### **FUTUROS EVENTOS/FUTURE EVENTS**

A continuación se encuentra un listado de los eventos relacionados con el proyecto PMA:GCA que se realizaran en el futuro:

Below is a list of conferences, workshops, or other events that may be of interest to MAP:GAC participants:

#### **ARGENTINA**

 IX EDICIÓN DEL CURSO INTERNACIONAL DE VOLCANOLOGÍA DE CAMPO DE LOS ANDES CENTRALES Salta, 19-27 Noviembre, 2002 Instituto Geonorte y Escuela del Doctorado en Ciencias Geológicas - Universidad Nacional de Salta Berta González Bonorino: curvol@una.edu.ar www.unsa.edu.ar/~geonorte/ cursos/curvol.html

#### **BOLIVIA**

 X SIMPOSIO LATINOAMERICANO DE PERCEPCIÓN REMOTA Y SISTEMAS DE INFORMACIÓN **ESPACIAL** Cochabamba, 11-15 Noviembre, Sociedad Latinoamericana de Percepción Remota **Hotel Portales** 

### **CHILE**

- CONGRESO GEOLÓGICO CHILENO 2003 Concepción, Octubre 6-10, 2003 Universidad de Concepción, Departamento de Ciencias de la Tierra cgeologico@udec.cl www.udec.cl/cgeologico
- ASAMBLEA GENERAL DE LA IAVCEI (INTERNATIONAL

ASSOCIATION ON **VOLCANOLOGY AND** CHEMISTRY OF THE EARTH INTERIOR) Pucón, Noviembre 14 –19, 2004 iavcei@sernageomin.cl

www.sernageomin.cl/iavcei

#### **ECUADOR**

 Curso sobre Metodología para elaborar Planes de Contingencia Lancones, 2 - 6 Diciembre, 2002 Dirección Nacional de Defensa Civil del Ecuador Coronel Eugenio Martínez, Jefe Departamento de Capacitación: defensacivil@ecnet.ec (593-2) 2439433 www.defensacivil.gov.ec

#### **VENEZUELA**

- CURSOS "MANEJO Y EVALUACIÓN DE RIESGOS NATURALES" (ASOCIADO A MAESTRÍA EN GESTIÓN DE **RECURSOS NATURALES** RENOVABLES Y MEDIO AMBIENTE) Mérida, 11 - 29 de Noviembre, Sede del CIDAT, Lic. Alicia Usubillaga: cursob@cidating.ula.ve cidat@cidat.ing.ula.ve www.cidiating.ula.ve
- XI CONGRESO VENEZOLANO DE GEOFÍSICA Caracas, 17 - 20 de Noviembre 2002 Marco Polo Rivero: mp80526@yahoo.com Melín Nava: mjnava@cantv.net Marítza Rivas: rivasma@cantv.net www.iifi2002.edu.ve

# **OTROS PAISES/OTHER** COUNTRIES

- THE 8th FIELD WORKSHOP ON VOLCANIC GASES Nicaragua y Costa Rica, 26 Marzo - 1 Abril. 2003 Eduardo Malavassi - OVSICORI - Universidad Nacional: emalava@una.ac.cr www.volcgas.unm.edu/ nextworkshop.htm
- EGS-AGU-EUG JOINT ASSEMBLY 2003 -**GEODATABASES FOR** HAZARDS AND RISK **ASSESSMENT** Nice, France, 6-11 April, 2003 egs.abstracts@copernicus.org www.copernicus.org/EGS/ EGS.html
- 3RD INTERNATIONAL SYMPOSIUM ON AVIATION **EMERGENCIES** Miami Beach, FL, 24–27 March, 2003 Chris Williams: contact@edmus.info www.edmus.info/
- Geological Association of Canada/ Mineralogical Association of Canada/Society of Economic Geologists GAC/MAC/SEG Vancouver 2003 Vancouver, B.C. 25-28 May, 2003 Email: vancouver2003@nrcan.g www.vancouver2003.com

For further MAP:GAC information please consult the project Web page at http://www.pma-map.com/gac

Newsletter produced by MAP administrative staff:

Mike Ellerbeck Otto Krauth Victoria Mazo-Gray Loretta Wong

and supervised by MAP Project Manager

Dr. Catherine Hickson

GSC Vancouver #101 - 605 Robson Street Vancouver, BC, Canada V6B 5J3

Tel: (604) 666-0183 Fax: (604) 666-7507 Email: map@pma-map.com



Ressources naturelles

# MAP



# GAC

Internal Newsletter of the Multinational Andean Project: Geoscience for Andean Communities http://www.pma-map.com/gac/

Vancouver, Canada, Oct. & Nov., 2002

An Update of Internal Project News

Vol 2 - No.4

# From the Manager's Desk October-November, 2002

ctober 28 marked my first week back at work and a busy one it was! Many thanks to all of you who sent your good wishes via email, cards and notes over the preceeding seven weeks! They were all very much appreciated and I was deeply touched by your sentiments. The time went by more rapidly than I had anticipated, most likely due to all your good thoughts for a speedy recovery! I would especially like to thank Mr. Mike Ellerbeck for doing an outstanding job during my absence; he and the rest of the MAP:GAC management team did a superb job of pulling together all the myriad of things that had to be done so that the Executive Council meeting and the other activities ran smoothly. Many thanks to all of you!

