

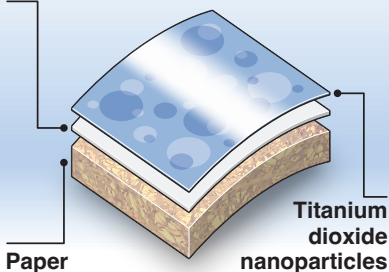
Turning paper into biodegradable plastic

Researchers in Japan have developed a cheap coating for paper that behaves like plastic, but is far less harmful to the environment

BIODEGRADABLE COATING

“Choetsu”: Easily applied to paper, making it rigid, waterproof and bacteria-repellent – without creating plastic pollution

Silica-resin layer: Solution of methyltrimethoxysilane, isopropyl alcohol, and tetramethoxysilane



EXAMPLE USES



Paper cutlery



Food packaging



Drinking straws



Plastic drinking straws: World's beaches estimated to be polluted with **8.3 billion** plastic straws. Now banned in many countries

Traditional paper straws lack rigidity and soon become soggy



When submerged in water, coated origami crane keeps its shape while uncoated one soon becomes saturated and starts to disintegrate