Heat transfer increase for a laminar pipe flow of a magnetic fluid subjected to constant heat flux: an initial theoretical approach

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PII: S0093-6413(18)30059-4
DOI: 10.1016/j.mechrescom.2018.05.005
Reference: MRC 3273

To appear in: *Mechanics Research Communications*

Received date: 26 January 2018
Revised date: 14 May 2018
Accepted date: 16 May 2018

Please cite this article as: R.G. Gontijo, Heat transfer increase for a laminar pipe flow of a magnetic fluid subjected to constant heat flux: an initial theoretical approach, *Mechanics Research Communications* (2018), doi: 10.1016/j.mechrescom.2018.05.005

Highlights

- Theoretical expression for the mean Nusselt number of a magnetic fluid pipe flow;
- Identification of operational parameters to promote heat transfer enhancement;
- Physical discussions regarding the breakthroughs of the proposed theory;
- Conceptual proposition of a new method to promote heat transfer control;