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Numerical investigation on the flow and heat transfer of a multi-lobe particle and equivalent spherical particles in a packed bed with considering the wall effects

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Highlights

- Wall effects on cross and axial flow and heat transfer of a multi-lobe particle in a packed bed was investigated numerically.
- Finite element method was used for solving partial equations.
- Nusselt number obtained for cross flow is greater than that obtained for the axial flow.

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