LIFE HACKS

This Mexican Student Invented Rubber Road Pavement with Self-Repair Properties

By bestfolkmedicine · 06/08/2020 · 1 min read

Israel Carmona is a student from Mexico who won the nation's James Dyson Award for his invention of a tyre-based pavement that is repaired by rain rather than damaged by it.

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The student of Coahulia Autonomous University made a rubber pavement from recycled tyres and additives that enable self regeneration when it comes into contact with water.

Carmona started his research as a way of solving the issue of rainwater damage of the streets resulting in cracks and potholes.

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He explained that rain weakens pavements and causes subsidence and damages them. And, this is how he came up with the idea to turn the biggest degradation agent into a recovery one.

Is This the Only Type of Self-Healing Pavement in the World?

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Currently, although there are pavements with the capacity for regeneration, the student explains that none of them can use water as a tool for the regeneration, much less ones that are made of recycled tyres.

> *#Ciencia Mexicano crea pavimento que se repara con agua. Israel Antonio Briseño, egresado de la Universidad Autónoma de Coahuila, ganó el concurso James Dyson-México. Hecho a base de neumáticos y con resultados satisfactorios todavía no está listo para su implementación.*

> *pic.twitter.com/6M8epm7lFC*
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> *— Enfoque Informativo Guerrero (@enfoqueinforma) October 22, 2019*

Usually, it's concrete that's combined with limestone-producing bacteria to have self-repairing properties.

ezstandalone.cmd.push(function () { ezstandalone.showAds(132); });

For his invention, he won the award in 2019 and his current plans are to approve the formula for usage in Mexico and brew the asphalt in his construction company.

The award is recognition for the best achievements of engineering and design graduates globally.

The winner takes £30,000 and the university gets £5,000.

Sources:

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