

Drilling profiles from Companhia Nacional de Cimento Portland (CNPC) in the São José do Itaboráí Basin show separate domains with different contents of CaCO<sub>3</sub> (> 60%, 30 – 60% and < 30%). This suggests that the basement contour of the basin was previously defined by CNPC on an economic basis, excluding the basal and peripheral layers with CaCO<sub>3</sub> content < 30%. This reinterpretation reveals a different basement contour for the basin, especially in its western portion where it becomes 50% larger. To the south, the limit of the basin is the ENE São José Fault, which has a dextral offset coincident with the NW Transverse Fault. To the north, the new limit of the basin is defined by *en echelon* segments parallel to the São José Fault, which is offset by NW structures parallel to the Transverse Fault. One of these structures shows slickensides with low rake striations probably generated by a strike-slip regime. The folds and reverse faults parallel to the São José Fault (Rodrigues Francisco & Cunha 1978, An. Acad. Bras. Ci., **50**: 381-416) reveal a basin inversion. The horizontal calcareous travertine veins that crosscut the vertical banded travertine layers and the gneissic basement near the São José Fault indicate that this inversion was, at least partially, synchronous with the hydrothermal activity in the basin. The basin inversion was associated with a counter-clockwise rotation of  $\sigma$  1, from NE to NNW. The trace of the São José Fault suggests that this inversion was related to a change from a releasing to a restraining band in a sinistral strike-slip regime. Further, in the Pleistocene, the basin was affected by additional NW compression. — (December 10, 1999).

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#### PALEOMAGNETISM OF CAACUPÉ AND ITACURUBÍ GROUPS, WESTERN BORDER OF PARANÁ BASIN, PARAGUAI

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The Silurian-Ordovician sequence, west of Paraná Basin is represented by the Caacupé Group (Paraguary, Cerro Jhú and Tobatí formations) and the Itacurubí Group (Eusébio Ayala, Vargas Pená and Cariy formations). This

sequence is composed of basal conglomerate followed by continental/ marine sandstones, glacial diamictites, transgressive marine shales and regressive marine sandstones. The succession corresponds to a great transgressive-regressive cycle.

Two main components of magnetization, A (Dec= 348, 9° Inc= -42.9° N= 19,  $\alpha_{95} = 11.5^\circ$  k= 7) and B (Dec= 163, 2° Inc= 48.6° N= 7,  $\alpha_{95} = 9.9^\circ$  k= 22) were identified by means of paleomagnetic analyses and rock magnetic studies. These two components seem to characterize a dipolar geomagnetic field. The paleomagnetic pole based on both directions is located at 79°S 22°E (N= 26,  $\alpha_{95} = 4.9^\circ$ ). This pole is close to the geographic pole and to South American Mesozoic paleomagnetic poles suggesting a possible remagnetization during Permo-Triassic or Cretaceous times. This remagnetization could be due to the thermal effects imparted by the Mesozoic magmatic events.

On the other hand, the two directions of magnetization are similar to those found for the Lipeón formation (Subandean Silurian sediments, NW Argentina) and the Serra Grande, Pimenteiras and Cabeças formations (Paraná Basin, Brasil), suggesting that the magnetization of the Caacupé Group was acquired during the Lower Paleozoic at latitudes as low as the present ones. — (December 10, 1999).

#### STROMATOLITES IN THE MESOPROTEROZOIC ITAIACOCA GROUP (SE BRAZIL): PALEOENVIRONMENTAL INFERENCES AND COMPARISONS WITH OTHER SIMILAR FORMS

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Stromatolites have long been used as paleoenvironmental markers and for correlation within and among diverse Proterozoic basins. Coniform stromatolites of the Mesoproterozoic volcanosedimentary Itaiacoca Group in the Ribeira Belt of southeast Brazil form two types of bioherms south of Itapeva (São Paulo), one tabular and widespread, and the other lenticular and isolated. In both cases the predominance of *Conophyton* together with the rarity of other forms and with the absence of such shallow-water sedimentological indicators as micro-unconformities, stromatolitic intraclasts, and crinoid strat-