

NANOCOMPOSITE MATERIALS BASED ON ACRYLIC COPOLYMER AND TiO₂ NANOPARTICLES

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Abstract: *The paper presents research concerning the obtaining of nanocomposite coating nanomaterials consisting of an organic component (functionalized acrylic copolymers in water dispersion) and inorganic component titanium dioxide. The formation of a crosslinked nanometric network of inorganic and organic domains was evidenced by AFM analysis. The interphase characterization of the nanostructured materials was performed using FT-IR analysis. The obtained nanocomposites can be used as ecological wood coating materials with improved properties.*

Key words: *nanocomposites, acrylic copolymer, TiO₂ nanoparticles.*

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