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Engineering Student Reveals the Streets are Paved with Platinum

Posted on Thursday 18th September 2008

A lucrative method for extracting precious metals such as platinum from road dust is being developed by a University of Birmingham postgraduate student.

Up to 70% of the precious metals in car autocatalysts currently end up on the roadside but Angela Murray, a research student at the University of Birmingham's School of Chemical Engineering is currently developing a way to recover them, potentially allowing local authorities and waste processors to generate an income stream from a material they currently pay to dispose of.

Speaking about the process Angela said: 'Precious metals including platinum, palladium and rhodium are lost from vehicle catalytic converters as people drive around. Much of this ends up in road dust which is collected but not currently recycled, often ending up in landfill sites. What people don't realise is that there are now almost the same levels of these metals present on our city streets as there are in the places where they are originally mined. Our streets really are paved with platinum.'

Angela's break-through comes at a time when metals are commanding record prices. Precious metals such as rhodium can cost up to £90 per gram. These prices have led to a spate of metal thefts across the country, but the UK's recycling industry is concentrating its efforts on technologies which can recover this valuable resource legitimately.

Commenting on the latest developments in material separation technology, Lindsay Millington, director general of the British Metals Recycling Association (BMRA) said: 'The British Metals Recycling Association welcomes any move to recover more metal from the waste stream. According to Defra figures, nearly two million tonnes of metal still goes to landfill every year. We need to maximise the UK's resource efficiency by keeping as much metal from landfill as we can.

'The UK already recovers around 15 million tonnes of metal every year and we have well developed markets all round the world. Demand is growing, since all industrialised countries need metals and countries like China and India are industrialising fast. If metal is recovered, it can be recycled, time and time again, to make new metals of the highest quality – and there will be a market for it. This is one of the reasons why metal recycling is the UK's most successful recycling story.'

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For further information

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