



IGC  
2024

The 37<sup>th</sup> International Geological  
Congress 2024



IUGS

International Union of Geological Sciences

# IGC 2024

The 37<sup>th</sup> International Geological Congress

## Abstract Book

---

**Busan, Korea**  
**25-31 August 2024**

[www.igc2024korea.org](http://www.igc2024korea.org)



## **Geochemical Map of Latin America and the Caribbean. Methods for implementation**

Maria João Farinha Batista<sup>1\*</sup>, LNEG (mjoao.batista@lneg.pt)

Andrea Turel<sup>2</sup>, SEGEMAR

Iván Martín<sup>3</sup>, IGME

João Larizzatti<sup>4</sup>, Serviço Geológico do Brasil

Gloria Prieto<sup>5</sup>, CGGB-IUGS

Geochemical Group ASGMI<sup>6</sup>, ASGMI

### **Abstract**

The Geochemistry Experts Group of the Ibero-American Association of Geological Services is a group of experts who exchange knowledge on exploration geochemistry and geochemical mapping as a result of the experience of each Geological Service. Currently, the group of experts has started to test the methodology for collecting information for the Geochemical Map of Latin America. The continental data unit used is the Global Terrestrial Network (GTN), following the recommendations for International Geochemical Mapping, but instead of 160x160 km, it will have a 40x40 km cell. The geochemical data will be collected in each cell, and an average value (median or geometric mean) will be determined.

The medium used to harmonize the information will be stream sediments, as most Geological Surveys use and have archives of stream sediment geochemistry data from previous exploration projects. The geological and mineral resource information of the 40x40 km cell will also be part of the attribute table that will make up the database. The criterion for leveling data between contiguous stream sediment analytical datasets will be the greatest similarity in chemical analysis methods, sampling density and stream order. The continental geological map used to prepare the metallogenic map of Latin America and the Caribbean will also be utilized for the geochemical map of Latin America and the Caribbean. This map will include as many chemical elements as possible on a continental scale.

### **Keyword**

geochemical mapping, stream sediments, geological surveys, ASGMI