

# MAP NEWS

### Internal Newsletter of the Multinational Andean Project

http://www.pma-map.com/newsletter/v2n11.html

Vancouver, BC, February 1st, 2000

A Monthly Update of Internal Project News

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# **Highlights from Executive Council Meeting Minutes**



Executive Council Meetings, Vancouver, BC, January, 2000: From left to right: Mr. Otto Krauth (Canada), Ing. Manuel Paz (Peru), Ing. Jean-Claude Lauzier (Canada), Ing. Carlos Riera (Bolivia), Dr. Catherine Hickson (Canada), Ing. Elmer Boulangger (Peru), Dr. Moyra Gardeweg (Chile), Ing. Jose Mendia (Argentina), Lic. Roberto Page (Argentina), Mr. Mike Ellerbeck (Canada), Dr. Eduardo Zappettini (Argentina), Ing. Ricardo Troncoso (Chile), Ms. Rocio Lopez (Canada).

The 8th meeting of the MAP Executive Council took place in Vancouver, Canada from January 26 to 28, 2000. The meetings were attended by representatives from all four South American MAP countries as well as from the GSC and CIDA. Some of the highlights include:

### **Update on Sample Processing**

Dr. Catherine Hickson and Dr. Jennifer Getsinger reported on the status of samples being handled by MAP. It was noted that the ability of MAP adminstration to effectively handle sample processing logistics has greatly improved.

### **MAP Sample Standards**

Dr. Getsinger reported that all countries have sent to MAP administration potential standard rocks. Geochemical analysis has already been carried out on some samples and initial results were reviewed at the meetings. More sample choices and larger amounts of sample from some countries are required for a complete evaluation of their suitability as petrological standards.

### **MAP Certificates**

Dr. Hickson reported that over 100 certificates for participants in MAP short courses during the last quarter were ready for the signature of the Executive Secretary.

### Questionnaires

Mike Ellerbeck reported that Ms. Claire Despins who had been in charge of compiling MAP Questionnaire reports is leaving the GSC Vancouver office. Ms. Rocio Lopez will take over the task of compiling and reporting on the Questionnaires. Mr. Ellerbeck also reported on the status of Questionnaires noting that a number of questionnaires have still not been completed and that he and Ms. Lopez would be in contact with the corresponding countries.

### **Verifiable Indicators**

Mr. Ellerbeck also reported on the current status of Verifiable Indicators. He mentioned that all countries have sent in the verifiable indicator reports which will be compiled into one quarterly report to be included in the next project quarterly report.

#### Airborne Surveys Update

Dr. Dennis Teskey joined the meeting to update the Council on the status of the Airborne surveys. Dr. Zappettini reported that the Chilean - Argentinian survey would proceed with four companies: Anaconda, Phelps Dodge, BHP and CODELCO. Argentina will be participating with the purchase of 2 shares. Each of the participants were requested to pay an additional \$12,500US to ensure that the entire area of the proposed survey could be flown. Each has agreed, and the contract will be awarded to SIAL Geosciences Inc.

There are now three companies committed to the Peru - Bolivia - Chile airborne survey. These are BHP, Phelps Dodge, and Southern Peru Copper. There are several other companies which have expressed interest. Two more companies are required before there is sufficient funding to commence the survey. It was agreed that the likelihood of finding two additional partners was very good and so a Request for Proposals has been submitted.

### Discussion on Cartographic Standards Committee & Technical Committee for the Compilation of Metallogenic Map of the border regions of the MAP countries

Dr. Eduardo Zappettini reported on the results of the meeting held on Wednesday, January 26. At the meeting there was a representative from each of the countries and the progress of the map was reviewed in detail and problem areas discussed. Each country agreed to have the geology completed according to the agreed upon stratigraphic column in time to bring the maps to a meeting in Iquique, Chile. The meeting will be held March 23 - 24 and organized by Chile. At this meeting it was agreed that the map would be reviewed by all members of the technical committee to resolve any problems. In the case of differences in contact relationships between units it was agreed to use satellite images to help resolve the problems. Each country is to bring the appropriate images to the meeting. One day will be spent reviewing the map data and the second day the data table to accompany the map. The amount and detail of deposit information is variable between the four countries. These differences will be discussed at the Iquique meeting. Digitization of the Argentinian map and Chilean maps will proceed in Vancouver. Zappettini will come to Vancouver early in the next fiscal year to complete work on the map with the assistance of Mr. Rob Cocking. While the geology is being compiled Cocking will assemble the topographic base with digital topography sent from each of the countries. Argentina and Peru had their digital topography available for Cocking and Chile hopes to have theirs available by late March and Bolivia will have their digital topography available in three weeks. The map will be presented at the Andean Special Session of the IGC held at Puerto Varas, as part of the IX Chilean Geological Congress and as a poster at the IGC's SEGEMAR MAP booth.

### MAP participation at IGC, Rio de Janeiro and Chilean Congress





Dr. Moyra Gardeweg reported that she has had good response from each of the countries with the exception of Bolivia. It was explained that there has been a reorganization in Bolivia and now Ing. Carlos Riera will be the contact person. Two papers are proposed from Peru, five from Argentina, and seven from Chile. These will be presented as both oral and poster presentations. One page summaries are required for poster presentation and 5 page papers for the oral presentation. The papers are required by Gardeweg no later than March 31, 2000. Hickson asked if the Council would like to see an overview of MAP presented. There was also discussion on presenting the petrological standards program in poster format. The papers are to be reviewed by members of MAP. Gardeweg will review the papers first then forward them to two reviewers. It will be expected that reviewers will return their comments within two weeks.

