

## **LATE CRETACEOUS LACUSTRINE SEDIMENTATION IN THE PARANÁ BASIN (SOUTHEAST BRAZIL).**

1BATEZELLI, A.; 1PERINOTTO, J. A. J.; 1,2FULFARO, V. J 2ETCHEBEHERE, M. L. C.; 1,2SAAD, A. R.; - 1-UNESP-Rio Claro-Brazil; 2-UnG-Guarulhos - Brazil. Support FAPESP 96/7090-8 and 99/00324-1

The lacustrine sedimentation in the Paraná Basin (southeast Brazil) is very well documented by gray-greenish muddy and/or sandy siltstones (Araçatuba Formation, Bauru Group - Late Cretaceous). Previous researchers have associated these rocks to fluvial depositional system. However, the facies association analysis are clearly indicative of lacustrine sedimentation. This huge lake could represent the main base level of all depositional system at the base of the Bauru Group. The facies analysis of the Araçatuba Formation, permitted to distinguish two major facies association: muddy sandstone with big sandy lens, 1 meter thick, massive or showing sigmoid cross stratification, trough cross stratification, laminated plane bed and ripples. It also shows saline molds (margin of the lake). The other association is the sandy siltstone represented by massive or laminated plane bed sandy siltstones, with ripples in fining upward sequences established by rhythmical sedimentation, with or without saline molds (distal facies). In conclusion, the paleogeographic evolution shows the lake (the base level) with river channels feeding. At the mouth of the rivers, deltaic progradational lobes were formed (muddy sandstone facies association). Toward the distal portion of this lake the facies association become finer (sandy siltstones).