

GEOLOGICAL MAP (1:400.000) OF STATE OF RIO DE JANEIRO

FONSECA, M.J.G. (DNPM)

More than half of State of Rio de Janeiro is formed of high grade metamorphic terrains of Paleoproterozoic-Archean age, constituted of the following **Complexes**: **Juiz de Fora** (dominantly formed of charnockitic rocks), **Região dos Lagos** (gnaissic granitoids, homogeneous / heterogeneous migmatites), **Tingui** and **Série Inferior** (similar and correlated to the Região dos Lagos Complex), **Rio Negro** (heterogeneous migmatites, similar to the **Tingui**, but intensively reworked and injected by sintectonic Neoproterozoic granitoids), and the **Pão de Açúcar Ortognaisses** (augen-gnaisses). Certainly, some of these complex are of Archean age and suffered crustal reworking in Paleoproterozoic. The **Paraíba do Sul** and **Raposo Gnaisses** (orto/paragneisses, metavolcanics/migmatites) are younger than the charnockitic rocks, but their precise age still is a controversial subject. These complexes suffered diferencial reworking during the *Brasiliano Cycle*.

In the northern region (**Shear Zone Block**) were identified some mafic-ultramafic stocks of pre-Brazilian age.

The metasedimentary **Units**: **Italva**, **Búzios** and **Palmital** and the **São Fidélis Complex** are formed during the *Brasiliano Cycle*, that was also responsible for an important magmatism of calc-alkalic trend. The **Búzios Unit** was correlated with the metasediments of **West Congo Belt**.

From the tectonic view, the territory of the RJ can be divided in **three Crustal Blocks** (from the southeast to northwest): **Cabo Frio**, **Serra dos Órgãos** and **Shear Zones Blocks**. Each one of these blocks presents distinctives structural, magmatic and metamorphic characteristics. The city of Rio de Janeiro is situated in the **Serra dos Órgãos Block**.