

## **Petrology and Mineralization of the Habana-Matanzas Ophiolite (Western Cuba)**

<sup>1</sup>LLANES, A.I., <sup>1</sup>SANTA CRUZ PACHECO, M., <sup>1</sup>GARCÍA, I.,  
<sup>1</sup>MORALES, A., <sup>1</sup>PALACIO, B. <sup>1</sup>Instituto de Geología y  
Paleontología, La Habana, Cuba.

The exponents of an oceanic lithosphere in the Habana-Matanzas region (15-20 km length by 2-3 km width) are parts of a northern Cuban belt, as an allochthonous body that has been thrust north and northwestward onto the continental Bahamas paleomargin.

All ophiolite members are represented, but they are strongly deformed, dismembered and imbricate with rocks of the foreland-Bahamas paleomargin, and overlying Cretaceous volcanic arc rocks with a late Campanian-Eocene sedimentary cover.

Several type of metallic deposits have development in this region: high-Cr and high-Al chromite; Fe, Cu, Ni, Co sulfide (both are associated to the serpentinized transition zone rocks) and volcanogenic massive sulfide Cyprus type deposits that occur in basaltic volcanic rocks in the upper part of ophiolite member. It was defined a depleted character of mantle residue vinculated to high-Cr chromite and less depleted for mantle sequences related with high-Al chromite.

Petrographic and geochemical analysis carried out in basaltic lithotypes have been used to define the magmatic affinity and original tectonic setting of ophiolite. It is evident the presence of a subduction component during the formation of a greater part of oceanic lithosphere. Also there are elements of proto-caribbean or pacific oceanic crust origin.