UNIVERSITY OF BIRMINGHAM

# Cleaning up

A method of recovering platinum deposits originated from catalytic convertors from roadside dust.

Business with Birmingham

UNIVERSITY OF BIRMINGHAM

# A way of recovering platinum group metals from roadside dust.

## What is it?

A way of recovering platinum group metals from roadside dust.

## How does it help?

- Recovers a scarce and valuable commodity
- Reduces the need for mining for platinum group metal ores – and its subsequent environmental impact
- Reduces the need for landfill sites, as the extracted platinum can be used as an inert filler

## Background

Catalytic converters reduce the emissions of harmful pollutants in vehicle exhaust gases. The catalyst is usually a precious metal, such as platinum, which over time is released from the catalytic converter in minute amounts – and can then be found in roadside dust.

Platinum group metals are scarce natural resources (one ounce of platinum is extracted from ten tons of ore), so the platinum in roadside dust (at a concentration of about one part per million) is worth recovering.

The University of Birmingham has developed a method of recovering platinum from this waste (currently dumped in landfill sites) which could be economically viable.

## Why the University of Birmingham?

- One of the largest concentrations of chemical engineering expertise in the UK
- School of Chemical Engineering collaborates nationally and internationally with leading-edge engineering and science departments
- More than £3.5m of investment has created some of the best teaching, computing and laboratory facilities in the UK

## Who's behind it?

Angela Murray is a postgraduate student in Chemical Engineering and a BBSRC (Biotechnology and Biological Sciences Research) fellowship holder for Biosciences. She has won awards for this project and launched a spin-out company, Roads to Riches.

## What's next?

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