije, R. H. and Marcovecchio, J. 2Distribution of inorganic nutrients in the coastal zone nearby Ushuaia city (Tierra del Fuego) and its relation with terrestrial sources”.

- Barría de Cao, M. S., Beigt, D., Piccolo, M. C. and dos Santos, E. “Relationship between abiotic and biotic factors and the abundance and diversity of Tintinnida (Ciliophora)in Bahía Blanca estuary”.

- Beigt, D., Piccolo, M. C., Perillo, G. M. E. and dos Santos, E. “Annual cycle of temperatures and heat flux at the soil el suelo in a tides plain of Bahía Blanca estuary”.

- Botté, S., Chiarello, N., Asteasuain, R., Contardi, E., Freije, R. H. and Marcovecchio, J. “Disolved metals as recent pollution indicators Bahía Blanca estuary, Argentina”.

- Botté, S., Delucchi, F., Asteasuain, R., Chiarello, N., Contardi, E., Freije, R. H. and Marcovecchio, J. “Surface sediments in the tides plains as source of metals trace for the Bahía Blanca estuary, Argentina”.

- Carbone, M. E. and Piccolo, M. C. “Variation of the water level inside the estuary of Claromecó stream”.

- Cervellini, P. M., Beigt, D., Piccolo, M. C. and dos Santos, E. “Zooplankton Variability and its relationship with temperature at Puerto Cuatreros, Bahía Blanca estuary”.

- Del Blanco, L., Botté, S., Chiarello, N., Arlenghi, J., Freije, R. H. and Marcovecchio, J. “Estimation of the contribution of heavy metals by Sauce Chico river and Napostá Grande stream to Bahía Blanca estuary”.

- De Marco, S., Botté, S. and Marcovecchio, J. “Mercury distribution in estuarine wetlands and salt-marshes from Argentina: an overview”.

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- De Marco, S., Freije, R. H. and Marcovecchio, J. “Seasonal variation of the phytoplanktinic composition at Mar Chiquita coastal lagoon (Buenos Aires, Argentina)”.

- Diez, P., Melo, W. D., Perillo, G. M. E. and Piccolo, M. C. “Evaluation of the inundated areas at Samborombón bay, using Landsat TM satellite images”.

- Escapa, M., Minkoff, D., Perillo, G. M. E. and Iribarne, O. O. “Effects of the digger crab Chasmagnatus granulatus on the erosion of marshes dominated by Salicornia”.


- Ginsberg, S. S., Cuadrado, D. G. and Gómez, E. A. “Hydro-sedimentologic study in an area for tilting of dredged material”.


- Gómez, E. A., Amos, C. L. and Li, M. Z. “Predictions and measurements of sand transport”.

- Hoffmeyer, M. S., Beigt, D., Piccolo, M. C. and dos Santos, E. “Recruiting of the copepods Acartia tonsa and Eurytemora americana in Pto Cuatreros, Bahía Blanca estuary”.

- Hoffmeyer, M. S., Berasategui, A. A., Piccolo, M. C., Fernández Severini, M. D., Menéndez, M. C. and Biancalana, F. “Morphology of Acartia tonsa eggs and Eurytemora americana (Copepoda, Calanoida)”.

- Maraschin, S. D., Minkoff, D. R., Pierini, J. O. and Perillo, G. M. E. “Generation of tide-channels upon the basis of topographic study – Preliminary analysis”.


- Natali, M., Gómez, E. A., Cuadrado, D. G. “Marine morpho-dynamics in the Trinidad island, Bahía Blanca estuary”.


- Palma, E. D., Matano, R. P. and Piola A. R. “Simulation of oceanic circulation over the continental shelf of the Southern Atlantic Ocean. Part II: Baroclinic Model”.

- Pérez, D. E., Perillo, M. M. and Perillo, G. M. E. “Calibration curve determination of an Acoustic Doppler Velocimeter (ADV) for the computation of the suspended sediment turbulent flux”.

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- Pierini, J. O., Perillo, G. M. E., Gómez, E. A. and Cuadrado, D. G. “Effect of the tide plains on the la hydro-dynamics of Rosales and Belgrano harbours (Bahía Blanca)”.


- Pierini, J. O. and Perillo, G. M. E. “Application of a numerical model to tide (inlets)”.

- Piola, A. R., Palma, E. D. and Matano R. P. “Variations of Río de La Plata impact over the continental shelf: wind versus volume”.

- Piola, A. R., Palma, E. D. and, R. P. “Simulation of oceanic circulation over the continental shelf of the Southern Atlantic Ocean. Part II: Comparison with observations”.


- Sitz, L., Palma, E. D. and Piola, A. R. “Impact of the election of wind climatologies on the barotropic circulation in the continental shelf of the Southern Atlantic Ocean”.

  **American Ocean Sciences Meeting** of the AGU. Portland, Oregon, EE.UU. 26 – 30 January, 2004:
  - Matano, R. P., Strub, P. T., James, C. and Palma, E. D. “The Low-Frequency Variability of the South Atlantic Circulation
  - Palma, E. D., Matano, R. P. and Piola, A. R. “A numerical investigation of the Southwestern Atlantic Continental Shelf Circulation”.
  - Piola, A. R., Palma, E. D. and Matano, R. P. “The effect of the Plata outflow in el Niño years”.

  **II Meeting Bi-National of Ecology**. Mendoza. Argentina. 2004:
  - Barría, M. S., Parodi, E., Píccolo, M. C. and Beigt, D. “Seasonal variation of ciliates mix-trophic ciliads in Bahía Blanca estuary”.

  **X Argentinean Meeting of Sedimentology**. San Luis. Argentina. 2004:
  - Bidart, S. M., Rodriguez, M. L. And Piccolo, M. C. “Distribution of land particle size from the atmospheric powder in the southern coastal area of Buenos Aires Province. Influence of the meteorological conditions”.

  - Ginsberg, S. S., Cuadrado, D. G. and Gómez, E. A. “Relationship between the sediment dynamics and the asymmetry of tide currents”.

  - Minkoff, D. R., Escapa, C. M., Ferramola, F. E. and Perillo, G. M. E. “Model and study of an erosive process due to physical-biological interactions based upon automate cells”.

  - Pérez, D. E., Minkoff, D. R. and Perillo, G. M. E. “Relationship between the suspended sediment over a tide plain at Puerto Cuatrerros, Bahía Blanca”.


- **Campos de Ferreras, A., Piccolo, M. C., Ramos, M. B. and Campo, M. I.** “Respiratory illness related to the dominant wind at Punta Alta (Buenos Aires)”.
- **Cuadrado, D. G., Gómez, E. and Ginsberg, S. S.** “Dynamic processes in a nearby artificial coastal structure”

V National Congress of Physical Geography. Catholic University of Santa Fe. 2004:

- García, M. C. and **Piccolo, M. C.** “Summer sea breezes at Mar del Plata and Necochea. Buenos Aires Province”.
- Geraldí, A. M. and **Piccolo, M. C.** “Spatial variations of Malaver lagoon, Buenos Aires”.

89ª Meeting of Argentinean Physics Association. Bahía Blanca. Argentina. 2004:

- **Palma, E. D.** and Sitz. L. “Influence of different forcings on the dynamics of floating plumes”.

