Editorial

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The structural Eurocodes are now published and gaining increasing usage in practice but there remains a need to scrutinise, harmonise between countries, develop and, where possible, simplify their provisions. The first paper in this issue (Bourne-Webb *et al.*, 2011) examines the subject of steel sheet pile wall design, covered by Part 5 of Eurocode 3. A simplified approach is employed to assess the impact of reduction factors on section modulus and inertia on the resistance and mobilised bending moments in steel sheet pile walls – the strong interaction between wall flexibility and generated bending moments is emphasised.

Research on the structural characteristics of fibre-reinforced polymers (FRP) has featured prominently in recent issues of the journal. This issue's second paper involves the development of a stress–strain model for rectangular concrete columns confined by FRP wrapping (Koksal and Doran, 2011). The validity of the model is demonstrated by comparison with a large body of experimental data.

The third paper, by Thanoon *et al.* (2011) presents an experimental study of a novel composite floor system, while the fourth (Ghasemi and Farshchin, 2011) applies ant colony optimisation to the design of frames under seismic loading.

There follows some very interesting discussion on a previous

paper on the subject of tension stiffening in concrete beams. The issue concludes with a book review.

REFERENCES

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