Contribution ID: **36** Type: **Poster**

PHYSICAL PROPERTIES OF LUMINSCENT “MICROCRYSTALLINE CELLULOSE – OXIDE – CARBON NANOTUBE” COMPOSITES

Microcrystalline cellulose doped with luminescent oxides particles composites were made by cool pressing procedure. Morphology, crystallinity, luminescence and dielectric characteristics of the composites were studied. Their morphology can be described as “ceramics - like” type as it consists of cellulose plates and embedded oxide particles. Luminescence spectra of the composites covers all the range of the visible light, 350 – 750 nm, and comprises both wide band and narrow lines, related with host and oxides luminescence, respectively. Studied composites can be perspective materials for transformation of the single colour LEDs radiation into white light.

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Track Classification: Surface Physics, Nano- and Microelectronics