IV International Symposium on Environmental Geochemistry in Tropical Countries. Universidade Federal Fluminense (UFF), Buzios, Brazil. 2004:

- Beltramé, M. O., **De Marco, S.** and **Marcovecchio, J.** “Nutrients and organic matter distribution in Mar Chiquita coastal lagoon tidal plains. The tide effect”.
- Botté, S. E., Delucchi, F., Grecco, M. L., Marcos, A., Freije, R. H., and **Marcovecchio, J.** “Cadmium, lead and manganese in tidal flats sediments of the Bahía Blanca estuary, Argentina”.
- Del Blanco, L., Botté, S. E., Chiarello, M. N., Arlenghi, J., Freije, R. H. and **Marcovecchio, J.** “Sauce Chico river and Napostá Grande stream as a potential source of heavy metals to Bahía Blanca estuary”.
- Delucchi, F., Tombesi, N. B., Freije, R. H. and **Marcovecchio, J.** “Organotin compounds occurrence in surface sediments from Bahia Blanca estuary, Argentina”.
- **Marcovecchio, J.** “Heavy metals distribution and accumulation trends in Bahía Blanca estuary, Argentina: a historical analysis”.
- Spetter, C., Asteasuain, R., Arlenghi, J., Freije, R. H., **Marcovecchio, J.** “Assessment of dissolved inorganic nutrient levels in water and pore-water of Bahía Blanca estuary, Argentina”.
- **International Coastal Symposium.** Itajaí, SC, Brazil. 2004:
  - **Cuadrado, D. G., Gómez, E. A., Pierini, J. O. and Federici, G. A.** “A possible solution to Rosales Harbour excessive siltation rate (Bahía Blanca) estuary, Argentina”.
  - **Gómez, E. A.,** Amos, C. L., and Li, M. Z. “Evaluation of sand transport models by in situ observations under unidirectional flow”.
  - **Grecco, L. E.,** Marcos, A. O., Gómez, E. A., Botté, S. and **Marcovecchio, J.** “Natural content and anthropogenic input of heavy metals in sediments from Bahía Blanca Estuary (Argentina)”.
  - **Natali, M., Gómez, E. Angeles, G. R., and Cuadrado, D. G.** “Submarine shore-connected sand bank monitored by means of satellite images in the external zone of Bahía Blanca Estuary, Argentina”.

  - Botté, S. E., Asteasuain, R. and **Marcovecchio, J.** “Total mercury levels in tidal flats and salt marshes from an estuarine environment, in Argentina”.
  - **De Marco, S.,** Botté, S. E., **Marcovecchio, J.** “Mercury bioaccumulation and biomagnification processes within coastal marine trophic webs. Several study cases in Argentina”.
  - **Marcovecchio, J., De Marco, S.,** and Botté, S. E. “An assessment of mercury exposure of the human population from Argentina. A quantitative approach”.

- **IV Meeting of Regional Palaeontology.** Punta Alta. Buenos Aires Province. 2005:
  - Farinati, E., **Spagnuolo, J. O.** and Aliotta, S. “Effects bio-erosive on valves and boulders at the coast of Punta Alta”.

- **IX Argentinean Congress of Meteorology.** (CONGREMET IX). Buenos Aires. 2005:
  - Marino, B. M., **Piccolo, M. C.** and Thomas, L. P. “Detection of marine breeze fronts in the coast of Buenos Aires Province”.

- **VII National Congress and I International Symposium of Research-Tourist action.** 2005:
  - Geraldi, A. M., **Piccolo, M. C.** and Perillo, G. M. E. “Lago Epecuén: A lake with tourist features and stories”
  - **Melo, W. D.,** Piccolo, M. C. and Perillo, G. M. E. “Proposal of tourist development in the beaches of Bahía Blanca estuary: Beautiful Mont Buoy and Green Island”.

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- XI Latin-American Congress of Marine Sciences - COLACMAR XI - and XXV Congress of Marine Sciences of Chile. Viña del Mar. Chile. 2005:
  - Fernández, M. D., Hoffmeyer, M. S., Marcovecchio, J. and Menéndez, M. C. “First evaluation of heavy metals concentration in the meso-zooplankton in the inner zone of Bahía Blanca estuary”.

- VI National Congress of Physical Geography. 2006:
  - Cuadrado, D. G., Ginsberg, S. S. and Gómez, E. A. “Submarine Geomorphology of the Principal Channel of Bahia Blanca estuary”.
  - Ginsberg, S. S. and Cuadrado, D. G. “Evaluation of materials of coastal erosion of the destiny (Bahía Blanca estuary, Argentina)”.
  - Pizani N., Cuadrado, D. G. and Parodi, E. “Preliminary study of tides plains”.

- II International Meeting TAPHOS’05 and IV Meeting of Taxonomy and Fossilisation. Barcelona, Spain. 2005:
  - Farinati E., Spagnuolo, J. and Aliotta, S. “Comparative taxonomy of in the coast of Bahía Blanca estuary, Argentina”.

- First International Congress on Ichnology. Trelew, Chubut, Argentina. 2005:

- Holocene environmental catastrophes in South America. IGCP 490 III Joint Meeting. Córdoba. Argentina. 2005:
  - Gómez, E. A., Martínez, D. E. and Cusminsky, G. C. “A cycle in solar irradiance as trigger of abrupt Holocene global climatic changes y negative sea level oscillations: From the lowlys to the Yes, ICSU dark Nature

- Symposium on Geo-Science Education and Outreach in the Americas. AGU-NABS-SEG-SPD/AAS Joint Assembly: Opportunities for North-South Collaboration. New Orleans.USA. 2005:
  - Perillo, G. M. E. and Piccolo, M. C. “Why there is no oceanography teaching in Argentina? A possible N-S collaboration”.

  - Perillo, G. M. E., Bohn, V. Y., Gerald, A. and Piccolo, M. C. “Shallow Ponds as Sediment and Nutrients retainer, Buenos Aires province, Argentina”.

  - Weschenfelder, J., Corrêa, I., Ayup-zouain, R., Aliotta, S., Pereira, C. and De Vasconcellos, V. “Gas accumulations revealed by high-resolution seismics in the Patos Lagoon, southern Brazil”.

- IX Iberian-American Congress on Environmental Physics and Chemistry. Cáceres. Spain. 2006:
- Borrelli, N., Oyarbide, F., Osterrieth, M. and Marcovecchio, J. O. “Effects of the vegetal cover and the calcium bio-minerals production on the bio-chemical cycle of calcium”.

- **VI International Meeting on Phytolith Research.** Barcelona. Spain. 2006:
  - Borrelli, N., Osterrieth, M. and Marcovecchio, J. E. “Calcium oxalate crystal content in native and exotic vegetal species of the Southeast of the Buenos Aires Province, Argentina”.

- **International Congress of Science and Food Technology.** Córdoba. Agencia Córdoba Ciencia S.E. 2006:
  - Caldironi, H., Borges, M. E., Piccolo, M. C. and Barrantes, F. “Determination of amnesiac toxin of the molluscs in Argentina”.

- **IX Argentinean Congress on Palaeontology and Bio-Stratigraphy.** Córdoba. Argentina. 2006:

- **International Conference on the Humboldt Current System.** Lima. Peru. 2006:
  - Matano, R. P. and Palma, E. D. “A numerical study of the ocean circulation in the South-eastern Pacific”.

- **IX Argentinean Congress on Palaeontology.** Córdoba. Argentina. 2006:
  - Farinati, E., Spagnuolo, J. O. and Aliotta, S. “Dissolution, an important taxonomic attribute in the Holocene deposits of Bahía Blanca estuary”.

- **IV Latin-American Congress on Sedimentology and XI Argentinean Meeting of Sedimentology.** 2006:
  - Cuadrado, D. G., and Gómez, E. A. “Accumulation in tides plains caused by vegetation”.
  - Da Rodda, M.C., and Parodi, E. R. “Understanding the interactions between salt marsh sediments and microphytobenthos successions as support for substrate structure”.
  - Ginsberg, S. S., Cuadrado, D. G., and Gómez, E. A. “Geomorphologic control about formation of underwater dunes”.