### Discussion on what presence MAP should have at the IGC

It is likely a booth will be available. Each country will be asked to contribute material for display. There is likely to be at least one representative from each of the countries. These people could help staff the booth over the two week period of the IGC (August 7-18).

### **Member Country Updates**



Ing. Manuel Paz of INGEMMET during presentation of Peru's MAP activities for 1999/2000

### Argentina

Argentina presented a review of their project activities for 1999/2000. In January 2000 the Puna-Austral geophysical data became available for sale to the public. Argentina reported that three geological map sheets have become available to the public, three others have been completed, one planned, three have been digitized and three others are planned to be digitized. - Geochemical reports on four map sheets are available, while sampling has been completed on 3 others. Two additional sheets are in the planning stage. Geophysical digital data and maps are available for seven quadrangles, two others are complete but have not yet been released and four others are being interpreted. Metallogenic studies of 2 sheets are in progress and 5 others are being planned. Analysis of Satellite images of two map sheets are in progress while 5 others are planned. GIS integration and multi-parameter analysis are programmed for 4 quadrangles.

### **Bolivia**

Bolivia presented a review of their project activities for 1999/2000. Accomplishments: The 1:100,000 drainage map of the Salinas de Garci Mendoza y Tahua area was started. During the month of September a revision of preliminary geological maps of Panantalla and Salar de Coipasa and Llica Bella Vista were completed. Together with Ing. Jorge Clavero from SERNAGEOMIN, Chile, a field trip was conducted in the area of Sojama and Choquelimpie. From this field campaign samples were collected for radiometric dating analysis. During the year Bolivia had three field campaigns: June, July, and November. During the 3rd quarter courses were given in Fluid Inclusions and PIMA at SERGEOMIN facilities.

### Chile

Chile presented a review of the activities carried out from the beginning of the fiscal year until now. Progress has been made in both the Copiapó and Arica areas. In the Copiapó region the field activities of the mapping program (three 1:100,000 sheets) has been completed with only the final field check pending. One of the maps (Ojos del Salado sheet) is being prepared for publication in the SERNAGEOMIN Geological Map Series. The study of hydrothermal alteration zones along the

border area with Argentina was completed and the final report is being revised. Advances were also made in the Hydrogeology Project. The hydrogeological map of the Negro Francisco Basin, was finished at the end of 1998 and will soon be released as a CD-ROM. In the Arica region important advances were made in the compilation of three 1:250,000 map sheets. The northernmost of the three (Putre-Parinacota) will be finished by the end of the year. The field work for the Lluta and Camarones transect was completed. A set of samples for Pb/U and 40Ar/39Ar geochronological analyses was selected and sent to Canada to be processed.

#### Peru

Peru has completed all of the maps in the northern area and is now focusing work on the mineral resources of the area to the north and south of Lake Titicaca. Peru hosted the meeting of the Cartographic Standards Committee. Dr. Teskey reviewed the status of geophysical data on file at INGEMMET during his visit August 23-27. During this visit there was also a meeting held with private sector companies regarding the Airborne Survey. During the 3rd quarter Peru focused primarily on training with a course in PIMA, Fluid inclusions, sampling for radiometric dating and classification of mineral deposits and genetic modelling in metallogeny as well as a course on mapping in volcanic terrains.

## Presentation on CordLink to Executive Council



http://cordlink.gsc.nrcan.gc.ca/cordlink1/

Dr. Murray Journeay of GSC Vancouver and project leader for the development of CORDLink gave a presentation on the project. CORDLink is a regionally focused WEB based digital geoscience library, which uses a data model being developed jointly by the United States Geological Survey, the Association of State Surveys, and the Geological Survey of Canada. The presentation demonstrated how various types of data could be integrated into a data model. The presentation was intended to give MAP members a view of the latest advances in digital information delivery and to provide ideas for the presentation of data for subsequent projects.

### Discussion was opened on MAP II

As MAP is scheduled to close on December

31, 2001 it is paramount that if a sequel project is to be approved by CIDA, the initial proposal needs to be submitted by the beginning of March 2000. The recent Executive Council meetings were used as an opportunity to begin discussions on "MAP II". It was agreed that the new project should focus on common goals of the participant countries rather than on an identified area. It was noted that having common objectives would create a more unified project with all members having similar objectives and commitment to the project activities.

As CIDA's mandate is to fund projects that aid poverty reduction it was proposed that the new project focus on geological hazard identification and resource management. A working draft title will be: "Proyecto Multinacional Andino: Identificacion de Riesgos y Aprovechamiento de Recursos Geologico-Mineros para el ordenamiento Territorial de la Region Andina". Each country agreed to send the Executive Secretary examples of the types of natural hazards relevant to their country as well as a letter of support for the new project stating whom they wish to act as the executing agency. These letters must be received no later than February 14th 2000 as the project proposal will be based on information contained in the letters.



### Andean Metallogeny Symposium Update

A symposium at the Geological Society of America (GSA) Cordilleran Section meeting April 27 to 29, 2000 Vancouver, B.C. Canada.

The conference willl present 22 symposia or theme sessions. One full day of theme sessions on Latin and South American cordillera, and Circum-North Pacific Metallotects is scheduled. The Andean Metallotect session will examine mineral environments ranging from the scale of individual deposits through their evolution in an orogenic cycle. It includes talks on several porphyry deposits, volcanic massive sulfides, and epithermal volcanic-hosted deposits. A number of pre and post meeting field trips are scheduled.

For further details refer to the meeting WEB site at: http://www.eos.ubc.ca/cordgsa2000/

For further MAP information please consult the project Web page at:

### http://www.pma-map.com

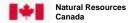
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