

FUNCTIONAL SURFACE TREATMENTS FOR THE FOOD, BIOMEDICAL AND TEXTILE INDUSTRY

Innovations and benefits - Deposition of nanostructured functional coatings and plasma treatments, for the provision of specific properties to materials used in the sectors of food industry (e.g. food packaging), biomedical, textile etc. These surface modification processes confer specific functional properties such as, for example, antibacterial, antioxidant characteristics or barrier to the permeation of gases and vapors (e.g. water vapor). Furthermore, the transparency of the material can be appropriately controlled so as to guarantee that the product can be adequately seen when this represents an important aspect (e.g. for some food products).

Use -

- Food packaging
- Biomedical components
- Fabric treatments.

Applications and ongoing Activities - Development of functional coatings as part of research projects (national CLAN Cluster "Safe & Smart") with industrial partners, and related support characterization activities.