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- Gómez, E. A. and Maraschin, S. D. “bathymetric Sonar by Phase Measurement: new tool to study morphology and underwater sedimentology”.

- Gómez, E. A., Aguirre, M. L. and Borel, C. M. “Uncertainties in radio-carbon dating of transition and continental shelf environments”.

- Sassi, M. G., Maraschin, S. D., Cuadrado, D. G. and Perillo, G. M. E. “Effects of a threshold on the dynamics of tide channels”.

- International Conference on the Humboldt Current System. Lima, Peru. 2006:
  - Strub, T., Matano, R. P. and Palma, E. D. “A satellite study of the surface circulation in the South-eastern Pacific”.


- IV Interdisciplinary Congress from the South-west of Buenos Aires Province Southern National University. Buenos Aires. Argentina. 2006:

- XXVI Argentinean Congress of Chemistry. San Luis. Argentina. 2006:
  - Arias, A., Tombesi, N., Freije, R. H. and Marcovecchio, J. E. “Presence of aromatic poli-cycle hydrocarbons (PAHs) in surface sediments of Bahía Blanca estuary”.

  - Geraldj, A. M., Piccolo, M. C. and Perillo, G. M. E. “Multi-temporal analysis of the soil uses through the tele-detection application”.
  - Jordán, M. A., Murray, F. and Piccolo, M. C. “Re-production of Lorenz modified equation in a convection cycle: analysis of stationary orbits and equilibrium points”.

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- Melo, W. D. and Piccolo, M. C. “Cartography Bahía Blanca estuary”.

- Menéndez, M. C., Vitale, A. J., Piccolo, M. C. and Hoffmeyer, M. S. “Hydrography of the water column in relation with the tides cycle in the inner zone of Bahía Blanca estuary”.

- Perillo, M. M. and Perillo, G. M. E. “Waves and currents analysis of a marsh in Bahía Blanca estuary”.


- Pierini, J. O. and Perillo, G. M. E. “Analysis of temporal series upon the basis of fractal theory”.

- Pizani, N. V., Cuadrado, D. G. and Parodi, E. R. “Preliminary study of dredging effects on the bio-sedimentologic aspects of tide plains”.


- Torrero, M., Piccolo, M. C. and Campo de Ferreras, A. “Day-degrees of refrigeration and heating in the micro-centre of Bahía Blanca”

- VI National Congress of Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006:


- Beltrame, M. O., De Marco, S. and Marcovecchio, J. E. “Salinity effect on the lethal toxicity of cadmic and zinc in the crab: Chasmagnathus granulatus. Presence of these heavy metals in the coastal lagoon of Mar Chiquita”.


- Carbone, M. E., del Río, J. L., Perillo, G. M. E. and Martínez Arca, J. “Preliminary evolutionary scheme of coastal lagoons at the northern coast of San Matías gulf”.


- Delucchi, F., Tombesi, N., Narvarte, M., Nogueira, L., Arias, K., Freije, H. R. Fernández Severini, M. D., Marcovecchio, J. E., Hoffmeyer, M. S. “Heavy metals in the zooplankton of Bahía Blanca estuary (Argentina)”.

- Dos Santos, E. P., Piccolo, M. C. and Parodi, E. R. “Biomass developing of fouling organisms related to environmental parameters”.

- Gómez, E. A. and Cuadrado, D. G. “New tool to “see” the sea bottom: the bathymetric sonar operating by phase measurement”.


- Hempel, M., Botté, S. E., Chiarello, M. N. and Marcovecchio, J. E. “Content of heavy metals in Spartina alterniflora and sediments at Villa del Mar, Bahía Blanca estuary, Argentina”.

- Martínez, A., Belloni, N., Asteasuain, R., Marcovecchio, J. and Freije, H. R. “Aporte fluvial de nutrientes al estuario de Bahía Blanca”.

- Menéndez, M. C., Hoffmeyer, M. S., Piccolo, M. C., Biancalana, F. “Middle-zooplankton vertical distribution in relation with a tide cycle in the inner zone of Bahía Blanca estuary”.


- Palma, E. D. “Numerical modelling of slight dense plumes”.


- Pierini, J. O. and Perillo, G. M. E. “Estimation of the fractal dimension over the Atlantic coast”.

- Pierini, J. O. and Perillo, G. M. E. “Temporal series analysis upon the basis of fractal theory”.


- Pons, J. and Gómez, E. A. “Signal Digital Processing Techniques applied to sonar equipment”.
- Tonini, M. H., Palma, E. D. and Rivas, A. R. “Circulation and Dynamics of Patagonia Gulfs: 3D Barotropic Model”.

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1.- ASSOCIATION: IAPSO

2.- INSTITUTION: Instituto Nacional de Investigaciones Pesqueras (INIDEP)

Mission: It is in charge of formulating, executing and controlling the research projects on fisheries’ prospecting, evaluation and developing of acicultur technologies, fishing arts, technological processes and fishery economy, according to the guides and priorities set by the corresponding authorities.

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4.- FIELD WORK:
GUERRERO, Raúl Physical Oceanography
MADIROLAS, Adrián Underwater Acoustics

5.- PUBLICATIONS:

Articles in International and National Journals.


**Technical Reports.**


6.- CONGRESS:

- **ICES-Working Group on Fisheries Acoustics Science and Technology**, Bergen, Norway. 18 – 21 June 2003:
  - **Madirolas, A.** “The role of commercial fleets in providing key data for the planning of scientific surveys: The hoki fisheries in Argentina”.

- **V National Congress on Marine Sciences and XIII Colloquy of Oceanography** (organised by the Argentinean National Committee of IAPSO), Mar del Plata, Pcia. de Buenos Aires, Argentina, 8 – 12 December, 2003:
  - **Madirolas, A.** “Recent advances in fisheries acoustics”.

- **FEMME 2005**. Dublín, Ireland. 26 – 29 April 2005:
  - **Madirolas, A.**, Isla, F., Tripode, M., Alvarex Colombo, G. and Cabreira, G. “First results from the multibeam surveys carried out over the Argentinean continental shelf”.

- **VI National Congress on Marine Sciences and XIV Colloquy of Oceanography** (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006:
  - **Madirolas, A.** “‘Seeing’ under the sea-surface with multibeam echosounder technology”. Invited Talk.
  - **Pons, C. F., Christiansen, E. and Madirolas, A**. Madirolas, A. “Anatomic and histological study of the gaseous bladder of the common merluce (*Merluccius hubbsi*): Possible implications in the ‘nictemeral’ migrations”.
  - **Madirolas, A.**, Pons, C. F., Alvarez Colombo, G., Venere, M., Damato, J., del Frezno, M., Capiel C. and Alvarez, H. “Detailed morphometry and 3D models development of the of fishes gaseous bladder: Application of computed tomography techniques on several species from the Argentinean Sea”.
  - Alvarez Colombo, G. L., **Madirolas, A.** and Tripode, M. “Zooplanktonic aggregations in the slope-front: simultaneous scanning of the submarine topography and the plankton using different acoustic technologies”.
  - Gagliardini, D., Williams, G., Karszenbaum, H., Grings, F. and Madirolas, A. “Seabed irregularities detected LANDSAT-TM and ERS-SAR images in the external and adjacent zones of San Matías Gulf”.
  - Madirolas, A., Lasta, M., Tripode, M., Alvarez Colombo, G., Iantanos, N. and Isla, F. “Morphological characteristics of submarine cannons at the northern Patagonia”.