September and October were very busy months for everyone. Almost the entire MAP:GAC team was on the road for most of it - hence no October Newsletter! I spent some of my time reviewing the work plans and reflecting on how to deliver the Project in the most effective way, maximizing the Project goals. It is clear that we need more information in a number of areas before specific work plans can be devised. Information technology. coordination and communication with emergency planners and other personnel, and satellite imagery are three areas that need additional information and thought. These were also topics of discussion at

September (see article, this issue).

Through the work of Mr. Roberto



Executive SecretaryTroncoso speaking to Hickson via speaker phone

Gonzalez we will gain a better understanding of how to proceed with the community awareness and emergency planning part of the Project. Gonzalez will be presenting his report at the Toronto Executive Council meeting in March. Otto Krauth continued his review of the IT capabilities of each Geoscience Agency and the IT group will be pursuing aspects of "GeoSemantica". Based on their work, and Krauth's review (see article, this issue), the Executive Council will be presented with a work plan in March that addresses the area of information technology. Requests for IT assistance

the highly successful Executive by individual countries will be deferred Council meeting held in Lima in until this work is completed, but countries are strongly encouraged to contact Krauth or any of the IT group if you have specific concerns or questions.

> The third area of concern is satellite imagery. Several countries have requested assistance in building capacity for processing RadarSat images and using InSar technology. InSar is a relatively new technique, still under development, using radar satellite imagery taken over a series of days, weeks or years. Maps can be generated indicating areas where displacement has occurred between the time when the two images were taken. The technique is still experimental and requires significant institutional commitment (personnel, hardware and software) to support the work. Dr. Mark Stasiuk will introduce the technical aspects of the technique and review the topic in an article in the December Newsletter. It is then proposed that a short course "Introduction to advanced use of satellite imagery", be given as a multi-country activity sometime in the first half of the next calendar year. This workshop would be designed to give the participants a good working knowledge of various advanced satellite imagery applications and provide the background required for the institutions to decide whether they wish to make the commitment to build capacity in this area.

The need for a full time specialist in landslides for the Project has been clear since the beginning. There is no one

currently within the ranks of the GSC was in Lima, Peru from September 23 who could be dedicated full time to to 30 to speak with representatives from the Project; therefore a search began to the geological survey and emergency find and hire a suitable candidate. One candidate has declined the position, so the search will continue, but we expect that a suitable candidate will be in place by early January. This process has delayed some of the landsliderelated activities in the Project. I hope that the countries will bear with us as we search for just the right Spanishspeaking technical expert to do the job.

time has been spent on the Project web page. November will see an emphasis on updating it and posting the Implementation Report. Ms. Loretta Wong (lowong@nrcan.gc.ca) with the help of Ms. Victoria Mazo-Gray (vmazogra@nrcan.gc.ca) will be doing this work. Wong has also taken over layout duties from Krauth. If you have ideas or suggestions for changes please email. The newsletter will also be revamped. Up until now it has been used to convey project information, keeping participants upto-date on Project activities. While this will still be the primary goal of the Newsletter, it will be expanded to include monthly professional offerings such as short articles on advances in hazard monitoring techniques, critiques of crisis events (what worked and what didn't), articles on emergency preparedness and sustainable development, etc. Dr. Mark Stasiuk (mstasiuk@nrcan.gc.ca) will act as the Editor for this section of the Newsletter. He will be soliciting your input. You are strongly encouraged to submit articles on your own work, or activities of interest to the Project participants. Please send Stasiuk vour ideas.

Dr. Catherine Hickson

# **Gonzalez Visit to Peru and Ecuador**

Roberto Gonzalez, on Mesecondment from the British Columbia Office for Critical and Infrastructure Protection Emergency Preparedness (OCIPEP),

management organizations in Peru in order to assess the relationship between the organizations. Following the Peru visit Gonzalez travelled to Ecuador, Venezuela and Bolivia to conduct the same work in each country. He will be in Argentina and Colombia in mid November and then visit Chile early in 2003. He will address the Executive Council and present on his findings and give recommendations at the next During the last few months, little Executive Council meeting in Toronto in March 2003.

Mr. Mike Ellerbeck

# **Executive Council Meeting**

The first official Executive Council ■ meeting for MAP:GAC, since its approval by CIDA in June, took place in Lima, Peru on September 23 and 24, 2002 immediately prior to the XI Peruvian Geological Congress. The meeting was attended by d sening meeting minutes representatives from all member countries except Colombia and Venezuela, both of whom participated briefly by telephone conference. Accomplishments of the meetings included the completion and signing of the Project Implementation Report, which is the document that defines the purpose, objectives, and structure of the project.

Project Manager Dr. Catherine Hickson was unable to attend the meetings for health reasons but was connected by telephone to address the council on the first day.

