Self cleaning coating





This is the age of smart coatings – which means the coating will act its designated function as per the pre-defined stimulus. Multi-storey glass buildings, ACP facades, solar panels, sophisticated furniture, etc. all gather dust or stains which spoil them. In order to make them stain / dust free, it is advisable to provide the self-cleaning ability.

We developed a universal coating which can clean dirt on wood, cardboard, paper, fabric, plastic, glass and concrete. This self cleaning coating was made on the principle of Lotus Effect. The coating was formulated using sol-gel technique using MTMS and GPTMS to form a base precursor, which was hydrophilic. This was converted to hydrophobic by adding flurosilanes. The self cleaning effect was then introduced by a set of nano particles, Nano-ZnO or nano-SiO₂. Detailed testing was carried out on various substrates to see its effect.

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