

Cover letter

February 24, 2020

Editorial Department of International Journal of Emerging Technology and Advanced Engineering

IJETAE Publishing House

Teh-Huzur, Madhya Pradesh, India

Dear Editor of the IJETAE,

I am submitting a manuscript for consideration of publication in International Journal of Emerging Technology and Advanced Engineering. The manuscript is entitled “Thermal analysis of turbulent Poiseuille flows”.

It has not been published elsewhere and that it has not been submitted simultaneously for publication elsewhere.

A semi-analytical methodology for solving the thermal field over an turbulent Poiseuille channel flow was developed based on the Boussinesq hypothesis. On such method, differential evolution was applied to adjust an ideal turbulent Prandtl number for each Reynolds number. Then it was possible to develop a model for the turbulent Prandtl number in function of the Reynolds number that reduced the error of the simulation when compared with DNS solutions.

Thank you very much for for your attention.

Yours Sincerely,

Sr. Felipe J. O. Ribeiro

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