Mr. Roberto Gonzalez - on secondment from the British Columbia Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP) - was introduced to the Executive Council and explained that over the next 6 months he would visit each

country to study the relationships between the National Geoscience Agency and emergency management organizations in each country with the objective of producing a report assessing these relationships in each country and a list of recommendations for future activities to help strengthen

Mr. Otto Krauth of GSC Vancouver gave a video presentation to the group on GeoSemantica - the Digital Library that MAP:GAC will be elaborating over the duration of the project. Mr. Krauth also explained that he too will be visiting the National Geoscience Agency of each participant country over the next 6 months in order to assess the current information systems networks in each country and the

current databases in use. He

will produce a report to be delivered to the Toronto Executive Council meetings (near the time of the PDAC -March 9 to 12, 2003), detailing his findings and recommending a course of action and "next step" in the development of GeoSemantica for MAP:GAC.

Each member country present at the meetings gave a presentation on their work plan for the current fiscal year (up to March 31, 2003) and Dr. Mark Stasiuk of GSC Vancouver also worked with each country individually on their project work plans.

Other issues discussed include binational and multinational products and projects, communication and collaboration with other international and national projects, technical experts for supervising work and publications, and standards for hazard work and

The meetings were adjourned on Tuesday September 24, 2002.

Mr. Mike Ellerbeck

# **Integration of Database Upgrade**

r. Otto Krauth, MAP:GAC Information Systems coordinator visited the offices of INGEMMET, Perú (Sept 23 to 30); DINAGE, Ecuador (Oct 1 to 7): and INGEOMINAS. Colombia (Oct 8 to 11) to assess database structures and computer capabilities as an initial step for the creation of MAP: GAC GeoSemantica web application as well as the possible implementation of a project intranet using satellite connections. Krauth also presented an



Krauth in Loja, Ecuador.

introductory movie about the technical aspects and possible sample scenarios for the GeoSemantica Web application.

Krauth will be visiting the offices of INGEOMIN, Venezuela and SERGEOMIN, Bolivia in November and will complete his visit to Argentina and Chile early next year.

Mr. Otto Krauth

#### Welcome

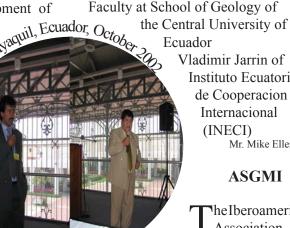
**A**AP:GAC management wishes to MAP: GAC management manes in formally welcome and introduce Ms. Victoria Mazo-Grav who has been helping out with MAP:GAC administration since early September. Many MAP:GAC participants have already had the pleasure of dealing with Ms. Mazo-Grav, who holds a Masters degree in Chemistry and has extensive experience in international projects in Latin America. She is fully bilingual in English and Spanish.

Mr Mike Ellerbeck

# The XI Peruvian Geological **Congress**

The XI Peruvian Geological L Congress took place from September 25 to 28, 2002. As the theme of the congress was "Geological Sciences at the Service of Sustainable Development", MAP:GAC Project Manager was invited to participate at a round table on the Geosciences in Support of Sustainable Development. As Dr. Hickson was unable to attend Mr. Michael McPhie of Natural Resources

> Canada's Minerals and Metals Sector (MMS) went in Mr. her place. McPhie gave two presentations on Saturday September "Canada's Approach to Sustainable the Development of



TheIberoamerican

Friday, September 27, 2002. MAP: GAC management was invited to present on general project objectives and in particular on GeoSemantica (the MAP:GAC digital library).

Mr. Mike Ellerbeck gave a presentation to the group on the general project overview and Mr. Otto Krauth presented on GeoSemantica. ASGMI also held a press conference to which Mr. Ellerbeck was invited to make a brief statement on MAP:GAC.

"Sustainable Development and Geoscience Information and the Multinational Project: Andean Geoscience for Andean Communities (MAP:GAC)". In addition to these two presentations, McPhie participated in a panel discussion on the final day of the conference that considered the issues of geoscience information and sustainable development. Attendance at the

Natural

Resources" and

800 people.

MAP:GAC also had an information booth at the conference to distribute project information.

conference was in the order of 600 -

Mr. Mike Ellerbeck

r. Jarrin and Ing. Mucho gave a Dioint presentation on the recently signed bilateral agreement between the two geological surevys under which the Catamayo / Chira basin project (MAP:GAC project area), is being conducted. Both men they stressed the significance of this agreement as it is a step towards lasting peace betwen the two countries.

**MAP:GAC** in Ecuador

In Ouito Jarrin and Ellerbeck visited the following organizations to present MAP:GAC:

Ministry of Energy and Mines Subsecretariat. CAF - PREANDINO Defensa Civil Prefect of the Government of Imbabura - Gustavo Pareja Cisneros -DINAGE staff Faculty at School of Geology of

> Vladimir Jarrin of Instituto Ecuatoriano de Cooperacion Internacional (INECI) Mr. Mike Ellerbeck

#### **ASGMI**

**▲** Association of Geological and Mining Surveys (ASGMI) held its annual meeting in Lima on