

## **Juxtaposition of low-grade and high-grade blocks of the Morro do Ferro greenstone belt, SW Minas Gerais, Brazil.**

FILGUEIRAS, A. M. da C., CHOUDHURI, A., Universidade Estadual de Campinas, SZABÓ, G. A. J., IG-USP.

The Morro do Níquel unit of the Archaean Morro do Ferro greenstone belt and the Mumbuca area are remnants of a volcanic sequence in the southwest part of Minas Gerais, Brazil. Metamorphism in the greenstone belt is not uniform and varies from greenschist-lower amphibolite facies in the Morro do Níquel unit to upper amphibolite to granulite facies in the Mumbuca area. The Morro do Níquel unit is characterized by a succession of komatiite flows, and the predominant lithology is actinolite-chlorite rock intercalated with ultramafic tuffaceous rocks and chemical sediments (oxide and silicate facies, banded iron-formation and graphite-pyrrhotite-pyrite-bearing cherts). The Mumbuca area is composed of similar ultramafic rocks but with olivine/orthopyroxene + hornblende  $\pm$  green spinel/chlorite, banded iron-formation (ferrosilite + grunerite + garnet + quartz), and amphibolites (locally orthopyroxene + clinopyroxene). These terranes are within a short distance, about 2 km, and have the same WNW / ESE regional trend, having been affected by the same structural event. The last deformational event is characterized by transcurrent shear zones with development of mylonite zones. These structural characteristics are responsible for the present distribution of the greenstone remnants as well as their contacts with the other lithologies. The present juxtaposition of these terranes is shaped by distinct crust levels, now connected as a result of vertical movements and ascent of blocks. The later, extensive transcurrent shear zone cuts across and these units and remodels this terrane, giving it its present regional structure.