- **Gagliardini, D., Williams, G., Karszenbaum, H., Grings, F. and Madirolas, A.** “Seabed irregularities detected LANDSAT-TM and ERS-SAR images in the external and adjacent zones of San Matías Gulf”.
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XXIV IUGG GENERAL ASSEMBLY
Perugia (Italy), July 2 - July 13, 2007

1.** ASSOCIATION: **IAPSO

2.** INSTITUTION:**

Servicio Naval de Investigación y Desarrollo (SENID)

– Naval Service of Research and Development –

Underwater Sound Division  
Acoustic Systems Division

**Mission:** SENID’s general objective is to conduct Research and Development Projects related to maritime interests.

Its two main areas of research are: Radio Propagation and Underwater Sound Propagation. It is precisely through the latter area that SENID is mainly related to the International Association for the Physical Sciences of the Oceans –IAPSO–.

Sound Propagation in a variable medium like the ocean, as well as its interaction with the boundaries (sea-surface and seabed) and the biologic organisms, suspended particles, bubbles, submarine vehicles, etc. that are present in its volume, is a relevant area of research in Oceanography. Therefore, it turns out to be within the scope of Physical Oceanography.

3.** NAMES:** Members of CNIAPSO that work at this institution:

Michèle BAQUES (MD in Oceanography)  
Silvia BLANC (MD in Physics)  
Marta Etcheverry de MILOU (PhD in Physics)  
Juan Carlos PIZZONI (MD in Engineering)  
Silvia R. SALVADORES (MD in Physics)  
Daniel César VARA (MD in Physics)

4.** FIELD WORK:**

BAQUÉS, Michèle  
Acoustical Oceanography

BLANC, Silvia  

MILOU, M. I. E. de  
Underwater Sound. Acoustic propagation.

PIZZONI, Juan Carlos  
Acoustic Signals Processing
5.- PUBLICATIONS:

Articles in International and National Journals.


Other published articles.


Technical Reports.


• **Pizzoni, J. C.** and **Marrero, H. R.** 2005. “Selective DEMON with capture in low frequencies between 800 and 1600 Hz”. Tech. Note 01/05. SENID.


• **Baqués, M.** 2006. “Oceanographic cruise on board the R/V L. M. Gould (USA) held between the 1st January and 9th February 2006. -ACTIVITY REPORT-. Produced by the scientific observer on board”. Tech. Rep. AS 1/06, SENID.

6.- CONGRESS:

- **V Argentinean Symposium and 1st Latin-American Symposium on Antarctic Investigations**, organised by the Argentinean Antarctic Institute. Buenos Aires, Argentina, 30 August - 3 September, 2004:
  
  - **Baqués, M.**, **Blanc, S.** and **M. I. E. de Milou.** “Exploring Sound Backscattering with an Acoustic Doppler Current Meter: **PART I.** Oceanographic and Acoustic Measurements in Drake Passage.”
  
  - **Blanc, S.**, **Milou, M. I. E. de** and **Baqués, M.** “Exploring Sound Backscattering with an Acoustic Doppler Current Meter. **PART II**: Acoustic Response of Plankton at 150 kHz across the Drake Passage”.

- **PORSEC2004** (Pan Ocean Remote SEnsing Conference), Univ. de Concepción, Chile, 2004:
  
  - **Baqués, M.**, and **Blanc, S.** “Oceanographic and acoustic measurements in Drake Passage”.
  
  - **Blanc, S.**, **Mosto, P.**, **Milou, M. I. E. de** and **Benítez, C. E.** “An alternative proposal: acoustic techniques to asses detection and monitoring of toxic algal blooms”.
  
  - **Milou, M. I. E. de**, **Salvadores, S. R.** and **Blanc, S.** “Using updated parabolic equations codes to examine acoustic transmission losses measurements over the Argentinean continental slope”.

- **IAG/IAPSO/IABO Joint Assembly “Dynamic Planet 2005: Monitoring and Understanding a Dynamic Planet with Geodetic and Oceanographic Tools”, Cairns, Australia, 2005:**
  
  - **Blanc, S.**, **Baqués, M.** and **Milou, M. I. E. de.** “An acoustical insight into Drake Passage oceanography”.

- **IV Inter-American Naval Conference Specialised on Science and Technology**, Lima, Peru. 2006.
  
  - **Blanc, S.**, **Baqués, M.** and **Milou, M. I. E. de.** “Acoustic description of oceanography across Drake Passage”.

- **VI National Congress on Marine Sciences and XIV Colloquy of Oceanography** (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.
- **Blanc, S., Baqués, M. and Milou, M. I. E. de.** “Acoustic alternative methodology to estimate Numerical Abundance of zooplankton across the Drake Passage”.

- **Salvadores, S. R. and Milou, M. I. E. de.** “A description of the acoustic field in the Drake Passage”.

7.- **COURSES:**

- **2003:** September. Course attended by **M. Baqués:** “Underwater Acoustics”, by Prof. W. Kuperman and Dr. P. Roux with the Marine Physical Laboratory, Scripps Institute of Oceanography, University of California, San Diego. University of Concepción, Chile.

- **2003:** October 8. Seminar on: “Optimum acoustic frequency of propagation at the marine front of the Río de la Plata estuary”, by **S. Salvadores.** Smith Lab. Woods Hole Oceanographic Institution (WHOI), MA, USA.

- **2003:** October 14. Seminar on: “Activities performed at WHOI. State-of-art”, by **S. Salvadores.** Woods Hole Oceanographic Institution (WHOI), MA, USA.

- **2003:** October 16. Seminar on: “Topics of underwater acoustic modelling and factors affecting the value of the optimum frequency of propagation under positive sound velocity gradient conditions and strong changes in sea water salinity”, by **S. Salvadores.** Ocean Acoustics Dept., Massachusetts Institute of Technology (MIT), MA, USA.


- **2006:** February. Talk on “Activities at the Underwater Sound Division of the Naval Service of Research & Development” by **M. Milou** at the Applied Research Laboratory (APL), University of Washington, Seattle, WA, USA.

- **2006:** February. Talk on “Some current investigations on acoustic volume scattering at the Underwater Sound Division of the Naval Service of Research & Development” by **S. Blanc** at the Applied Research Laboratory (APL), University of Washington, Seattle, WA, USA.

- **2006:** February. Talk on “Activities at the Underwater Sound Division of the Naval Service of Research & Development” by **M. Milou** at the Naval Research Laboratory (NRL), Washington DC, USA.

- **2006:** February. Talk on “Remarks on updated acoustic databases” by **S. Blanc** at the Naval Research Laboratory (NRL), Washington DC, USA.


9.- ADDRESS:
   Servicio Naval de Investigación y Desarrollo (SENID)
   – Naval Service of Research and Development –
   Underwater Sound Division
   Av. Libertador 327
   (1638) Vicente López
   Pcia. de Buenos Aires
   Argentina

   PHONE:  00 54 (11) 4 797 8346 ext. 107/110
   FAX:    00 54 (11) 4 795 6895

10.- WEB PAGE:  www./ara.mil.ar/serv_serv naval.asp#02
1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Servicio de Hidrografía Naval - SHN -

– Hydrographic Naval Service –

Department of Oceanography

Mission: The mission of the Oceanography Department is to carry out and encourage studies, explorations, works and investigations about physical oceanography, marine geology, geophysics and chemistry and any other ocean science related to maritime activities that contribute to the economical and scientific development of the country, functioning as a research centre of ocean sciences.

