

## Self-repairing potholes down the road

Potholes could soon become a thing of the past due to futuristic plans to produce self-healing concrete.



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British scientists are experimenting with the groundbreaking material, which uses bacteria to plug gaps and cracks opened up by bad weather.

Researchers at the University of Bath, Cardiff University and the University of Cambridge created the concrete blend, which is full of bacteria hidden in tiny capsules. When water seeps into a crack, the bacteria burst out of their cases and produce limestone, sealing the gap before it can widen and become a pothole.

The scientists believe the technique could vastly increase the life of concrete, remove the need for repairs, and reduce costs by as much as 50%.

Carbon dioxide levels in the atmosphere would be lower because there would be no need to constantly replace roads. More than 7% of the world's CO2 emissions are due to cement production.

Roads would also become much safer for motorists and cyclists, the researchers believe. At least 40000 drivers in the UK claimed compensation from councils for damage caused by potholes last year, and deep cracks in roads caused injuries and deaths.

Self-healing concrete could also increase the life of buildings.

The groundbreaking material is mentioned in a report on the future of highways by engineering company Arup.

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