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Editorial

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Waste and Resource Management is part of the *Proceedings of the Institution of Civil Engineers*. The journal welcomes original contributions on research and practice relevant to all civil engineering and construction aspects of the resource management cycle, from waste minimisation through the reuse and processing of waste materials to the management and disposal of residual wastes. This issue of *Waste and Resource Management* features one briefing and five papers, on a variety of different topics.

The briefing and three of the papers address various aspects of the treatment of biodegradable wastes and/or the beneficial use of post-treatment residues. The briefing by Mathers illustrates, with reference to some case studies, the use of high quality (BSI PAS 100 compliant)¹ compost produced from municipal garden waste in place of imported topsoil in the remediation of former landfills and other industrial sites. Municipal garden waste represents a waste stream from which it should be relatively easy to derive a usable product. Mixed municipal solid waste provides a much more difficult challenge. The paper by Johnson describes the construction of a treatment plant constructed under the Department for Environment, Food and Rural Affairs' (Defra) New Technologies Demonstrator Programme (NTDP)² that is intended to treat this material by aerobic digestion, and sort the residue into different fractions from which value can be realised. Robinson *et al.* describe a series of laboratory scale experiments carried out to demonstrate the feasibility of using microwave processing to

convert biodegradable wastes into a storable and transportable, high-calorific-value char: this study was one of the 'blue-skies' research projects also funded under Defra's NTDP. Lastly in this group, Salter *et al.* address a different approach to the recovery of energy from roadside verge cuttings, through anaerobic digestion to produce a biogas.

Blakey *et al.* describe the development and report progress on a second major Defra-funded waste and resources research programme (WRRP), established in 2004 to deliver a better evidence base for policy in this field. Interestingly, this scheme has acted as a pilot for the development of a similar evidence-based approach across a wider range of Defra activities. Finally, the paper by Tam *et al.* presents guidelines, based on the results of a testing programme, relating to the use of recycled aggregate in concrete. It is hoped that these will be of assistance to designers in understanding the benefits, limitations and suitability of recycled aggregate concrete, and facilitate the more widespread use of this material in appropriate applications.

REFERENCES

1. BRITISH STANDARDS INSTITUTION. *Specification for Composted Materials*. BSI, London, 2005, PAS 100.
2. *Proceedings of the Institution of Civil Engineers, Waste and Resource Management, 2007, 160*, No. 1, 1–38, special issue on Defra's New Technologies Demonstrator Programme.