

**SOME NATURAL CATALYSTS BEHAVIOUR
IN COAL TREATMENT**

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ABSTRACT

Transition metal sulfide catalysts play active role at first stages of coal destruction. The dehydrogenation is the main reaction on these catalysts into coal treatment. This reaction leads to rapid conversion of coal organic matter into different aromatic compounds such as naphthalene, phenanthrene, benz[a]pirene and so on. Molybdenum, iron, nickel, and cobalt sulfides selectively interact with coal organic matter fragments. They change destruction products increasing the amount of final products and decreasing intermediates concentrations.