**AAPG Annual Meeting**
**March 10-13, 2002**
**Houston, Texas**

Luis Claudio Ribeiro Machado[1], Adriano Roessler Viana[1], Renato Oscar Kowsmann[2], Waldemar de Almeida[1] (1) Petrobras - Petroleo Brasileiro S.A, Macae, RJ, Brazil (2) Petrobras - Petroleo Brasileiro S.A. - Cenpes, Rio de Janeiro, RJ, Brazil

# The modern sediment drainage system of the Campos Basin, Brazil

The modern sedimentation of the Campos Basin is presented from its source in the fluvial drainage down to the turbiditic deposits in ultra-deep waters, as seen in active and relict features at the sea-bottom. By integrating geological, geophysical and oceanographic data we have obtained a tridimensional view of the modern depositional environments. The Campos Basin turbidites are mostly deposited in troughs implanted on the S„o Paulo Plateau, a wide salt-based depocenter with similarities to the Gulf of Mexico. Most of the troughs mapped at the present sea-bottom are relict, starved, and are part of a large alveolar drainage network responsible for transporting of sand to deep waters. Such network involves the initial tributary drainage of the Para'ba do Sul River that drains the granitic-gneissic basement and concentrates the sedimentary charge into a single course at the coastal plain. Crossing the continental shelf, the drainage ramifies in many incised valleys and enters the head of submarine canyons at the continental slope. Arriving at the S„o Paulo Plateau, the drainage continues as wide (3km) troughs, which are salt-withdrawal-basins. At this point the drainage network presents again a convergent pattern, the troughs making a tributary system. This Yazoo-like style continues into the abyssal plain, interplaying with contourite mounds. The main transversal barriers to this drainage are the wave-dominated delta, the outer shelf carbonates, the muddy debris apron at the foot of the slope and the sediment walls uplifted by salt tectonics.