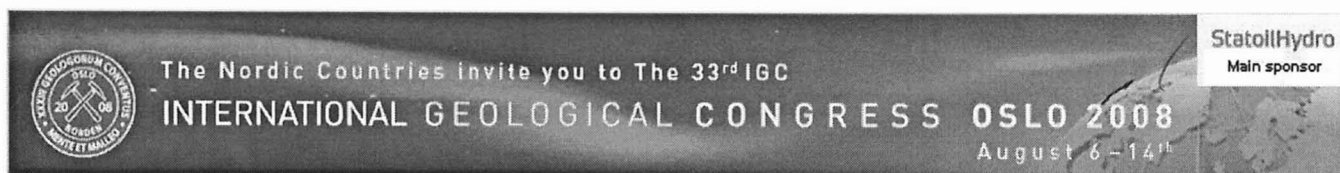


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New microprobe analyses for Brazilian occurrences of pyrochlore-group minerals (six from pegmatites and one from carbonatite) were obtained. These data are used for discuss ideas of new nomenclature schemes, based on the ions in A, B and Y sites. Three schemes are presented, the first making use of two prefixes, the second with a prefix and a suffix, and the third with two suffixes added to a root name. Among the new suggested schemes, that based on a root name and two suffixes seems more appropriate for allowing that minerals with same root name be in sequence in mineralogical glossaries. The root names (pyrochlore, microlite, betafite, romeite) are related to the dominant-constituent cations in the B position. Prefixes are, for example, "hydroxy", "fluor", "calcio", "natro" etc., while suffixes are represented by chemical symbols (Na, F, H₂O etc) or □(vacancies). The results allow the species being grouped in three "families". The first could be named as "microlite", including microlite-NaF, microlite-CaF, microlite-NaO and microlite-CaO. This family was identified in Morro Redondo quarry, Coronel Murta; Volta Grande pegmatite, Nazareno; Jonas quarry, Conselheiro Pena; Ip quarry, Marilac; and Ponte da Raiz quarry, Santa Maria de Itabira, all in Minas Gerais. Microlite-NaF (= fluornatromicrolite) seems to be more common than thought. It was previously described only in Quixabá, Paraíba, but now it was verified in many occurrences. Although -Na and -Ca suffixes were used, all the formulas seem to approach the term (NaCa)Ta₂O₆F. The second family could be named "hydromicrolite", with formula [□(H₂O)]Ta₂O₆(H₂O). This formula is not eletrically neutral so H₂O is replaced by cations (Ba, U etc) in the A site while O is replaced by (OH) in X site. Minerals from this family (microlite-H₂OH₂O and microlite-H₂O) were identified in the Volta Grande pegmatite, Nazareno, Minas Gerais. The third family, "pyrochlore", was verified in the Jacupiranga mine, Cajati, São Paulo, including pyrochlore-CaF and pyrochlore-CaO species. The new suggested names, based on cations, vacancies or H₂O dominant constituents of A, B and Y sites, seem better describe the species, allowing grouping them in families. This scheme of new nomenclature exhibits the advantage of verify the dominance of Ca or Na and not emphasize minor constituents in the A cavity. Furthermore, Ta, Nb and Ti cations have the same importance in B cavity.

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