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## **Entropy Generation Analysis of Buoyancy Effect on Hydromagnetic Poiseuille Flow with Internal Heat Generation**

Abiodun A. Opanuga<sup>a\*</sup>, Hilary I. Okagbue<sup>b</sup>, Olasumbo O. Agboola<sup>c</sup>,  
Ogbu F. Imaga<sup>d</sup>

Department of Mathematics, College of Science & Technology, Covenant University, Ota, Nigeria

<sup>a</sup>abiodun.opanuga@covenantuniversity.edu.ng, <sup>b</sup>hilary.okagbue@covenantuniversity.edu.ng,

<sup>c</sup>ola.agboola@covenantuniversity.edu.ng, <sup>d</sup>imaga.ogbu@covenantuniversity.edu.ng

**Keywords:** Entropy generation, Buoyancy force, Hydromagnetic, Poiseuille flow, internal heat generation.

**Abstract:** This paper presents the entropy generation analysis of buoyancy effect with internal heat generation on a viscous incompressible non-Newtonian hydromagnetic Poiseuille flow through vertical isothermal walls. The solution of the non-linear boundary value problems obtained from the governing equations is constructed via the rapidly convergent semi-analytical technique of Adomian decomposition. Graphs and table are presented to analyse the effects of some parameters on fluid motion, temperature, entropy generation and irreversibility ratio.

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