3.- NAMES: Members of CNIAPSO that work at this institution:

Carlos Balestrini (MD in Oceanography) cfbales@mail.retina.ar
Alejandro A. Bianchi (MD in Oceanography) abianchi@hidro.gov.ar
José Luis Cavalletto (PhD in Geology) jlcavalletto@hidro.gov.ar
Marcela Charo (MD in Oceanography) mcharo@hidro.gov.ar
Juan De Abelleyra (MD in Oceanography) jdeabelleyra@hidro.gov.ar
Walter C. Dragani (PhD in Atmospheric Sciences) dragani@hidro.gov.ar
Mónica Fiore (MD in Oceanography) marcas@hidro.gov.ar
Lucio J. Janiot (MD in Chemistry) quimica@hidro.gov.ar
Andrés Lusquiños (MD in Oceanography) (Retired)
Carlos Mazio (PhD in Atmospheric Sciences) mazio@hidro.gov.ar
Gerardo Parker (PhD in Geology) (Dead)
Marcelo Patterlini (Eng. in Geophys. & Geodesy) mpatterlini@hidro.gov.ar
Alberto A. Piola (MD in Oceanography) apiola@hidro.gov.ar
Silvia Inés Romero (MD in Oceanography) sromero@hidro.gov.ar
Walter Reynoso Peralta (MD in Geophysics) wreynoso@hidro.gov.ar
Ariel Troisi (MD in Oceanography) atroisi@hidro.gov.ar
Roberto Violante (PhD in Geology) violante@hidor.gov.ar
4.- FIELD WORK:

BALESTRINI, Carlos  
Physical Oceanography.

BIANCHI, Alejandro A.  
Physical Oceanography.

CAVALLOTTO, José Luis  
Coastal and Marine Geology.

CHARO, Marcela  
Regional oceanography and western boundary currents. Processing of ocean colour images (SEAWIFS) and hydrographic data (CTD, XBT) design; Data Bases updating.

DE ABELLEYRA, Juan  
Physical Oceanography. Continental shelf.

DRAGANI, Walter C.  
Physical Oceanography.

FIORE, Mónica  
Tides.

JANIOT, Lucio J.  
Marine Chemistry and Marine Pollution

LUSQUIÑOS, Andrés  
Physical Oceanography (Currently, retired)

MAZIO, Carlos  
Tide-Driven Currents. Waves. Hydrodynamic Models

PARKER, Gerardo  
Marine Geology (Dead)

PATTERLINI, Marcelo  
Marine Geophysics

PIOLA, Alberto R.  
Physical Oceanography

REYNOSO PERALTA, Walter L.  
Marine Geophysics and Geology, Geomorphology, Seafloor Characterisation and Ocean Bathymetry.

ROMERO, Silvia Inés  
Ocean Colour - River Plumes - Oceanic Fronts - Biophysical Interactions

TROISI, Ariel  
Physical Oceanography

VIOLANTE, Roberto  
Marine Geology

5.- PUBLICATIONS:

Articles in International and National Journals.


Technical Reports.


Other published articles.


6.- CONGRESS:

- **CLIVAR/OOPC/IAI Workshop on the South Atlantic Climate Observing System (SACOS)**, Angra dos Reis – Brazil, 31-38. 6 – 8 February, 2003.


- **Continental Shelves during the last Glacial Cycle.** 2003.

  - **Cavallotto, J. L. and Violante, R. A.** “Late Pleistocene and Holocene transgressions in the northern Patagonia gulfs, Argentina”. (IGCP No 464, Gdansk, Poland).

- Janiot, L. J., Sericano, J. L. and Marcucci, O. “Evidence of Oil Leakage from the Bahía Paraiso Wreck in Arturo Bay, Antarctica”.


- Janiot, L. J., Sericano, J. L. and Marcucci, O. “Evidence of Oil Leakage from the Bahía Paraiso Wreck in Arturo Bay, Antarctica”.


- D’ Onofrio, E. E., Fiore, M. M. E. “Estimation of extreme levels at Buenos Aires’ harbour taking into account the increment of the average level”.


- Meccia, V., Dragani, W. C., Schmidt, S. and Pousa, J. “Beach profile evolution during intense wind wave events at Pinamar”.


- Simionato, C. G., Dragani, W. C. Núñez, M. and Meccia, V. “Currents and heights simulation at Río de la Plata using Hamsons/Cima model forced by the re-analysis of NCEP and comparisons with observations”. FREPLATA Symposium.

- Simionato C. G., Dragani, W. C. and Núñez. “Propagation of the principal moon semidiurnal tide wave in the South-eastern South American continental shelf and Río de la Plata”. FREPLATA Symposium.

- **Continental Shelves during the last Glacial Cycle.** IGCP No 464, Rome, Italy. 2004.
  - Cavallotto, J. L. “Sea-level and environmental changes since the LGM in the Río de la Plata (Argentina).”

  - Piola, A. R. and Romero, S. I. “Space Time variability of the Plata River plume inferred from ocean colour”

  - Romero, S. I. and Piola, A. R. “Spatial and temporal variability of Río de la Plata’s plume”

- **International Conference & Exhibitions on Oil Spill Technology.** Trondheim, Norway. 14-17 June 2004.

  - Kokot R., Menéndez A., D’ Onofrio E. E., Barros V. and Fiore, M. M. E. “Return periods of floods over the coastal lands of the Río de la Plata (AIACC Project No. LA26)”

  - Bianchi, A., Charo, C., Bianucci, L., Balestrini, C., Schloss, I. and Ferreyra, G. “Spatial and inter-annual variability of CO₂ fluxes in the Weddell Sea. It relation with the environmental variables”.
  - Romero, S. I. and Charo, M. “Seasonal and inter-annual variability of chlorophyll–A in the Atlantic Ocean using ocean (SeaWiFS)”.

  - Dragani, W. C. and Romero, S. I. “Impact of an eventual local wind change on the waves weather at the upper Río de la Plata”.
- **D' Onofrio, E., Fiore, M. M. E.,** Ruiz, H. E. “Influence of the new temporal scales on oceanic tides prediction and corrections to gravimetric measurements”.

- Natali, M. P., Brunini, C. A., Drewes, H., Kaniuth, K., **Fiore, M. M. E.** and **D’ Onofrio, E. E.** “Sea absolute level determination along the Argentinean coast”.


- **Cavallotto, J. L. and Violante, R. A.** “Post-LGM evolution of the inner coastal plain of the Río de la Plata (Argentina).”

- **XI Latin-American Congress on Marine Sciences.** Viña del Mar, Chile. 16 – 20 May 2005.

- Simionato C. G, Meccia V. L., **Dragani, W. C.** and Nuñez, M. N. “Observations of internal waves in the estuary of Río de la Plata”.


- **Piola, A. R. and Romero, S. I.** “Space -Time Variability of the Plata Plume Inferred From Sea Spectral Reflectance Data (Ocean Colour)”.


- Simionato, C. G., Meccia, V., **Dragani, W. C.,** Guerrero, R. and Nuñez, M. “Río de la Plata’s estuary barotropic response to wind variability at synoptic and inter-seasonal scales”.

- **IX Argentinean Congress on Meteorology.** Buenos Aires, Argentina, 3 - 17 October 2005.

- Simionato C. G, Meccia V. L., **Dragani, W. C.,** Guerrero R. A. and Nuñez M. N. “Barotropic response of the estuary of Río de la Plata to wind variability in the synoptic and Inter.-seasonal scales”.

- Janiot, L. J., with the Administrative Commission of the Uruguay River. “Environmental Protection Plan for the Uruguay River”.

• 8th International Conference on Southern Hemisphere Meteorology and Oceanography, Foz do Iguazú, Brazil, 23 – 28 April, 2006.

- Simionato, C. G., Meccia, V. L., Dragani, W. C., Guerrero, R. and Núñez, M. “Recent advances in the knowledge of the Río de la Plata estuary circulation, forcing and variability”.

• XI Meeting of the International South Atlantic Buoy Program, Technical Workshop, Buenos Aires, 30 May – 2 June, 2006:

- Dragani, W. C. “The coastal environmental buoy”.


