

# DevulCO<sub>2</sub>

## Devulcanisation and re-use of scrap tyre rubber to create an efficient, eco-friendly and sustainable recycling process

The principal aim of the DevulCO<sub>2</sub> project is to develop an innovative, continuous and effective carbon dioxide assisted chemical devulcanisation process.

The main objectives of the project include:

- Development of a multi-component devulcanising technique to effectively devulcanise waste rubber.
- Use of supercritical CO<sub>2</sub> as a means of improving the efficiency of chemical devulcanisation.
- Evaluation of devulcanised rubber as a replacement for virgin rubber in the manufacture of high quality products.
- The successful and economical use of devulcanised rubber for the production of a wide range of high added value products.

The new technology developed as a result of the DevulCO<sub>2</sub> project will provide a cost-effective solution to the challenging environmental problem of scrap tyres.

[www.devulCO2.net](http://www.devulCO2.net)

This project is co-funded by the Technology Strategy Board's Collaborative Research and Development programme, following an open competition. The Technology Strategy Board is a business-led executive non-departmental public body, established by the government. Its mission is to promote and support research into, and development and exploitation of, technology and innovation for the benefit of UK business, in order to increase economic growth and improve the quality of life. It is sponsored by the Department for Innovation, Universities and Skills (DIUS). Please visit [www.innovateuk.org](http://www.innovateuk.org) for further information.

# Project Consortium



## Smithers Rapra Technology Limited

Europe's leading independent plastics and rubber specialist organisation.

[www.rapra.net](http://www.rapra.net)



## B D Technical Polymer Limited

A small and flexible compounding and moulding company specialising in mixing high quality compounds.

[www.bdtechnicalpolymer.co.uk](http://www.bdtechnicalpolymer.co.uk)



## Charles Lawrence International

Market leaders in tyre recycling, supplying rubber granulate to manufacturers in sport, leisure and other industries.

[www.clgplc.co.uk](http://www.clgplc.co.uk)



## J Allcock and Sons

Britain's leading rubber recycler, supplying recycled rubber back into industry.

[www.allcocks.co.uk](http://www.allcocks.co.uk)



## PJH Partnership

Specialists in using supercritical fluid and superheated water as environmentally sustainable process development tools.

[www.conland.com](http://www.conland.com)



## Martins Rubber Company Limited

Specialist manufacturers of bespoke elastomeric products, supplying to all industrial sectors including Engineering, Automotive and Medical.

[www.martins-rubber.co.uk](http://www.martins-rubber.co.uk)