DECLARATION

I, Sabu A.S, hereby declare that the thesis entitled, "Magnetohydrodynamic Convective Flow Problems: Fascinating Applications of Nanofluids", submitted to the University of Calicut in partial fulfillment of the requirements for the award of the Degree of Doctor of Philosophy in Mathematics is a bonafide research work done by me under the supervision and guidance of Dr.Alphonsa Mathew, Assistant Professor, Department of Mathematics, St. Thomas College (Autonomous), Thrissur, Kerala.

I further declare that this thesis has not previously formed the basis of any degree, diploma or any other similar title.

Thrissur Sabu A.S.

11 December, 2022

CERTIFICATE

This is to certify that the thesis titled "Magnetohydrodynamic Convective Flow Problems: Fascinating Applications of Nanofluids" submitted by Sabu A.S. to University of Calicut in partial fulfilment of the requirements for the award of the Degree of Doctor of Philosophy in Mathematics is a record of original research work carried out by him under my supervision. The content of this thesis, in full or in parts, has not been submitted by any other candidate to any other University for the award of any degree or diploma.

Thrissur

11 December, 2022

Dr. Alphonsa Mathew

Assistant Professor,

St. Thomas College(Autonomous),
Thrissur, Kerala.

CERTIFICATE

I hereby certify that, this is the revised version of the thesis entitled "Magnetohydrodynamic Convective Flow Problems: Fascinating Applications of Nanofluids" submitted by Sabu A.S., under my guidance after incorporating the necessary corrections/suggestions made by the adjudicators. I also certify that the contents in the thesis and the soft copy are one and the same.

Thrissur

23 May, 2023

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