- Di Biase, F., D’Onofrio, E. E. and Dragani, W. C. “New charts of coranges and cotidals for the Río de la Plata”.


- Grismeyer, W, Dragani, W. C., D’ Onofrio, E. E. and Fiore, M. M. E. “First recorded evidence of a tsunami-wave in the coast of Buenos Aires province”.

- Mazio, C. “Tidal structure at Northern Patagonia using WqMap model”.

• VI National Congress of Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.


- Bianucci, L., Ianson, D. and Bianchi, A. “A bio-chemical boxes model of the Patagonia tides fronts”.

- Cavallotto, J. L. and Violante, R. A. “Paleoclimatic, paleoceanographic and tectonic influence during Mar del Plata submarine cannon evolution”.


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Fiore, M. M. E., Stadelmann, M., D’ Onofrio, E. E. “Astronomic tide propagation from Buenos Aires harbour to Zárate”.

Isbert, H. G., Bianchi, A. A., Ruiz Pino, D. and Balestrini, C. F. “Relation among the environmental variables and the sea-atmosphere fluxes of CO₂ at Weddell Sea”.


7.- COURSES:

• 2003. As part of the Third Austral Summer Institute on Ocean Observing Systems, organised by the University of Concepción, Woods Hole Oceanographic Institution and Andes Foundation. Concepción, Chile, the three following course were attended by S. I. Romero:

- “Application of Acoustical and Optical Methods for Plankton Monitoring”, by Dr. Mark C. Benfield (Dept. of Oceanography & Coastal Sciences/Coastal Fisheries Institute, Louisiana State University).

- “Observing the large-scale Ocean Circulation”, by Dr. Detlef Quadfasel (Dept. of Geophysics and Danish Center for Earth System Science, University of Copenhagen).

- “Coupled physical-biological and biogeochemical time series and advanced technologies”, by r: Francisco P. Chávez (Monterey Bay Aquarium Research Institute).


• 2004: Post-Graduate course "Processes and sediments recordings in coastal regions and submarine continental shelves”, by R. A. Violante and J. L. Cavallotto, Faculty of Natural Sciences and Museum. National University of La Plata, La Plata, Buenos Aires province. Argentina.


- **2004-2006**: Postgraduate Programme in Ocean Bathymetry. Nippon Foundation/GEBCO Training Program at the Centre for Coastal and Ocean Mapping/Joint Hydrographical Centre of the University of New Hampshire, USA, attended by **W. Reynoso Peralta**.


- **2005**: Course attended by **S. I. Romero, M. M. E. Fiore, M. Charo**: “Computation of Tides from Satellite Altimetry”. Professor: Dr. Victor Zlotnicki (Jet Propulsion Laboratory California Institute of Technology Pasadena, California, USA). Buenos Aires, Argentina.


- **2005**: Course attended by **J. L. Cavallotto**. "Seismic stratigraphy and its application to marine sedimentary media evolution", by Dr F. J. Hernández Molina (Faculty of Marine Sciences - University of Vigo), F. J. Lobo Sánchez (Andalusian Institute of Earth Sciences - University of Granada) and L. M. Fernández Salas (Spanish Institute of Oceanography in Málaga). Superior Professional Council of Geology.


8.- ADDRESS:

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Oceanography Department
Av. Montes de Oca 2124
(C1270ABV) Buenos Aires
ARGENTINA
PHONE: 00 54 (11) 4 301 0061 / 7

1.- ASSOCIATION: IAPSO

2.- INSTITUTION:

Rowan University

Dr Patricia Mosto

3.- NAME: Patricia Mosto (PhD in Biology)  

mosto@rowan.edu

4.- FIELD WORK:

MOSTO, Patricia  
Water Quality and Water Pollution/ Engineering Education

5.- PUBLICATIONS:

**Articles in International and National Journals.**


Other published articles.

• Mosto, P., 2004. “Honing the Skills of Department Chairs at Rowan University.” ACE Department Chair Online Resource Center.

Technical Reports.


6.- CONGRESS:

International Presentations (out of USA).

• 16th International Congress of Chemical and Processing Engineering (CHISA), Prague, Czech Republic. 2004:
  - Mosto, P. “Future of Chemical Engineering: Integrating Biology into the ChE Curriculum”.

• Invited Conference. Ankara University, Turkey. 2005:
  - “Innovation in Engineering Education”.

• Invited Conference. Ataturk University, Turkey. 2005:
  - “New Innovations in Engineering Education – Rowan Clinics: A Case Study and Integrating Biology in the Engineering Curriculum at Rowan University”.

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- **International Botanical Conference.** Vienna, Austria. 2005:
  - “Green algae from Cryptogamic Crusts, Santa Fe, New Mexico”.

- **17th International Congress of Chemical and Processing Engineering (CHISA) – 2006:**
  - “The Engineering Clinics at Rowan University: A Unique Experience”.

### Presentations in USA.

- **3rd Annual Hawaii International Conference on Arts and Humanities.** Honolulu, Hawaii. 2005:
  - Mosto, P. "Effectiveness of an Interdisciplinary Course Designed for Freshman”.

- **102nd General Meeting of the American Society for Microbiology.** Chicago, Il., 2003:
  - Mosto, P. “Establishment of an Introductory Biology/Microbiology Course for Undergraduate Chemical Engineer Major”.

- **89th Annual Meeting of the Association of America Colleges and Universities.** Seattle, WA, 2003:
  - Mosto, P. “Designing a Workshop to Develop Team Taught Interdisciplinary Courses to Address Issues of Diversity and Democracy in America”.

- **2003 Annual AAHE Conference.** Washington, DC, 2003:
  - Mosto, P. “All Together Now: How student learning is enhanced by working in collaboration with faculty. Learning to Change”.

- **Phycological Society of America 56th Annual Conference.** Salishan, Oregon, 2003:
  - Mosto, P. “Periphytic Algae as indicators of Nitrogen Enrichment in New jersey Lakes”.

- **AICHE Annual Conference.** San Francisco, CA. 2003:
  - Mosto, P. “Introducing Students to the Link Between Biology and Chemical Engineering in the Freshman and Sophomore Curriculum”.

- **2004 Annual AAHE Conference.** San Diego, CA. 2004:
  - Mosto, P. “Interdisciplinary collaboration: a key component in improving students' learning. Learning in 3D”.

- **The teaching Professor Conference.** Cherry Hill, NJ. 2004:
  - Mosto, P. “Changing in the Context of Learning”. “If you build it – They will come”.

- **AIChE Annual Meeting.** Austin, Tx. 2004:
  - Mosto, P. "Integrating Biology into the Upper Level ChE Curriculum".

- **ASEE Midatlantic Section Fall Meeting.** Washington D.C. 2004:
- Mosto, P. “Research Experiences in Pollution Prevention and Sustainability for Undergraduates”.

**Regional Presentations**

- **6th Rowan STEM Symposium.** Glassboro, NJ. 2003:
  - Mosto, P. “PSI- Pond Scum Investigation: Periphytic Algae as Bioindicators of Nitrogen Inputs in Lakes”.
  - Mosto, P. “To Kayak or Not to kayak”.

- **34th Mid Atlantic Industrial and Hazardous Waste Conference.** New Brunswick, NJ, 2003:
  - Mosto, P. “Metal Uptake by Algae for Remediation of Hazardous Wastes”.

- **Scholarship Night. Rowan University.** N.J. 2004:
  - Mosto, P. “Bildner Project”.

- **ESA – Mid Atlantic Ecology Conference.** Lancaster, PA, 2004:
  - Mosto, P. “Ecological Indicators of River Health on two tributaries of the Maurice River, NJ”.

