

# Cleaning up contaminated land

A recently launched project that unites academia with industry is addressing the need to decontaminate 'brownfield' sites for redevelopment.

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Dr Abir Al-Tabbaa, Reader in Geotechnical Engineering at the Department of Engineering, provides the academic lead on a £1.24 million initiative that aims to develop a new technology for cleaning up the legacy of industrial contamination left in soil: heavy metals, petrol, tar, asbestos and other noxious waste. Remediation is needed both to protect the wider environment and to meet ever-increasing demands for housing and commercial developments on brownfield sites.

Project SMiRT (Soil Mix Remediation Technology) is the largest project funded by the Technology Strategy Board (TSB) on contaminated land remediation technologies to date. Leading the industrial component of the project is geotechnical contractor Bachy Soletanche, with the additional involvement of engineering consultancies, trade associations and materials suppliers.

'Making previously developed sites safe for new development is an important but costly process, with government targets set at building 72% of new housing on brownfield sites and upwards of £400 million per year spent

on remediation,' explained Dr Al-Tabbaa. 'The technology that we are working on with Bachy Soletanche aims to achieve significant technical advances that will reduce the cost and time involved in this necessary process.'

Over the course of three years, the project will develop an integrated advanced Soil Mix Technology by designing and manufacturing novel equipment and employing suitable materials that can simultaneously improve land quality and deal with pollutants. An important element of the project will be to take this technology forward through consultation meetings with stakeholders and a dissemination programme. 'This project is a unique opportunity to further develop soil mixing equipment in close parallel with materials technology,' said Peter Barker of Bachy Soletanche. 'The aim is to provide new, cost-effective solutions for both the contaminated land and ground improvement sectors.'

**For more information, please contact Dr Abir Al-Tabbaa (aa22@eng.cam.ac.uk).**