

Nano Science, Technology and Industry Scoreboard

Nanotechnology to Prevent Bird Strikes



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Bird-strike incidences with airplanes and high-rise building are very common, yet there is no effective solution to prevent such disasters. The sol-gel derived nano-TiO2 coating, which can reflect the UV radiation by 27.8%, as reported in this new study will be able to solve this longstanding problem. This is a low-cost easy solution, which has not been implemented before.

Birds see a little differently than us, they are capable of seeing UV radiation which we cannot see. So, by coating the building or aeroplane surfaces with the invented UV-reflecting nano-TiO2 formulation, either in solid or patterned form, birds will be able to see the obstacles and avoid severe accidents.

As a result, birds will not suffer from pre-matured death and nature will be conserved. The aviation and construction industries will get immense benefit as this will prevent damage to public properties and reduce catastrophic accidents, while also resulting in economic savings.

Moreover, this type of coating can be deposited on various substrates, not just glass, and the inherent anti-microbial properties can be utilized which can be particularly advantageous in the context of current epidemic.

The research paper titled "UV-reflecting sintered nano-TiO2 thin film on glass for anti-bird strike application" authored by Tania Dey was recently published in the journal <u>Surface</u> <u>Engineering</u>.

Based on the findings of this research, the author suggests change to current industry practice, offering timely solution which will have a direct impact on human life and nature.

Read the original article on Technology Org.