

## The study of multi-component catalysts based on oxides of transition metals deposited on the polymer matrix, in the oxidation of sulfur compounds

© Renat M. Akhmadullin,\*<sup>+</sup> Din' N. Bui, and Alfia G. Akhmadullina

Department of Synthetic Rubber Technology. Kazan National Research Technological University.

K.Marx St., 68. Kazan, 420015. Tatarstan Republic. Russia. E-mail: [ahmadullinr@gmail.com](mailto:ahmadullinr@gmail.com).

\*Supervising author; <sup>+</sup>Corresponding author

**Keywords:** *oxidation of sodium sulfide, heterogeneous catalyst, transition metal oxides, multicomponent catalysts.*

### Abstract

The catalytic activity of the oxides of transition metals deposited on the polymer matrix in the oxidation of sodium sulfide was investigated. The synergistic effect of multicomponent catalysts based on oxides of transition metals in the oxidation of sodium sulfide was studied. It has been revealed that the mixed catalysts of ternary components have the highest activity in the oxidation of sodium sulfide, sodium hydrosulfide and ammonium sulfide.