

## General information

All nonresident participants will stay in the Costa Río Apart Hotel (Avenida San Martín 673) in Río Gallegos (phone: +54-2966-423-412, fax: +54-2966-421-446, email: [costario@infovia.com.ar](mailto:costario@infovia.com.ar)). All scientific talks will be held in the Conference Hall at the Complejo Cultural Santa Cruz, Av. San Martín and Ramón y Cajal, located in walking distance for the hotel.

If there should occur any question, do not hesitate to contact the PASADO organizing committee consisting of Hugo Corbella, Nora Maidana, Christian Ohlendorf and Bernd Zolitschka.

## Plano urbano de Río Gallegos



City map of Río Gallegos

## Introduction

This international workshop is based on the research initiative “Potrok Aike Lake Sediment Archive Drilling Project” (PASADO) within the framework of the “International Continental Scientific Drilling Programme” (ICDP). PASADO addresses several challenging issues of geoscientific and socioeconomic relevance related to Earth history and climate (quantitative climatic and environmental reconstruction, palaeosecular variation of the Earth's magnetic field), natural hazards (fire history, frequency of volcanic activity including tephra fallout, dust deposition) and volcanic systems (evolution of phreatomagmatic craters, history of volcanic activity) for the last several hundred thousand years. Moreover, dust and tephra records will provide means to link this terrestrial record to marine sediment archives and to ice cores from Antarctica. Finally, obtained reconstructions of climate variability will be compared statistically with the output of Global Circulation Model (GCM) simulations to improve our understanding of forcing mechanisms of the global climate. This international and highly interdisciplinary research approach needs a detailed pre-planning to be carried out successfully. Therefore, we will focus during the ICDP-Workshop PASADO on discussing and planning of objectives and achievements, required laboratory analyses and techniques, forms of scientific collaboration, anticipated drilling sites and operations as well as on logistics, funding, political and legal issues.

The ICDP-Workshop PASADO (2<sup>nd</sup> milestone) follows up an ICDP pre-proposal which was submitted by January 15, 2005 (1<sup>st</sup> milestone) and is organized to summarize all currently available information related to the Pali Aike Volcanic Field, in which the target of this initiative – Laguna Potrok Aike, Santa Cruz (southern Patagonia, Argentina) – is located (day 1). During day 2 of the workshop a field trip introduces the site of the maar lake to all participants. On day 3 a variety of additional methods not yet applied or not yet fully exploited will be proposed. Finally, on day 4 of the workshop the PASADO organizing committee expects from the scientific community to stimulate the discussion about which methods need to be applied, to join in with their own ideas and methods and to streamline the overall conceptions about the strategy and the aims that should be considered for the full coring proposal due January 15, 2007 (3<sup>rd</sup> milestone). The output should be a collectively developed science plan, which will serve as the nucleus for international multidisciplinary collaborations. Ideally, the GLAD 800 coring expedition is anticipated not before southern summer 2007/08. Upon coring, individual researchers will need to write proposals to their national funding agencies and apply for soft money to do the actual work on the core material.

In addition to sediment coring it would be desirable to organize and continue the monitoring approach, which helps tremendously to improve our understanding of modern processes. This in turn is essential for a better interpretation of the environmental records of the past. Monitoring aspects could include e.g. lake water, runoff, groundwater, limnology and climatic conditions (precipitation, evaporation, wind, temperature).

Finally, we wish to thank some persons and organizations for their support. Without the scientific support of Vera Markgraf (University of Boulder, Colorado), Jörg Negendank (GeoForschungsZentrum Potsdam) and the late Arturo Amos (PROGEB, San Carlos de Bariloche) we would never have started to work on lakes in southern Patagonia. Fieldwork in Santa Cruz would not have been possible without the political support of Francisco Anglesio (Subsecretario de Medio Ambiente e Ministerio de Economía y Obras Públicas, Río Gallegos), the tireless logistical support through Cpt. J. Daniel Moreteau (Puerto Madryn), Cris(tobal) Kennard (Río Gallegos) and Gabriel Oliva (INTA Río Gallegos). For their financial incentives we thank the German Ministry of Science and Education (BMBF) for funds to the project SALSA in the framework of the German Climate Research Programme (DEKLIM), the German Research Council (DFG) for funding the pre-site seismic surveys and the ICDP for making this PASADO workshop happen.