Preparation of Fe-Impregnated Sepiolite Catalytic Layers for Synthesis of Carbon Nanotube Nanocomposites

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Abstract. This experimental work is focused on the catalyst films – their chemical composition, preparation and catalytic activity (in terms of the amount of CNTs produced) in the process of synthesis of carbon nanotubes using hot filament chemical vapor deposition. The series of experiments was devoted to the selection of methods for preparation and characterization of films and nanocomposites. The prepared nanocomposites based on carbon nanotubes and iron modified mineral fractions were evaluated by electron microscopy and Raman spectroscopy.