

COUNTRY ANNUAL REPORT FROM COSTA RICA (2011) TO THE INTERNATIONAL COMMISSION ON THE HISTORY OF GEOLOGICAL SCIENCES (INHIGEO)

INFORME ANUAL DE COSTA RICA (2011) A LA COMISIÓN INTERNACIONAL SOBRE HISTORIA DE LAS CIENCIAS GEOLÓGICAS (INHIGEO)

Gerardo J. Soto

Área de Amenazas y Auscultación Sísmica y Volcánica,
Instituto Costarricense de Electricidad
Terra Cognita Consultores S.A. Apdo. 360-2350 San Francisco de Dos Ríos,
Costa Rica
Cibercorreo: katomirodriguez@yahoo.com

(Aceptado: 11/06/2012)

ABOUT INHIGEO

The International Commission on the History of Geological Sciences (INHIGEO) was established by the International Union of Geological Sciences (IUGS) in 1967, and is also affiliated with the International Union of the History and Philosophy of Sciences (IUHPS). It has 231 members from 46 countries worldwide (data from late 2011, see Figure 1), from which 21 members are representing 7 Latin American countries (Argentina, Bolivia, Brazil, Colombia, Costa Rica, Mexico and Venezuela).

INHIGEO promotes ongoing research into the history of the earth sciences, and achieves its objective by sponsoring a major annual symposium

with associated field activities. It also promotes publication of individual and collective works on the history of geology and issues a substantial annual newsletter that details historical research into earth sciences worldwide, publicizes other pertinent historical activities and provides scholarly reviews of recent literature on the subject (see details in <http://www.inhigeo.org>).

2011 ANNUAL REPORT, COSTA RICA

There are two Costa Rican members in INHIGEO (Guillermo E. Alvarado and Gerardo J. Soto). Soto has served as Vice-President for Latin America since 2004 and will finish his second term



Fig. 1: INHIGEO 2011 World Membership by regions.

during the forthcoming 34th IGC in Brisbane. His duties have included frequent communication with regional members of INHIGEO, the promotion for new INHIGEO members in the region (especially those countries not currently represented in INHIGEO), and cooperation with the Board in its business, which has been very active throughout 2011.

Soto could not attend the INHIGEO meeting in Toyohashi (Japan) in August (“Visual Images and Geological Concepts”) because of funding problems, but presented an abstract on “The Heredia meteorite (Costa Rica, 1857), the work on meteorites by Ignacy Domeyko and 19th century meteoritics in Spanish Latin America”. On the other hand, a paper with his authorship from the previous INHIGEO meeting in Spain 2010, on metal mining in Central America, was published in 2011.

Soto was invited to the Segundo Simposio de Historia de la Geología [Second Symposium on the History of Geology], organized by the Geological Society of Chile on 17 August in

Santiago, but could not attend either. A short contribution entitled “Una conexión geocientífica Chile - Costa Rica: el meteorito Heredia (1857) y su análisis por Ignacy Domeyko” [A geoscientific connection Chile-Costa Rica: the Heredia meteorite (1857) and its analysis by Ignacy Domeyko], was presented on his behalf by Prof. Francisco Hervé during the meeting.

As a result of the “Simposio Geonaturalia Geografía e Historia Natural hacia una Historia Comparada, Cuarto Encuentro Internacional” [Symposium Geonaturalia Geography and Natural History to a comparative history, Fourth International Meeting], held in Buenos Aires, Argentina, in July 2010, a fourth book in the Geonaturalia series appeared in 2011, including three papers related to the history of geosciences in Central America, authored by Costa Rican geologists Soto and Giovanni Peraldo, and historians Flora Solano, Adolfo Quesada and Ronald Díaz.

Soto also published other paper on geological maps in Central America during the 19th century,

as well as a short divulgation article in the scientific supplement of the University of Costa Rica newspaper, on the history of metal mining in Central America.

During the year, two books authored by INHIGEO member Guillermo E. Alvarado, appeared as reimpressions of previous editions (*Los volcanes de Costa Rica: Geología, historia, riqueza natural y su gente and Costa Rica, Land of Volcanoes*). Both books include an ample chapter on the history of volcanology in Costa Rica.

