

## **RECENT ADVANCES CONCERNING THE TECTONIC EVOLUTION OF THE SOUTHERN PORTION OF THE SÃO FRANCISCO CRATON, BRAZIL.**

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To illustrate this geological advance are shown new whole-rock geochemistry and geochronological analyses (U-Pb, Sm-Nd, Rb-Sr and K-Ar ages) of an area bordered by the cities of São Francisco de Paula, Campo Belo and Santana do Jacaré, in the Minas Gerais state, Brazil. Gneiss and amphibolite rocks, of the Campo Belo Metamorphic Complex, mafic and ultramafic rocks, of the Ribeirão dos Motas Layered Sequence, mainly constitute this cratonic fragment. The geochemical and geochronological results obtained from these rocks, referred above, led to the following conclusions: 1) the U-Pb and Sm-Nd isotopic systems indicate a crustal evolution that began at the Mesoarchean time, when the gneissic and amphibolitic rocks were generated or reworked from older protoliths; 2) the K-Ar isotopic system of the hornblende indicates that the crustal fragment in discussion was cooled below 500°C. at the Paleoproterozoic time, around 2250 Ma. ago; 3) finally, the Rb-Sr isotopic system shows that studied rocks suffered variable isotopic resetting which should indicate a greenschist-facies metamorphic event that happened around 1900 Ma. ago.