

Quartz-sillimanite segregations in high-grade gneiss at the Guanhães River, Minas Gerais, Brazil: A singular *pseudoconglomeratic* structure

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Basement rocks of Brasileiro Araçuaí Mobile Belt in eastern Minas Gerais State consist of Archaean orthogneiss varying in composition from trondhjemite to granite with amphibolite. Subsidiary pegmatites in boudin necks are common. Igneous relict textures in plagioclase and the calcic mafic minerals indicate a metaluminous granite type and probable origin from an I- type magma.

Pseudoconglomeratic structure is observed in continuous outcrops at the mouth of the Guanhães River. The conglomeratic aspect of the rock is given by ellipsoidal masses of quartz and late fibrolitic sillimanite. The masses are parallel to the gneissic foliation plane and display uniform dimension throughout the same level. Variable masses dimensions are observed in alternating level.

The formation of pseudoconglomeratic structure involved segregation above the second sillimanite isograd. Quartz plus sillimanite (fibrolite) segregation and veins are described in many migmatitic rocks suggesting significant mobility of Al in aqueous fluids. Leucosomes may represent portions of anatectic melts that lost alkali elements during crystallization. The onset of migration corresponds to white-mica breakdown reaction. The 'pseudoclasts' are originated from asymmetric boudinaged quartz-fibrolite veins.