CERTIFICATE

This is to certify that the thesis entitled **"ANALYSIS OF MAGNETIC FIELD EFFECT ON NANOFLUID FLOW"** submitted for the award of Ph. D. Degree in Mathematics by **Mr. Akhil S. Mittal** (Reg. No: FOS/1939, Date: 21/04/2015), incorporates the original research work carried out by him under my guidance and no part of this work has been previously submitted by him to any other University or Institution for the same or any other degree.

He has put in research for the requisite number of terms as required by the University.

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Vadodara,

July 2018

CERTIFICATE

This is to inform to all concerned that the following publications have arisen out of the research work carried out by my Ph. D. student Mr. Akhil S. Mittal who wishes to submit the thesis entitled "**ANALYSIS OF MAGNETIC FIELD EFFECT ON NANOFLUID FLOW**" to the Department of Mathematics, Faculty of Science, The Maharaja Sayajirao University of Baroda, Vadodara for the award of Ph. D. degree in Mathematics.

1. H. Kataria, A. S. Mittal, Mathematical model for velocity and temperature of gravity-driven convection optically thick nanofluid flow past an oscillating vertical plate in presence of magnetic field and radiation. Journal of Nigerian Mathematical Society **(Elsevier)**, 34 (2015) 303–317.

2. H. Kataria, A. S. Mittal, Velocity, mass and temperature analysis of gravity-driven convection nanofluid flow past an oscillating vertical plate in the presence of magnetic field in a porous medium, Applied Thermal Engineering **(Elsevier)**, 110 (2017) 864–874.

3. H. R. Kataria, A. S. Mittal, Analysis of Casson Nanofluid Flow in Presence of Magnetic Field and Radiation, Mathematics Today, 33 (2017) 99-120. ISSN 0976-3228.

4. M. Sheikholeslami, H. R. Kataria, A. S. Mittal, Effect of thermal diffusion and heat-generation on MHD nanofluid flow past an oscillating vertical plate through porous medium, Journal of Molecular Liquids **(Elsevier)**, 257 (2018) 12-25.

5. M. Sheikholeslami, H. R. Kataria, A. S. Mittal, Radiation effects on heat transfer of three dimensional nanofluid flow considering thermal interfacial resistance and micro mixing in suspensions, Chinese Journal of Physics **(Elsevier)**. 55 (2017) 2254 – 2272.

6. H. R. Kataria, A. S. Mittal, Mathematical Analysis of three dimensional nanofluid flow in a rotating system considering thermal interfacial resistance and Brownian motion in

suspensions through porous medium, Mathematics Today, 34 (A) (2018)7-24, ISSN 0976-3228**.**

7. A. S. Mittal, H. R. Kataria, Three dimensional CuO-Water nanofluid flow considering Brownian motion in presence of radiation, Karbala International Journal of Modern Science **(Elsevier), 10.1016/j.kijoms.2018.05.002.**

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