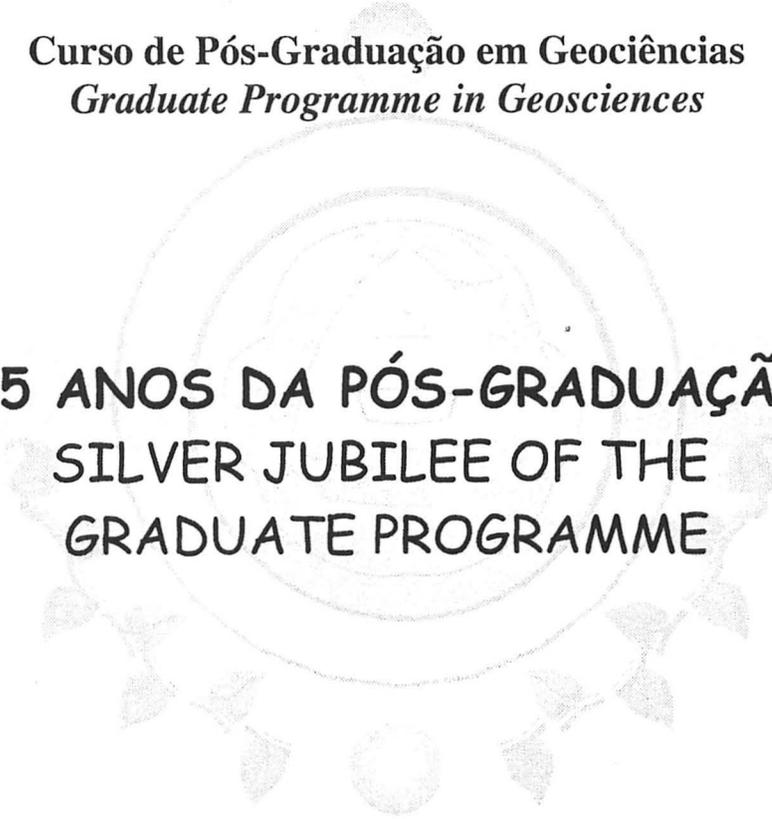


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PETROSTRUCTURAL ORGANIZATION OF THE SERIDÓ BELT
SOUTHERN SEGMENT, EASTERN SANTA LUZIA (STATE OF PARAÍBA)

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A petrostructural study of the Seridó belt, N of Patos Lineament was undertaken. Their stratigraphy comprises: (from top) metapelites of Seridó Formation with abrupt contact at base to Equador Formation. The former is a distal turbidite facies frequently intercalated by silicious-carbonate material, whereas the latter is a platform facies. The Equador Formation has a transgressive character overlying the gneissic basement of the Caicó Complex through an unconformity. The Jucurutu Formation in this region is constituted by psammite-pelite and carbonate rocks showing an intimate relationship with the basement. At the top, continuity to the Equador Formation was not observed, although it is anticipated in the central and northern regions of the belt.

The tectonometamorphic evolution showed a plurifacial metamorphism: an intermediate pressure facies with kyanite, staurolite and garnet, superposed by a high temperature/low pressure (HT/LP) metamorphic regime, with andalusite, cordierite, sillimanite and, garnet in metapelites, chondrodite and forsterite in marbles. The principal tectonic fabric in the region is related to HT/LP metamorphic event, effecting deeply the basement as well as the supracrustals.

The tectonic regime that constrained the rocks was constrictional, as interpreted by structural studies in metaconglomerates. An important stretching lineation has low dip in NE-SW always parallel to regional fold axis. This shows a deformation in a ductile level with partial rotation of structural linear elements to NE-SW extension direction.

In the latest deformation stages the region was affected by a transcurrent shear zone, developed in the contact between micaschists of the Seridó Formation and the gneissic basement the Serra dos Quintos hill. Fibrolite and muscovite to this event are observed. A study of quartz c-crystallographic axis fabrics in quartzites indicates a simple-shear regime with dextral movement. The evidence of anatexis during the HT/LP metamorphism apparently shows a Brasiliano evolution (c.a. 600 m.y.), forming the penetrative deformational and metamorphic structures in the region.

Keywords: Seridó belt, Stratigraphy, Tectonics, Metamorphism

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