

### **Krubera cave i Arabikamassivet, vestre Kaukasus: den første 2000 m dype grotte**

#### Krubera Cave

In 1980 Ukrainian speleologists started their explorations in the Arabika Massif. The strategy was guided by the knowledge of glaciokarst specifics. The Ortobalagan glacial valley in the southwest part of the Massif had been selected for Ukrainian efforts. The approach was adopted by other groups of the ex-USSR that joined the Arabika explorations in the 1980's, resulting in a boost of number and depths of caves. In addition, large-scale dye tracing experiments in 1984-85 established the world's deepest hydrological system with the total amplitude of over 2300 m.

Political turmoil in Abkhazia during 1990's suspended cave explorations in Arabika. When resumed in 1999, the Ukrainians focused on Krubera cave. A series of expeditions, in some of which cavers from France, Russia and Spain took part, established Krubera as the world's deepest cave in January 2001. In 2000 the Ukrainian S.A. launched the Call of the Abyss project in order to sustain the pace in Arabika and in another selected region, the Aladaglar Massif in Turkey. The work in Krubera continued in 2001 and 2003. During 2004-2005 there were three expeditions, sponsored in 2004 by the National Geographic Society. In August a team of 56 cavers (from Ukraine, Moldova, Spain, France, USA, Britain, Russia and Abkhazia) found a new branch in the post-siphon section, explored to 1840 m. In October 9 Ukrainian cavers discovered and explored a large series (Windows to 2080 m).

The most recent expedition in February-March 2005 (5 Ukrainian cavers) explored numerous side leads in the Windows series and found a continuation behind the deepest sump in caves so far, at 1990 m. The next two expeditions are planned for August and September 2005.

The Krubera Cave appears to offer a possibility for advance to an even greater depth as no major water flows and collector passages have been met with so far in the deepest section. Two potential upper entrances, at 40 and 90 m. above the present, are in work to be connected with Krubera. Also, there is a highly promising chance of connecting Krubera to the Kujbyshevskaja Cave through a level of fossil passages at 160 to 200 m (work in progress, less than 100 m remaining between the extreme points). When realized, these supposed connections would extend the total length of the Arabikskaja system to about 16 km and depth to about 2200 m.