

## „Smolenice“ and „Uhrovec“ – two news meteorites from Slovakia

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On March 4, 2012 was found in forest near Smolenice (Trnava Co., Trnava region, Slovak Republic) one piece of 13.95 kg heavy meteorite. Latitude and longitude coordinates gave 48°31.2'N and 17°23.9'E. According to bulk chemical composition meteorite belongs to octahedrite of IVA group. Iron (var. kamacite) lamellae (average 0.22 mm) suggest to fine octahedrite (Of). Main mineral is iron (kamacite), taenite and rare troilite nodules and daubréelite inclusions and thin veinlets are present. Typical for this iron are Widmanstätten pattern and locally plesitic structure. Meteorite is slightly weathered with weathering grade W1. Gamma-ray spectrometry confirmed the extra-terrestrial origin of the analysed sample as the activity of the cosmogenic radionuclide  $^{26}\text{Al}$  was  $0.052 \pm 0.004$  Bq/kg, as expected for the iron meteorite. Further analyses are in progress to determine its terrestrial age.

Only one piece of meteorite with provisional name “Uhrovec” was found on March 11, 2012 in forest 3.3 km ESE from Uhrovec in Strážovské vrchy Mts. (Bánovce nad Bebravou Co., Trenčín region, Slovak Republic). Its latitude and longitude coordinates are 48°44.4'N and 18°23.0'E. Whole piece of black-grey colour with rare regmaglypts was 5.07 kg in original weight. Ordinary chondrite L6 type is composed from monomict breccia. Recrystallized matrix is characterized by different type of chondrules that are relatively frequently deformed into oval shapes. Two-generational strongly recrystallized chondrules occur very rare. Chondrite forms forsterite, enstatite, augite, iron (kamacite), taenite, troilite, albite glass (maskelynite) less frequent are chlorapatite, merrillite and chromite. Terrestrial age of the Uhrovec meteorite was determined using the  $^{14}\text{C}$  cosmogenic radionuclide (analysed by accelerator mass spectrometry) to be  $2000 \pm 800$  yrs. The gamma-ray spectrometry confirmed the presence of  $^{26}\text{Al}$  at the level of  $1.1 \pm 0.3$  Bq/kg.