

## **Sorbents in wastewater treatment of dyeing and finishing production**

© **Marina V. Pyrkova, Irina I. Menshova,\*<sup>+</sup> Elena A. Frolova, and Elzyata M. Chupartinova**

*Department of Chemical Technology of Fibrous Materials. Moscow State University of Design and Technology. Sadovnichesky St., 33. Moscow, 117997. Russia.*

*Phone: +7 (495) 955-33-35. E-mail: imenshova@rumbler.ru*

---

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

**Keywords:** *adsorption, activated carbon, shungite, synthetic dyes, wastewater.*

### **Abstract**

Natural shungite sorbent has been researched in comparison with activated carbon for treatment of wastewater containing water-soluble dyes. Physical and chemical characteristics of sorbents, sorption capacity of sorbents and equilibrium adsorption isotherms were studied. It has been shown that shungite is capable to remove efficiently the colorants from aqueous solutions.