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**CLASSIFICATION OF THREE NEW METEORITES
FROM CENTRAL ALGERIAN SAHARA**

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Abstract

We carried out petrographic and mineralogical studies of three meteorites (HG1, HG2 and HG3) discovered in northern central Sahara (Hassi el Gassi, Algeria). These meteorites are the first discovered in this area of the Sahara. Major mineral phases of the three meteorites are olivine and orthopyroxene, and minor phases include troilite, Fe-Ni metal, clinopyroxene, plagioclase and chromite. The compositions of olivine and orthopyroxene in HG1 and HG2 are homogeneous. For HG1 meteorite, the mean fayalite content in olivine is 19 mole% (Fa19) and the mean ferrosilite content in low-Ca pyroxene is 17 mole% (Fs17), which are consistent with H chondritic compositions of ordinary chondrites. For HG2, the mean fayalite content in olivine is 25 mole% (Fa25) and the mean ferrosilite content in low-Ca pyroxene is 22 mole% (Fs22), which indicate L chondritic compositions of ordinary chondrites. The uniform silicate composition and the scarcity of chondrules indicate that HG1 and HG2 meteorites belong to petrologic type 6. HG3 meteorite is quite different : the composition of olivine is not homogeneous and varies from Fa19 to Fa23. The mean ferrosilite content in low-Ca pyroxene is 18,4 mole%. The composition of olivine and low-Ca pyroxene in HG3 is intermediate between the ranges for H and L chondrite. HG3 contains a matrix with a composition indicate a mixed of albite and Ca-rich pyroxene or a sodic-calcic amphibole ?. Some features of HG3 meteorite are similar to those of very rare H/L group of which only 5 or 6 meteorites are known. More detailed investigations are needed to determine the correct class of HG3 meteorite.