- **Delaware Valley Chapter, Society for Conservation Biology, Annual Meeting.** Villanova, PA. 2004:
  - Mosto, P. “Water Quality Indicators of two tributaries of the Maurice River, NJ”.

- **7th Rowan STEM Symposium.** Glassboro, NJ. 2004:
  - Mosto, P. “Isolation of Ethanol-Resistant Mutants of E. coli FBR5 for Fermentation of Corn Stover to Ethanol”.
  - Mosto, P. “Microbial Uptake of Arsenic”.
  - Mosto, P. “Myth Busters: Do Algae Grow in the Desert?”.
  - Mosto, P. “Haematococcus pluvialis growth for optimum astaxanthin production”.
  - Mosto, P. “Water Quality indicators of river health on two tributaries of the Maurice River, NJ”.

- **8th Rowan STEM Symposium.** Glassboro, NJ. 2005:
  - Mosto, P. “Water Quality indicators of two tributaries of the Maurice River, NJ”.
  - Mosto, P. “Myth Busters Revisited: Which Algae Grow in the Desert?”.

- **9th Rowan STEM Symposium.** Glassboro, NJ. 2006:
  - Mosto, P. “Design of a lab module incorporating the IMAPS unit into the classroom”
  - Mosto, P. “Measurement of water quality parameters on Rowan Pond”.

7.- COURSES:
Courses by **P. Mosto** at Rowan University, NJ, USA on the following topics:

- **Spring 2003**: Environmental Sciences and Biology Senior Seminar. Natural Resources.
- **Fall 2003**: Ecology and General Biology Environmental Focus.
- **Spring 2004**: Limnology and Natural Resources.
- **Fall 2004**: Environmental Toxicology and Honors Environmental Ethics.
- **Spring 2004**: Honours Human Ecology.
- **Spring 2006**: Issues on Sustainability.

8.- **ADDRESS**:
Rowan University  
201 Mullica Hill Rd,  
Glassboro, NJ 08028  
USA

PONE: 00 1 856-256-4012  
FAX: 00 1 856-256-4912

9.- **WEB PAGE**:  
http://www.rowan.edu/provost/staff/#mosto and  
http://users.rowan.edu/~mosto/
1.- ASSOCIATION: IAPSO

2.- INSTITUTION: Argentinean Navy

3.- NAME: Juan Carlos Pons (MD in Computing Sciences, Magister in Engineering) juan.pons@yahoo.com

4.- FIELD WORK: Underwater communications, side scan sonar, magnetometers.

5.- PUBLICATIONS:


6.- CONGRESS:

• VI National Congress on Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006.

  - Pons, J. and Gómez, E. A. “Signals Digital Processing Techniques applied to sonar equipment”.

7.- COURSES:

• Engineering Magíster (finished on March 2006), National Southern University, Bahía Blanca, Argentina.

8.- ADDRESS:

  Home address: Holdich 564.
  (8200) Bahía Blanca.
  Argentina
  PHONE: 00 54 (0291) 4 557 371

9.- WEB PAGE: none
1.- ASSOCIATION: IAPSO

2.- INSTITUTION: - Argentinean Navy, Secretary for Maritime Affairs (Currently, in process of retirement).
   - Vice-Chairman of the Intergovernmental Oceanographic Commission (IOC) from UNESCO
   - Freelance oceanographer and advice in oceanic issues in the Argentinean Secretary of Science, Technology and Productive Innovation.

3.- NAME: Javier Armando Valladares (MD in Oceanography) Javieravalladares@yahoo.com

4.- FIELD WORK: Sciences management

5.- PUBLICATIONS:
   • Technical Reports and internal publications (classified material) within the Argentinean Navy.

6.- CONGRESS:
   • GRASP (GOOSE Regional Alliance for the Southeast Pacific). Guayaquil, Ecuador. 15-17-June, 2006:
     - Participation in the role of Vice-Chairman of IOC.
   • COI Executive Council. Paris, France. 21-28 June, 2006:
     - Participation in the role of Vice-Chairman of IOC.
   • VI National Congress on Marine Sciences and XIV Colloquy of Oceanography (organised by the Argentinean National Committee of IAPSO), Puerto Madryn, Chubut, Argentina, 4 – 8 December, 2006:

7.- COURSES:
8.- ADDRESS:
   Home address: Jonas Salk 3267
   Olivos –Buenos Aires
   Argentina
   PHONE: 00 54 11 4313-1477/1484
   FAX: 00 54 11 4312-8364

9.- WEB PAGE: none
XIII COLLOQUY OF OCEANOGRAPHY
joint with
V National Congress of Marine Sciences

4– December 2003
Mar del Plata, Buenos Aires, Argentina

organised by the Argentinean National Committee of IAPSO (CNIAPSO).

Gerardo M. Perillo          Marta I. E. de Milou          Diana Cuadrado
PRESIDENT                    SECRETARY                    CO-SECRETARY
XIV COLLOQUY OF OCEANOGRAPHY

joint with

VI National Congress of Marine Sciences

4 – 8 December 2006
Puerto Madryn, Chubut, Argentina

organised by the Argentinean National Committee of IAPSO (CNIAPSO).

Silvia Blanc
PRESIDENT
2004-2008

Walter Dragani
SECRETARY
2004-2008
The National Committee of IAPSO –CNIAPSO– welcomes you to the website of the XIV Colloquy of Oceanography that will be held jointly with the VI National Congress of Marine Sciences. The aim of this event is to provide a unique “space” and “time” within a unique natural environment to Argentinean scientific investigators as well as foreign ones, working in Oceanography. Here, they will be able to share topics, problems, results, advances, discussions, updating and current and further projects, related to their field of work. Thus, it is expected to encourage the continuous growth of the whole scientific community that has a strong commitment with the oceans in Argentina.
What does CNIAPSO mean in Argentina?

CNIAPSO identifies a non-governmental association, a non-lucrative one, namely, “Comité Nacional” (National Committee) of IAPSO (International Association for the Physical Sciences of the Oceans), whose origin in Argentina corresponds to the end of the sixties.

Its mission is set in the first Article of its Internal Statute:

“To promote the study of the scientific problems related with the ocean and the interaction that takes place in its boundaries, taking into account the contribution of marine geophysics, marine geology, marine chemistry, physical oceanography, meteorology and hydrology; to organise scientific meetings and to report the corresponding results of the scientific activity in this field.”

Currently, CNIAPSO is composed by eighty five members. They are Argentinean scientific researchers that live either in Argentina or abroad, who have a great interest in common, namely, the scientific knowledge of the oceans. They are researchers working in different areas, such as oceanographers, physicists, chemists, geologists, biologists, geographers, mathematicians, meteorologists, hydrologists, engineers, Argentinean Navy Officers, retired or in service, experts in computing sciences. CNIAPSO’s activities are also spread and sometimes even shared with undergraduate and graduate students of oceanography studying at the Faculty of Sciences, University of Buenos Aires, or at other private and public universities.

Brief history:

Historically, when CNIAPSO arose in Argentina, at the beginning of the seventies, it had the objective of “opening” a space, that did not exist up to that moment. It was oriented to consolidate an incipient community who was interested in studying the sea (including its boundaries and habitants), contributing to solve scientific-technological problems related to it.

