

Name: Dr.A.MAGESH	Photo 			
Designation:	Associate Professor			
Qualification:	M.Sc, M.Phil, B. Ed, Ph.D, SET			
Area of specialization:	Fluid Dynamics			
Experience:	Industrial Experience		Teaching Experience	
	0		15.6 years	
Number of workshops / FDP attended:	Number of Workshops		Number of FDPs	
	1		7	
Publications:	Conference		Journal	
	National	International	National	International
	3	2		25
Professional Body Membership	IEEE			

Academic Experience:

Name of the College	Designation	Joining Date	Relieving Date	Experience		
				Years	Months	Days
JEI Mathaajee College of Engineering	Asst Prof	15-10-2009	17-06-2017	7	8	3
SMK Fomra Inst of Tech	Asst Prof	19-06-2017	04-05-2018	0	10	16
JEI Mathaajee College of Engineering	Asst Prof	05-05-2018	30-06-2022	4	1	27
Sri Sai Ram Engineering College	Asst Prof	01-07-2022	31-08-2024	2	2	0
	Asso Prof	01-09-2024	Till date	1	1	9
				16	1	25

Anna University Research Supervisor Ref no: 4270048

International Publications

1. A.Magesh, M.Kothandapani, 2021, 'Heat and mass transfer analysis on non-Newtonian fluid motion driven by peristaltic pumping in an asymmetric curved channel', The European Physical Journal-Special Topics, 230, 1447-1464.
2. A.Magesh, M.Kothandapani, 2021, 'Analysis of heat and mass transfer on the peristaltic movement of Carreau nanofluids', Journal of Mechanics in Medicine and Biology, 22(1), 2150068.
3. A.Magesh, M. Kothandapani, V.Pushparaj, 2021, 'Electro-Osmotic flow of Jeffrey fluid in an asymmetric micro-channel under the effect of Magnetic field', Journal of Physics: Conference Series.1850, 012102
4. A Magesh, P Praveen Kumar, P Tamizharasi, R Vijayaragavan, S Vimal Kumar and M Kothandapani,2021, 'Effect of magnetic field on the peristaltic transport of Oldroyd-B fluid in an asymmetric inclined channel', Journal of Physics: Conference Series.1850, 012111.
5. P.Tamizharasi, R.Vijayaragavan, A.Magesh, 2021, 'Heat and Mass transfer analysis of the peristaltic driven flow of nanofluid in an asymmetric channel', Partial Differential Equations in Applied Mathematics 4, 100087.

6. R.Vijayaragavan, P.Tamizharasi, A.Magesh, 2022, 'Brownian motion and thermoporesis effects of nanofluid flow through the peristaltic mechanism in a vertical channel', *Journal of Porous Media*, 25(6), 65-81.
7. A.Magesh, P.Tamizharasi, R. Vijayaragavan, 2022, ' MHD flow of Al₂O₃/H₂O nanofluid under peristaltic mechanism in an asymmetric channel' *Heat Transfer-Wiley*, 51(7), 1-15 6563-6577.
8. J.Kamalakkannan, C.Dhanapal, M.Kothandapani, A.Magesh, 2023, 'Peristaltic transport of non-Newtonian nanofluid through an asymmetric microchannel with electroosmosis and thermal radiation effects', *Indian Journal of Physics*. **97**, 2735–2744
9. P.Tamizharasi, R Vijayaragavan, A Magesh, 2023, 'Electro-osmotic driven flow of Eyring Powell nanofluid in an asymmetric channel', *Mathematical Methods In The Applied Sciences*, 46(12), 13540-13557.
10. A.Magesh, P.Tamizharasi, R. Vijayaragavan, 2023, 'Non-Newtonian fluid flow with the influence of induced magnetic field through a curved channel under peristalsis', *Heat Transfer, Wiley*, 52 (7), 4946-4961.
11. Sara I Abdelsalam, A Magesh, P Tamizharasi, AZ Zaher,2023, Versatile response of a Sutterby nanofluid under activation energy: hyperthermia therapy, *International Journal of Numerical Methods for Heat & Fluid Flow*, <https://doi.org/10.1108/HFF-04-2023-0173>.
12. A Magesh, P.Tamizharasi, J.Kamalakkannan, 2023, 'Analysis of Bejan number and Entropy generation of Non-Newtonian nanofluid through an asymmetric microchannel' *Numerical Heat Transfer, Part A: Applications*, 10.1080/10407782.2023.2240507.
13. A Magesh, V Pushparaj, S Srinivas, P Tamizharasi, 2023, 'Numerical investigations of activation energy on the peristaltic transport of Carreau nanofluid through a curved asymmetric channel', *Physics of Fluids* 35 (10).
14. P.Praveen Kumar, S. Balakrishnan, A.Magesh, 2023, Peristaltic transport of (Al₂O₃ /H₂O) nanofluid through a vertical asymmetric channel with MHD effects, *Journal of Propulsion Technology*, 44(6), 1198-1207.
15. R.Vijayaragavan, P.Tamizharasi, A Magesh, 2024, 'Peristaltic motion of Non-Newtonian fluid under the influence of inclined magnetic field, porous medium and chemical reaction' *Scientia Iranica*, Doi: 10.24200/sci.2024.59484.6270.