Lucas and co-workers (including Alvarado) have also published a paper on the discovery of the first vertebrate fossils in Central America in 1858. Despite being discussed previously by others, the paper provides an interesting discussion on the stratigraphy of the remains and the history involved, as well as its importance for the subsequent discovery of mastodons and other vertebrates in Central America.

REFERENCES (WITH INHIGEO'S FORMAT)

- Alvarado, Guillermo E., *Costa Rica: Land of Volcanoes*, [First reimpression] Editorial Universidad Estatal a Distancia, San José, Costa Rica, 2011.
- Alvarado, Guillermo E., *Los volcanes de Costa Rica: Geología, historia, riqueza natural y su gente*, 3rd edition [First reimpression], Editorial Universidad Estatal a Distancia, Costa Rica, 2011.
- Lucas, Spencer G., Bonta, Mark, Rogers, Robert and Alvarado, Guillermo E., 'The "Tambla" (Humuya) Gomphothere (Honduras): The first report of fossil vertebrates in Central America', *Revista Geológica de América Central*, 2011, 44, 141-151.
- Peraldo, Giovanni, Solano, Flora and Quesada, Adolfo, 'La plaga de langosta en Costa Rica entre 1850 y 1950', in Lértora, Celina (ed.), *Geonaturalia. Geografía e Historia Natural: hacia una historia comparada. Estudio a través de Argentina, México, Costa Rica y Paraguay*, 2010, Ediciones FEPAL, Buenos Aires, 2011, 43-50.
- Historia Natural: hacia una historia comparada. Estudio a través de Argentina, México, Costa Rica y Paraguay, 2010, Ediciones FEPAL, Buenos Aires, 2011, 139-184.
- Solano, Flora J. and Díaz, Ronald, 'Los orígenes de la ciencia en la provincia de Costa Rica en el siglo XVIII', in Lértora, Celina (ed.), *Geonaturalia. Geografía e Historia Natural: hacia una historia comparada. Estudio a través de Argentina, México, Costa Rica y Paraguay*, 2010, Ediciones FEPAL, Buenos Aires, 2011, 17-42.
- Soto, Gerardo J., 'Country annual report to INHIGEO, Costa Rica 2010', *Revista Geológica de América Central*, 2011, 44, 167-169.
- Soto, Gerardo J., 'La producción de mapas geológicos en América Central en el siglo XIX', *Mapping (Centroamérica y El Caribe)*, Enero-Febrero 2011, 5-12. [available at <http://issuu.com/mappinglatino/docs/mappingca1-2011>]
- Soto, Gerardo J., 'Metal Mining in Central America (early 1500s – late 1800s)', in Ortiz, José Eugenio, Puche, Octavio, Rábano, Isabel & Mazadiego, Luis F. (Eds.), *History of Research in Mineral Resources, Cuadernos del Museo Geominero, Instituto Geológico y Minero de España, Madrid*, 13: 89-97.
- Soto, Gerardo J., 'Siglos de tradición minera en América Central', *Crisol, Suplemento de Ciencia y Tecnología, Semanario Universidad*, 2011, November 252, 1.
- Soto, Gerardo J., 'Sobre la minería metálica en América Central entre los años 1500 y 1900', in Lértora, Celina (ed.), *Geonaturalia. Geografía e Historia Natural: hacia una historia comparada. Estudio a través de Argentina, México, Costa Rica y Paraguay*, 2010, Ediciones FEPAL, Buenos Aires, 2011, 43-50.

Soto, Gerardo J., 'The Heredia meteorite (Costa Rica, 1857), the work on meteorites by Ignacy Domeyko and 19th century meteoritics in Spanish Latin America', International Commission on the History of Geological Sciences (INHIGEO) Annual Conference "Visual Images and Geological Concepts", Toyohashi, Japan 2 – 10 August, Book of Abstracts, 2011, 43 (abstract Ner O308).

Soto, Gerardo J., 'Una conexión geocientífica Chile - Costa Rica: el meteorito Heredia (1857) y su análisis por Ignacy Domeyko', Segundo Simposio de Historia de la Geología, Sociedad Geológica de Chile, 17 August, Santiago, Chile, Programa y Resúmenes, 2011, 10.