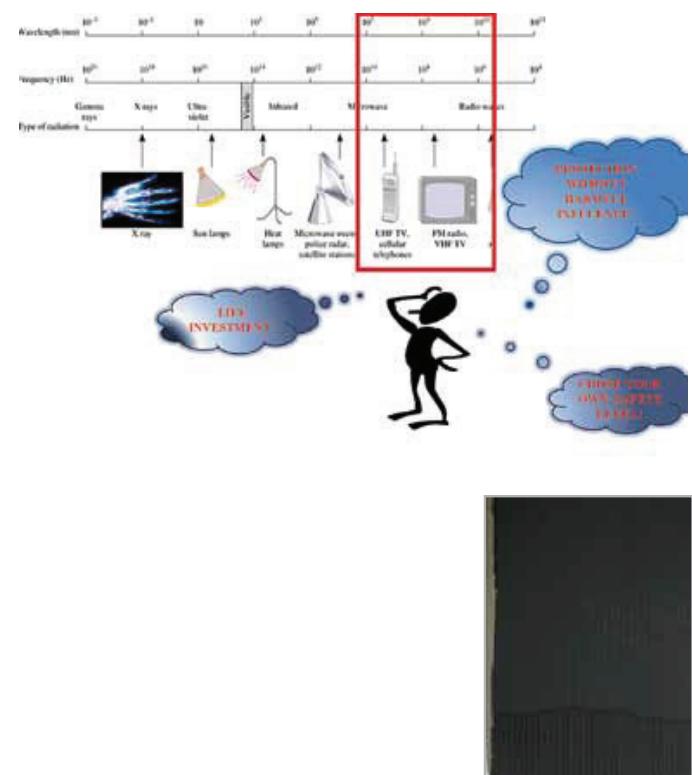
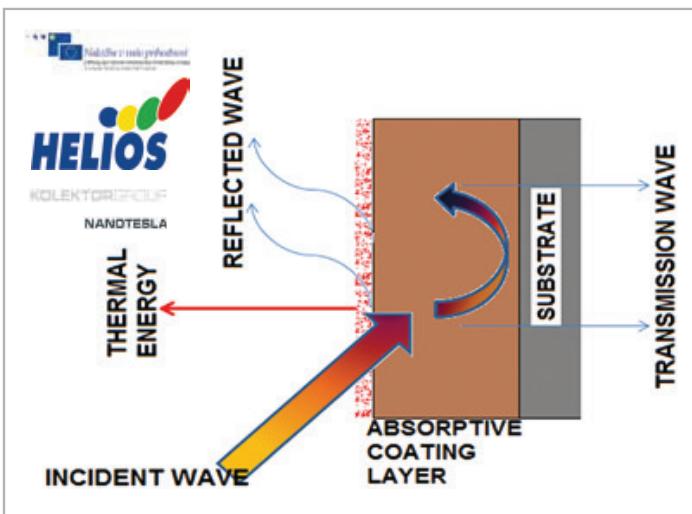




Premaz kot absorber elektromagnetskega sevanja v območju 500 MHz do 3 GHz

Coatings that function as an absorber of electromagnetic radiation in the range from 500 MHz to 3 GHz



Organizacija / Organization: HELIOS Domžale, d.d.
Avtor inovacije / Author of innovation: Branka Mušič, Andrej Žnidaršič, Nevenka Rajnar, Boštjan Bregar, Peter Venturini
Kontakt / Contact: Količeva 2, 1230 Domžale, 01 722 4009
info@helios.si, www.helios.si

Funkcionalni materiali so na vrhu lestvice naprednih materialov in so tudi prioritetno raziskovalno razvojno področje nacionalnega programa, ki je med vodilnimi po višini vlaganj v raziskave in razvoj. Naravnim elektromagnetskim sevanjem (EMS) se v zadnjem času vse bolj pridružujejo umetno povzročena sevanja kot posledica množične uporabe brezžičnih komunikacij. Povečal se je negativni vpliv EMS na žive organizme in ostale sisteme. Zaradi vse večjega zavedanja vpliva različnih segmentov na zdravje, varnost in okolje, je postal razvoj človeku in okolju prijaznejših premazov pomemben. Funkcionalne lastnosti premazov so vse pomembnejše ter tako prinašajo na tržišče nove materiale, ki poleg standardnih zahtev omogočajo absorpcijo EMS v širokem frekvenčnem območju.

Razvoj in uporaba brezžičnih komunikacij bo v prihodnosti še večja in povečala se bo tudi naša izpostavljenost patogenemu sevanju. Inovativni proizvod omogoča dodatno zaščito pred sevanjem, ki nam ni vidno.

The functional materials are on the very top of the list of advanced materials and are also treated as a high-priority research and development area in the national programme - among the most important actors in terms of the amounts invested in research and development. We have seen that the presence of the man-made radiation being a consequence of the mass use of the wireless communication devices is becoming as frequent as the natural electromagnetic radiation (EMR). The negative effects of EMR on living organisms and other systems are increasing. Since we are all becoming more aware of the impacts of various segments on health, safety and environment, the development of paints and coatings that can be classified as being more friendly to people and to the environment. The functional characteristics of electroconductive coatings for the protection against electromagnetic radiation are becoming ever-more important and consequently they bring to the market new materials that not only meet the standard requirements but also provide for the absorption of the EMR in a broad frequency range. The development and use of wireless communication devices and systems will increase further in the future leading to an increase in our exposure to pathogen radiation. The innovative product brings us additional protection by shielding us from electromagnetic waves.