



Deep degassing of the Earth and mine explosions

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The vide spectrum of natural and technological catastrophes occurred recently was caused by the same reason – the strengthening of deep hydrogen degassing of the Earth. A number of mine explosions increased greatly during the latest two decades. They killed many miners and destroyed a lot of mines in Bulgaria, Spain, Norway, Poland, USA, Turkey, Ukraine, etc. A terrible catastrophe had occurred in Russia on 19th March, 2007 at the “Ulyanovskaya” mine in Kemerovo region. 110 people were killed. Such a huge amount of victims was not recorded in this coal-field area since 1946. The circumstances of this explosion turned out to be remarkable. The “Ulyanovskaya” mine is the newest one in Kusbass, it was opened in 2002 and equipped with modern signal-blocked anti-gas system. However the accident had happened. After multiple gas explosions at Donbass mines in early 2008 the specialists admitted that they could not understand causes of these accidents. It is a common view that gas explosions originate from small hollows among coal layers and that gas has metamorphic nature. There must be no temporal regularities for such explosions, yet they do exist. These regularities were discovered a long time ago by Voitov and Chitarov. They determined from experiments that gas flow intensity in Chibiny depended on Moon phases and later detected the same regularity for the explosions and discharges at Donbass mines in 1947-1963. They clarified that such wrecks occurred 15 times more often in days closed to full and new Moon. We account this phenomenon for gravitational effect of Moon on the Earth’s core which is the major planetary stores of hydrogen – 4% of that gas is enough for transforming the air into firedamp – one disregard this circumstance by analysing the reasons of explosions. Measurements of hydrogen content are not taken, yet the hydrogen, being lighter, penetrating in the mine can be ahead of methane part of discharge. In our opinion, that is not the coal methane which explodes at mines but the hydrogen-methane mixture of deep nature.