

## Accepted Manuscript

Torsional buckling and post-buckling of columns made of aluminium alloy

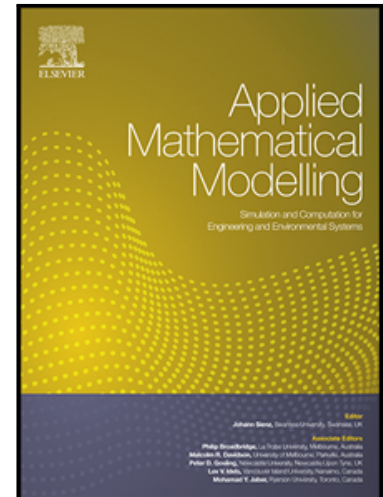
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**Highlights**

- The closed-form analytical solution of torsional buckling load is derived.
- The initial post-buckling behaviour is presented.
- The non-linear differential equation of torsional buckling is derived and solved.
- The effect of non-linear elastic material with comparison to linear one is discussed.
- Comparison of analytical results to FEM analysis is presented.

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