

v) Computational Modeling for the flow of Magnetic Nano-Particles along with the blood and Electromagnetically Induced Heat Transfer ---- An Application to Destruction of Cancer Cells (Principal Investigator)	UGC	2017--	On Going	Rs. 3,00,000.00
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List of Publications of Dr. Sushil Kumar Ghosh

1. "A mathematical model for the study of blood flow through a channel with permeable walls", **Acta Mechanica** (An International Journal), Vol. 122, No.1—4, 137---153, 1997
2. "Flow of a non- Newtonian fluid through a channel with a porous pulsating walls Application to hemodialysis/ultrafiltration in artificial kidney" **Modeling, Measurement and Control(AMSE)**, (An International Journal), Vol. 57, 47---63, 1998
3. "Pulsatile flow of a couple stress fluid through a narrow porous tube of elliptic cross Section : A model for blood flow in a stenosed arteriole", **Engineering Simulation**, (An International Journal), Vol. 15, 849---864, 1998
4. "Flow of a Casson fluid in a narrow tube with a side branch", **International Journal of Engineering Science** (An International Journal),, Vol. 38, 2045-2077, 2000
5. "A mathematical model for the study of interstitial fluid movement vis-à-vis the non-Newtonian behaviour of blood in a constricted artery", **Computers and Mathematics with Applications** (An International Journal),, Vol 41, 783--811, 2001
6. "Pulsatile flow of blood through a porous elastic vessel of variable cross-section", **Computers and Mathematics with Applications** (An International Journal),, Vol. 43, 903--916, 2003
7. "Hydro-magnetic Fluctuating Flow of a Visco-elastic Fluid in a porous Channel", **J. Appl. Mech. (ASME)**, (An International Journal),, Vol. 129, No.2, 177—180, 2007

8. "An Exact Solution of a Hydro-magnetic Flow of a non-Newtonian Fluid through Channel with a oscillating wall", Published in ***Review Bulletin of the Calcutta Mathematical Society*** 16(2) 145-154, 2008
9. "Micropolar Fluid Through a Channel--A Mathematical Model for Lung alveolar Sheet" ***Journal of Physical Sciences***, Vol. 15, 43— 57, 2011
10. "Mixed convection MHD flow of viscoelastic fluid in a porous medium past a hot vertical plate" ***World Journal of Mechanics*** (An International Journal), Vol. 2, 262—271, 2012
11. 'An Exact Solution of Fluctuating Hydromagnetic Flow of a Dusty Fluid Between Parallel Plates' ***Annals of Pure and Applied Mathematics*** (An International Journal),, ,Vol. 4, 120-126, 2013
12. "Unsteady Hydro-magnetic Flow of an Oldroyd Fluid Through a Porous Channel with Oscillating Walls", ***Journal of Physical Sciences***, Vol. 17, 155-167, 2013
13. "Unsteady Hydro-magnetic Flow of a Viscous Fluid Passing over an oscillating Flat Plate", ***International Journal of Applied Mathematics and Mechanics***, Vol. 3, 1-8, 2014
14. "Heat Transfer in Hydro-magnetic fluid Flow: Study of Temperature Dependence of Fluid Viscosity", ***Journal of Applied Fluid Mechanics*** (An International Journal), Vol. 7, 4, 633—640, 2014
15. "Convective heat transfer and MHD viscoelastic nanofluid flow induced by a stretching sheet" '*International Journal of Applied and Computational Mathematics*' DOI 10.1007/s40819-015-0080-4 , 2015
16. "MHD Rotating Flow and Heat Transfer through a Channel with Hall effects" ***Journal of Magnetism and Magnetic Materials*** 10.1016/j.jmmm.2015.12.033, 2016
17. "Effects of Joule Heating and Viscous Dissipation on MHD Visco-elastic Fluid Flow Past a Stretching Surface with Source/Sink", ***International Journal of Mathematics and Computations***, Vol. 27, No. 3, 2016 .
18. "Flow of a non-Newtonian Heated Fluid in a tube with a side branch" ***International Journal of Applied and Computational Mathematics***, DOI 10.1007/s40819-016-0210-7, 2016
19. "Unsteady Magnetized Flow and Heat Transfer of a Viscoelastic fluid over a Stretching Surface", Communicated to ,Journal of Magnetism and Magnetic Materials.