Within CNIAPSO, that scientific community finds a “site-in-common”:

- For publishing. Thus, it follows the creation of a national journal with anonymous reviewers, namely, “ACTA OCEANOGRAPHICA”. It stands for quite a long time till its edition had to be finished after some years mainly because of the lack of financial support.
- For sharing, problems, efforts and projects with other colleagues working in related areas.
- For interacting with other researchers from the national community, and doing so, to benefit themselves with constructive and useful judgements derived from the fact that submission of their own work to evaluation by equals finally enriches the own intellectual knowledge of any subject.
- For joining efforts that lead to optimise the scarce available resources and to avoid unnecessary superposition of tasks.
### Relationships with other organisms:

Regarding the **international** scientific community, we may mention the *International Association for the Physical Sciences of the Oceans* (IAPSO) whose mission is analogous to the one of CNIAPSO, concerning the national scientific community, and whose history comes from the beginning of the XX century.

IAPSO is one of seven Associations of the International Union of Geodesy and Geophysics (IUGG), scientific organisation devoted to promote and coordinate studies about the Earth and its environments, which, in turn, is one of the Unions of the International Council for Science (ICSU), that was created in 1931. IAPSO participates in ICSU's Scientific Committee on Oceanic Research (SCOR) which is a non-governmental organism created by ICSU. IAPSO interacts with UNESCO's Intergovernmental Oceanographic Commission (IOC). Member Countries of IAPSO (more than fifty) are the same as the member countries of the International Union of Geodesy and Geophysics (IUGG).

National Committees or equivalent organisations within member countries may appoint national correspondents who normally serve as national delegates to the IAPSO business meetings held in conjunction with General Assemblies of IUGG.

Regarding the **national** scientific community, there is a National Committee of the International Union of Geodesy and Geophysics (CNUGGI) whose principal objective is representing Argentina at IUGG. Its Members are divided in seven Sub-Committees. One of them is the corresponding to Physical Sciences of the Oceans. Each Sub-Committee, in turn, represents the Argentina Republic at the respective IUGG International Association. Accordingly, the Sub-Committee of the Physical Sciences of the Oceans –CNIAPSO– represents Argentina at IAPSO.

On the other hand, IAPSO interacts with the Intergovernmental Oceanographic Commission –IOC– of UNESCO (United Nations Organisation for the Education, the Science and the Culture) since 1960, that provides Member States of the United Nations with an essential mechanism for global co-operation in the study of the ocean. The IOC assists governments to address their individual and collective ocean and coastal problems, through the sharing of knowledge, information and technology and through the coordination of several national programmes. The enclosed figure schematically shows the above mentioned relationships.
- **Colloquies of Oceanography in Argentina.**

  I  09-1972  Naval Observatory, Buenos Aires  
  II  10-1973  Naval Observatory, Buenos Aires  
  III  06-1975  Naval Observatory, Buenos Aires  
  VI  10-1979  Technological Institute of Buenos Aires, Buenos Aires  
  VII  05-1982  Argentinean Institute of Oceanography, Bahía Blanca  
  VIII  10-1991  Technological Institute of Buenos Aires, Buenos Aires  
  IX  09-1994  Southern National University, Bahía Blanca  
  X  19-1997  Argentinean Institute of Oceanography, Bahía Blanca  
  XI  10-1999  CRIBABB, Bahía Blanca  
  XII  10-2001  Sheraton Hotel, Mar del Plata  
  XIII  12-2003  University of Mar del Plata, Mar del Plata  
  XIV  12-2006  National Patagonia Centre, Puerto Madryn

- **Activities proposed, organised and performed by CNIAPSO.**

  1. **SYMPOSIA with their respective Invited Talks:**

    1. **Oceanic circulation and processes at oceanic fronts.**

        Chairpersons: A. Piola (SIHN/UBA/CONICET, Argentina) – A. Rivas (CENPAT, Argentina).

        Invited Talks:
        
        - “Dynamics of light dense discharges”. Lecturer: Dr Elbio Palma, Dept. of Physics - Universidad Nacional del Sur, Bahía Blanca, Argentina.
        
        - “Tracing the Plata waters on the South American continental shelf. The La Plata Project”. Lecturer: Dr Osmar Möller, Dept. of Physics, Fundação Universidade Federal do Rio Grande, Brazil.

    1. **Coastal circulation, its interaction with the open ocean and the continent, and with the chemical, biological and geological associated processes.**

        Chairpersons: W. Dragani (SIHN, Argentina) – A. Bianchi (SIHN, Argentina).

        Invited Talks:
        
        - “Recent advances in the knowledge of the Río de la Plata estuary circulation, forcing and variability”. Lecturer: Dr Claudia Simionato (CIMA-UBA-CONICET, Argentina).
1.3. Physical and Biological Controls on Coastal Wetland Elevation.

**Chairpersons:** G. Perillo (IADO, Argentina) – O. Iríbarne (UNMdP, Argentina)

**Invited Talks:**

- “Physical and Biological Controls on Coastal Wetland Elevation and Sustainability”. **Lecturer:** Dr Donald R. Cahoon. (Patuxent Wildlife Research Centre, USA.).

1.4. Sea-Atmosphere interaction.

**Chairpersons:** C. Piccolo (IADO, Argentina) – C. Simionato (CIMA-CONICET-UBA, Argentina).

**Invited Talks:**

- “Global Climate Change and its regional effects”. **Lecturer:** Dr Mario Núñez, Dept. of Marine and Atmospheric Sciences, University of Buenos Aires, Argentina.

1.5. Current alternative methodologies and techniques applied to oceanographic research.

**Chairpersons:** V. Zlotnicki (JPL, USA) – M. E. Milou (SENID, Argentina).

**Invited Talks:**

1. “Satellite Sensors for Oceanography, present and future”. **Lecturer:** Dr Victor Zlotnicki (Jet Propulsion Laboratory, California Institute of Technology, USA).

2. “Surveying with multibeam echosounders or “watching” into the ocean: Case studies from Argentinean waters”. **Lecturer:** Ms in Engineering Adrián Madirolas. (INIDEP, Argentina).

2. **Plenary Conference:**

- “Activities of the Intergovernmental Oceanographic Commission -IOC-”. **Lecturer:** CN Lic. Javier Valladares (IOC, Argentina).

3. **Debate:**

- “Oceanographic Operative Research and Marine Scientific Research? or Oceanographic Operative Research versus Marine Scientific Research?”. **Coordinated by:** J. Valladares (COI, Argentina).
4. **Antarctic Activity:**


**Invited Talk:**
- “Impact of the climate change on the coast of Antarctic Peninsula due to the disintegration of the ice barriers”. *Lecturer:* Pedro Skvarca

6. **CNIAPSO General Assembly:**
- Some relevant considerations commented during the CNIAPSO General Assembly:
  - Currently, the small but active Argentinean oceanographic community, that belongs to the respective National Committee of IAPSO, is composed by 87 Members.
  - The Members of the Argentinean National Committee of IAPSO presented: 114 contributions (47 oral presentations and 67 posters) at the XIV Colloquy of Oceanography.
  - There were more than 1.100 participants in the XIV Colloquy of Oceanography, joint to VI National Congress of Marine Sciences. In particular, this latter meeting, mainly devoted to Marine Biology, is traditionally attended by a significant number of researchers (about 700 on 2003).
  - The funds provided by the National Secretary of Science, Technology and Innovative Production to financially contribute with the XIV Colloquy of Oceanography, organised by the Argentinean National Committee of IAPSO, namely, $ 6.300 (about US$ 2100) were used as follows, among Invited Lecturers, Convenors and Members of CNIAPSO:
    - Costs due to 2 trips by car (Buenos Aires-Puerto Madryn-Buenos Aires and Mar del Plata-Puerto Madryn-Mar del Plata).
    - Hotel Accommodation for 10 participants (equivalent to 36 nights at a hotel).
    - 4 transfers Trelew airport- Puerto Madryn- Trelew airport.
    - Dinner and lunch vouchers (about 50).
  - Many local and regional newspapers included several articles devotes to the scientific event.