Since Kolubara mining basin produces 30 million tons of coal per annum, it maintains the stability of the Electric Power System of Serbia. Various researches have been conducted to examine quality and properties of Kolubara coal.

At the VI International Conference “Coal 2013”, held in early October at Zlatibor, Mr. Miodrag Kezović, Head of the Department of Operation Geology at the “Tamnava West Field”, presented the paper on properties of the Kolubara coal. The aim of this paper is to provide scientific and professional data on the genesis of the Kolubara coal, composition and properties of creating coal-bearing sediments, coal seams and also the very coal deposit.

The importance of the Kolubara coal for the electric power system of Serbia is shown in the fact that Kolubara annually produces 30 million tons of coal, representing nearly 75% of the total production in Serbia, which is 17 billion kWh, or 52% of the total electricity consumption. For the last 50 years, the coal from Mining basin “Kolubara” was the subject of study of numerous researchers analyzing the paleogeography and sedimentation conditions, coal creation processes, coal petrographic characteristics and the possibilities of its application. Analysis of data obtained by different research methods provided complex consideration of coaly materials of Kolubara basin.

Paleogeographic evolution of the studied area was marsh – marine in character. Kolubara represented morpho-tectonic depression, or the zone of intensive subsidence, as evidenced by the great thickness of the deposit layers. Under the influence of hot and humid climate, lush wetland vegetation had developed in the area of about 530 km^2, dominated by large coniferous trees that are most important for the creation of the Kolubara coal. Analyzing the petrographic composition of the Kolubara coal, it has been discovered that it consisted of xylite and earthy, marshy coal. Chemical researches have shown that the average moisture content was over 45%, more than 17% of ash, about 0,5 % sulfur, and the lower calorific value amounted to about 7500 kJ / kg.

In the area of Kolubara mining basin, two strips of coal-bearing deposits evolution are most notable – North and South, and the coal seams are separated by clayey-sandy-gravel deposits.

Based on the qualitative properties of the Kolubara coal, in addition to burning in thermal power plants and the consumers’ use, the coal can be used to obtain products of higher calorific value by undergoing the processing and enrichment process.

Source; RBK