M1248

Isheyevo

~57°37'N; 56°20'E

Bashkortostan, Russia Found 2003, October Carbonaceous chondrite, bencubbinite

One stone, weighting 16.7 kg, was found by a tractor driver in a field during harvest carrying in the Ishimbai region of Bashkortostan, close to the Isheyevo village. A small piece of the meteorite was issued to the Meteorite Committee of Russian Academy of Sciences by Kazakov D.A., and Polozkov A.G., September 2004. Mineralogy and classification (Ivanova M.A. *Vernad.*, Ulianov A.A. *MSU*). Fusion crust is well developed, dark brown. The meteorite consist of FeNi metal grains, CC, POP, rare BO chondrules (0.02-1 mm in size), chondrules fragments, CAIs, and matrix lumps. FeNi metal comprises from 50 to 70 vol%, and contains 4.2-8.4 wt% Ni, 0.2-0.5 wt% Co, and 0.03-0.6 wr% Cr; Co/Ni ratio is approximately solar. CC chondrules don't contain any FeNi metal grains, they are Mg-rich, and consist of pyroxene-rich cryptocrystalline material. Olivine, Fa_{2.5}, rare FeO-rich olivines, Fa₁₀₋₃₈; pyroxene, Fs_{2.1}Wo_{1.7}, FeO-rich pyroxene, Fs₈₋₁₂Wo_{0.8-1.8}; troilite is Cr-rich, 2.5 wt% Cr. INAA data for a 20 mg chip: 2.74 wt% Ni; 717 ppm Co; 2608 ppm Cr, 8.2 ppm Sc, and 1.59 ppm Ir. Petrological type 3; shock stage, S1; weathering grade, W1. Specimens: a type specimen, 24.3 g, and two sections, *Vernad*; main mass with anonymous finder.