

10-14 JULY 2023



ABSTRACT

Antibacterial sol-gel layers containing carbon nanoparticles (CNP)

The spread of bacteria through people touching various surfaces in sensitive areas (hospitals, clinics, public transport, shops, schools, etc.) is a potential epidemiological threat. The problem arises especially in large human agglomerations and during the migration of people (in the EU, millions of people travel from place to place every day). Another problem is bacteria from other continents carried by tourists and immigrants to EU countries.

The aim of our project and the solution to the above-mentioned problems is to develop antibacterial coatings, obtained by the sol-gel method, containing carbon nanoparticles (CNP).

The AnBaCo project will use the technology of sol-gel coating deposition, and as a result of the project, non-toxic antibacterial coatings with optimal physico-chemical properties will be obtained. Such coatings will find many applications on a daily basis (in public transport, supermarkets, toilets, hospitals, etc.).