16. Yasir Akbar, Shiping Huang, A Magesh, J. Ji, Mohammad Alam, 2024, 'Thermal Analysis of Mixed Convective Peristaltic Pumping of Nanofluids in the Occurrence of an Induced Magnetic Field and Variable Viscosity', *Journal of Taibah University for Science*, 18 (1), 2319890,
17. A.Magesh, P.Tamizharasi, O.D. Makinde, S. Srinivas, 2024, 'Analysis of activation energy on the Johnson Segalman nanofluid through an asymmetric microchannel: Numerical study, *International Journal of Modern Physics -B*, DOI: 10.1142/S0217979225500195.
18. P.Praveen Kumar, S.Balakrishnan, P.Tamizharasi, A.Magesh, Sara I Abdelsalam, 2024, 'Numerical treatment of Entropy generation and Bejan number into an Electroosmotically-driven Flow of Sutterby nanofluid in an Asymmetric Microchannel', *Numerical Heat Transfer Part B: Fundamentals*, DOI: 10.1080/10407790.2024.2329773
19. P.Praveen Kumar, S.Balakrishnan, A.Magesh, 2024, Effect of heat and mass transfer on the MHD Al₂O₃/H₂O and Al₂O₃/C₂H₆O₂ nanoliquid through an asymmetric vertical channel, *Pramana-Journal of Physics*. <https://doi.org/10.1007/s12043-024-02814-2>
20. Sara I Abdelsalam, A. Magesh, P. Tamizharasi, 2024, Optimizing Fluid Dynamics: An In-depth Study for Nano-Biomedical Applications with a Heat Source, *Journal of Thermal Analysis and Calorimetry* DOI: 10.1007/s10973-024-13472-2
21. A Magesh P Praveen Kumar, S Balakrishnan, Peristaltic Transport of (Al₂O₃/H₂O) Nanofluid through A Vertical Asymmetric Channel with MHD Effects, *Tuijin Jishu/Journal of Propulsion Technology* 44 (6), 1198-1207
22. P.Praveen Kumar, S. Balakrishnan, P.Tamizharasi, A.Magesh, 2024, Heat and Mass transfer investigations of Oldroyd-B fluid in a curved symmetric channel, *Journal of Computational Analysis and Applications*, 33,4,421-432.
23. P. Tamizharsi, A. Magesh, P. Praveen Kumar, 2025, Influence of electroosmosis, thermal radiation, magnetic field, and activation energy on the peristaltic motion of Hyperbolic tangent nanofluid in an asymmetric channel. *Z Angew Math Mech.* 105, e202400727 (2025). <https://doi.org/10.1002/zamm.202400727>
24. P. Tamizharsi, Y.Akbar, A. Magesh, 2025, "Impact of Activation Energy and Electroosmosis on Peristaltic Flow of Pseudoplastic Nanofluids in an Asymmetric Channel, *Archive of Applied Mechanics*, Doi;10.1007/s00419-025-02778.

25. A Magesh, 2026, Influence of Heat and Mass transfer on nanofluid peristaltic motion through a curved asymmetric channel, *Journal of Nanofluids*, Vol. 15, pp. 69–82, doi:10.1166/jon.2026.2289.

- **Editorial Board:**

Academic Editor in ‘Asian Journal of Education and Social Studies’

- **Convenor**

Organized an International Conference on Advances in Mathematics and its Applications (ICAMA-2025) on May 8 & 9, 2025 at Sri Sai Ram Engineering Collage, West Tambaram, Chennai.

- **Conference/FDP**

1. Presented the paper at the 2nd International Conference on Mathematical Modeling and Computational Methods in Science and Engineering (ICMMCMSE-2020) entitled ‘Effect of magnetic field on the electro-osmotic flow of Jeffrey fluid in an asymmetric micro-channel’ in 22-24 January 2020, Alagappa University, Karaikudi, Tamilnadu, India.
2. Presented the paper at the 5th International Conference on Applications of Fluid Dynamics (ICAFD-2020) entitled ‘Heat and mass transfer analysis of (Al_2O_3 / H_2O) nanofluid in an asymmetric channel’ on 13-15 December 2020, VIT University, Amaravathi, Andhra Pradesh, India
3. Attended a National conference at KMG College of Arts and Science, Gudiyatam in the topic of Mathematical analysis.
4. Participated in the Faculty Development Programme on “Recent Trends In Graph Theory” organized by Division of Mathematics, School of Advanced Sciences from 8 – 12 May 2023 at Vellore Institute of Technology, Chennai.
5. Attended Faculty Development Programme at VIT University, Vellore in the topic of Homotopy Analysis Method.
6. Acted Session Chair at the Two-Day International Conference on “Emerging Innovations in Computational Mathematics Modeling for Engineering Applications (ICEICMEA 2026),” held from 12.02.2026 to 13.02.2026 at SRM university Trichy.

- **Resource person:**

Gave the invited talk in the SEVEN-DAY ONLINE FACULTY DEVELOPMENT PROGRAMME “ENHANCE AND ENABLE THE POTENTIAL OF MATHEMATICS AND STATISTICS” entitled “Peristaltic motion of nanofluid in an asymmetric channel” organized by SRM Institute of Science and Technology, Kattangulathur from 02-01-2024 to 08-01-2024.

- **Reviewer in International Journals**

1. Scientia Iranica.
2. Proceedings of the Institution of Mechanical Engineers Part E- Journal of Process Mechanical Engineering.
3. PLOS ONE
4. International Journal of Modern Physics –B
5. Heliyon
6. Physics of Fluids
7. Scientific Reports
8. International Journal of Modelling and Simulation.
9. Modern Physics Letters-B
10. Nonlinear Dynamics.
11. Numerical Heat Transfer Part A: Applications
12. Numerical Heat Transfer Part B: fundamentals
13. Journal of King Saud University – Science
14. Chinese Current Science
15. Alexandria Engineering Journal
16. Thermal Science and Engineering Progress
17. International Communications in Heat and Mass Transfer
18. Multiscale and Multidisciplinary Modeling, Experiments and Design
19. Turkish Journal of Mathematics
20. ZAMM