

## **ADVANCED IN THE QUATERNARY CHACO-PAMPEANA SHELVES USING TRACE ELEMENTS, ARGENTINA**

<sup>1</sup>TORRA, R., <sup>2</sup>PERINO, E. & <sup>2</sup>STRASSER, E. <sup>1</sup>Centro de Geociencias Aplicadas. Facultad de Ingeniería. Universidad Nacional del Nordeste. Avda. Las Heras 727. Resistencia, Chaco, Argentina. <sup>2</sup>Departamento de Química Analítica. Universidad Nacional de San Luis. Chacabuco y Pedernera, San Luis, Argentina.

There are no trace elements studies at the Quaternary Chaco-Pampeana shelves in order to make clear stratigraphic, paleoenvironmental and sedimentation processes.

The Chaco-Pampeana region embrace more than 700,000 km<sup>2</sup> at the Argentina, Paraguay and Bolivia countries.

Thirty-five selected samples of Quaternary loessial country rocks were analyzed using FRX and ICP. Major and trace elements analyzed were: Si, Al, Fe, P, Ca, K, Ti, Mn, (major) and Rb, Cs, Ga, Zr, Ta, Nb, Sr, Ba, Cr, Ni, Zn, Pb, Cu, V and boron (trace elements).

Preliminary results show that correlation of lithofacies along more than 1,000 km long are possible. The example of Chaco and Salta provinces fortifies this hypothesis.

However, more studies are necessary including isotopical determinations as well as microfossils studies in order to make paleogeographic maps and paleoenvironmental interpretations. Chiefly, the goals of these investigations include the geological evolution record in order to understand late 20,000 BP at the Pampas region.