

FUNCTIONAL GLASS SURFACES AND INDUSTRIAL APPLICATIONS

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Glasses especially oxide based glasses are one of the oldest materials used by mankind in many applications such as architectural, otomotiv, food and packaging, kitchen wares, furnitures, elektronik and optics throughout the history.

Glass science and technology try to keep in pace with the new demands in the properties and performance of glass materials. The new properties and performances usually obtained by functionalization of the glasses and glass surfaces by nanotechnological applications such as thin film coatings and ion-exchange.

In this presentation; surface functions such as hydrophobic, hydrophilic, antibacterial, self-cleaning, strengthening, easy-clean, coloured, reflective, anti-reflective will be introduced by referring the work we have been carried out over many years. Applications of the functional glasses in architectural, furniture, otomotiv, glass packaging, bio-sensor applications will be given and discussed.