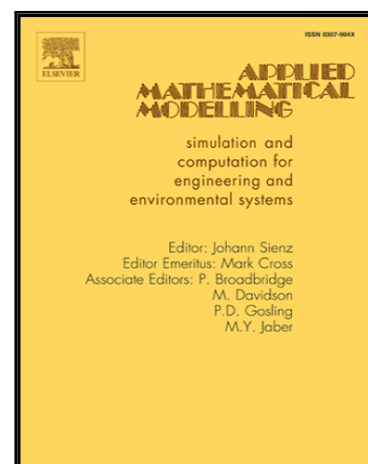


Thermoelectric problem for an axisymmetric ellipsoid particle in the liquid metal: analytical solution and numerical modeling

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PII: S0307-904X(17)30021-5
DOI: [10.1016/j.apm.2017.01.016](https://doi.org/10.1016/j.apm.2017.01.016)
Reference: APM 11513



To appear in: *Applied Mathematical Modelling*

Received date: 11 May 2016
Revised date: 20 November 2016
Accepted date: 5 January 2017

Please cite this article as: O. Budenkova, N. Bernabeu, S. Rukolaine, Y. Du Terrail Couvat, A. Gagnoud, R. Tarpagkou, Y. Fautrelle, Thermoelectric problem for an axisymmetric ellipsoid particle in the liquid metal: analytical solution and numerical modeling, *Applied Mathematical Modelling* (2017), doi: [10.1016/j.apm.2017.01.016](https://doi.org/10.1016/j.apm.2017.01.016)

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Highlights

- Current density inside the ellipsoid particle does not depend on the particle size
- Current density inside the ellipsoid particle depends on ellipse's eccentricity
- Current density in the ellipsoid depends on its orientation in the thermal field
- Inside an ellipsoid the vectors of current and thermal gradient may be not parallel
- The ellipsoid particle is translated by the thermoelectric force

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