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# Abstracts



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A sua impressão foi possível graças ao apoio dos Patrocinadores desse evento.

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## GEOCHEMISTRY OF THE SUPERGENE ALTERATION OF THE ALKALINE ROCKS OF LAGES

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In the lateritic alteration (bauxites) of phonolites in Lages, S.C., shows, in general, the leaching of major and minor elements, including REE's, with exception of the Al, Fe, Ti, Ga, Nb, Th, Zr and V. Fluor is relatively

enriched in bauxite, and zirconium presents a restricted mobility.

REE are mostly leached except cerium which is retained in manganese and iron minerals.

## MICROMORPHOLOGICAL, CHEMICAL AND MINERALOGICAL CHARACTERIZATION OF THE STRUCTURAL FACIES OF THE BAUXITE DEPOSIT OF MORRO DO FRAGA, IN THE MINAS GERAIS IRON QUADRANGLE



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The Morro do Fraga bauxite deposit comprises a slope type one whose profile presents the following facies sequence, from the bottom to the top: massive, friable, massive Al-Fe, nodular and soil.

Micromorphological, chemical and mineralogical analyses show the facies filiation (degradation toward the top of the profile) and that the friable facies represents an important internal degradation event in the profile.

Mineralogical transformations (hematite/goethite) and structural transformations occur at the same time. Fe<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> enrichment is observed toward the top. While secondary elements (Mn, Cr, Ni, K, Ca, Mg, Ba, Sr, Ga and V) show a little depletion.

Nevertheless, distinct characteristics are observed at the down slope profile as a result of an important deferruginization process, which leads to a relative Al<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> enrichment.

## MINERALOGICAL ASPECTS OF THE LATERITES OF MAICURU

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This paper presents the preliminary mineralogical data of the weathering materials derived from the alkaline-ultramafic-carbonatitic Maicuru complex, State of Pará. These material include several minerals species: iron, titanium and aluminium oxides/hydroxides as aluminous goethite, goethite, hematite, maghemite, lepidocrocite, anatase; and gibbsite; clay minerals of the smectite, chlorite, vermiculite and kaolinite groups and interstratified chlorite-smectite, mica-vermiculite, ver-

miculite-chlorite and kaolinite-smectite; and aluminous phosphates of the crandallite group, wardite, augelite, senegalite, wavelite and variscite. The principal characteristics of these minerals were obtained by x-ray diffraction, optical methods, electron probe microanalysis, energy dispersive scanning electron microscope, x-ray fluorescence, atomic absorption, inductively coupled plasma-ICP source spectrometry and colorimetric methods.