

Innovative Solution to Reduce Air Pollution

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Abstract: *In our Project we are aiming to make a 'Air Pollution Absorbing Material', which contains Titanium dioxide in addition to the conventional ingredients. Titanium dioxide is already commonly used in various toothpastes, Cosmetic Products because it functions as a self- cleaning chemical, meaning the new Material has the additional advantage that it breaks down algae and dirt so its surface stays clean. The Material is made up of traditional cement mixed with titanium dioxide. This unique mixture allows air to pass through while simultaneously capturing nitrogen- oxide particles, a main component of smog. Titanium dioxide functions as a catalyst to the chemical reaction which is activated by UV light. Not only does it filter the air, but the collected smog residue washes off with alight rainfall. This will be very Innovative Way to reduce Air Pollution by using Titanium Dioxide without harming the environment with harmless reaction and Saving Lives by reducing Air Pollution.*

Keywords: Concrete, Nitrogen Oxides, Photocatalyst, Titanium Dioxide, Porous Structure, smoke reduction

