# THE PROTEROZOIC OPHIOLITES OF THE EASTERN SIERRAS PAMPEANAS, ARGENTINA, THEIR EVOLUTION

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The analysis of the Middle to Late Proterozoic metamorphosed and desmembered ophiolitic belts in the basement of the Eastern Sierras Pampeanas from Córdoba, Argentina, shows a variety of rock - types, geochemical attributes and paleogeographic settings that suggest a supra - subduction type and allocthonous implications. As a whole these belts represent a complex system of sutures, that record the accretionary history of the basement of the Sierras Pampeanas with the Río de la Plata cratón during the Pampean cycle and later Famatinian episodes. The mechanism of obduction and emplacement is associated with a strong deformation and metamorphism history with related rodingite bodies, ophicalcites and metamorphic sole with Sm/Nd age of 600Ma ?.The depleted mantle with serpentinized harzburgites is associated with podiform chromite deposits, which include refractory and chemical chromites and only occasional metallurgical grade ore in a serpentinized dunite envelope. They also show Fe-Ti oxides related with later dikes, secondary Ni-Cu sulphides, and contain PGE and Au which suggest hidrothermal mobilisation. The morb basalts in the back-arc sequence show Cu (Au-Fe) VMS type mineralization, poorly developed due to the process interruption during the terrain's amalgamation. The outcrops of isolated gabbro bodies in the upper crustal sequence show scarce Cu-Ni-Fe mineralization and have calc - alkaline affinity related with an arc setting.