

## **GLAUCONITE AND PHOSPHORITE OF THE CONDENSED UPPER JURASSIC GEORGIEV FORMATION OF THE WEST SIBERIAN PLATE**

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The Georgiev Formation which corresponds to the upper part of the Oxfordian, Kimmeridgian and lower part of Tithonian stages has a very small thickness ranging from 1 to 6 meters, thus presenting a typically condensed formation. The Georgiev Formation consists of aleurolites, sandstones and carbonate rocks. The presence of glauconite grains and phosphatic concretions is one of the features of the Georgiev Formation. There are two types of the glauconite grains. First type is presented by oval and semi-angular grains from light- to dark-green spotting colouring. Some of them have a pyrite core. The grains of second type have the angular shape, dark-brown-green colouring, most of them are transformed by secondary processes. The grains of this type are regarded as underwent the redeposition, during which they suffered both mechanical and chemical (oxidation) influence. The phosphatic material is observed in the form of different-sized concretions from fine grains (first millimeters) up to the more larger (5-8cm) nodules. There are two types of phosphatic rocks cherty-phosphatic and phosphate-glauconite-calcareous-aleuritic rocks. The most abundant ultramicroscopic forms of phosphorite are tubes considered as covers of cyanobacterial threads. Analysis of cherty-phosphatic rock reveals a relatively high content of phosphatic material ( $P_2O_5$  23,93%), while  $CO_2$  content is extremely small (0,88%). Given rocks is being explained here to removal of the carbonate-ion from the crystal structure of apatite due to the influence of the catagenesis factor. The Cd content, which is one of the lowest for all Phanerozoic phosphorites (0,53%), is also being explained to catagenetic processes.