Full Paper _____ *Thematic Section:* Kinetics and Catalysis.
Registration Code of Publication: 12-30-5-94 *Subsection:* Composite Materials.
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/
Contributed: May 29, 2012.

The study of binary mixed compositions of transition metal oxides deposited on the polymer matrix in the sodium sulfide oxidation

© **Renat M. Akhmadullin**, **Dinh Nhi Bui**, and **Alfia G. Akhmadullina**
Institute of Polymer. Kazan National Research Technological University.
Karl Marx St., 72. Kazan, 420015. Tatarstan Republic. Russia.
E-mail: ahmadullinr@gmail.com.

*Supervising author; +Corresponding author

Keywords*: oxidation of sodium sulfide, the heterogeneous catalyst, transition metal oxides, the synergistic effect.*

Abstract

The catalytic efficiency of transition metal oxides deposited on the polymer matrix has been investigated in sodium sulfide oxidation. The synergetic effect of transition metal oxide mixtures was studied in sodium sulfide oxidation. Heterogeneous catalysts were synthesized by introducing transition metal oxides into the polymer matrix. It is shown that the polymeric catalyst based on mixture of copper and manganese oxides has highest activity in sodium sulfide oxidation.