

Dr. G. Palani
Associate Professor
Department of Mathematics
Dr.Ambedkar Govt. Arts College
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drgpalani@dagac.edu.in



Personal Details

Name
Designation
Academic Qualification

Dr.G.PALANI
Associate Professor
M.Sc., M.Phil., Ph.D

Teaching Experience

- Dr.Ambedkar Govt.Arts College, Vyasarpadi, Chennai-39,Tamil Nadu, India
Assistant Professor, July 2010 - till date
- Sri Subramaniaswamy Govt. Arts College,Tirutanni-631 209,Tamil Nadu, India
Assistant Professor, July 2009 - July2010

Area of Specialization

- Computational Fluid Dynamics

Research Activities

- **Recognised Research Supervisor in**
 - University of Madras
 - Anna University
 - SRM University
 - Bharathiar University

- **Guiding Ph.D Scholars**

- Six research scholars completed research under my guidance
- Two research scholars doing research under my guidance
- Two research scholars completed research under my co-guidance

- **Guiding M.Sc Projects**

- Six Students (Women's Christain College, Chennai) completed M.Sc Projects under my guidance
- Three Students (Women's Christain College, Chennai) doing M.Sc Projects under my guidance

- **Guiding Internship for M.Sc Students**

- Four Students from Vel Tech Deemed University completed internship under my guidance.

- **Reviewer of International Journals**

- International Journal of Heat and Mass Transfer (Elsevier)
- Journal of Thermal Science (Springer)
- Journal of the Taiwan Institute of Chemical Engineers (Elsevier Science)
- Allahabad Mathematical Society, India
- The Journal of Lithuanian Association of Nonlinear Analysts (LANA)
- International Scientific Journal
- Heat and Mass Transfer (Springer)
- Numerical Heat Transfer (An International Journal of Computation and Methodology), Taylor & Francis, Chicago
- International Journal for Numerical Methods in Fluids, UK

- **Advisory Editorial Board**

- Journal of Academic Research
- International Scientific Journal

- **Major Research Project**

- University Grants Commission Major Research Project
 - * Project Duration: 3 years 2010-2013.
 - * Project Title: *NUMERICAL STUDY OF HEAT AND MASS TRANSFER EFFECTS ON INCLINED (OR) VERTICAL SURFACES UNDER THE INFLUENCE OF MAGNETIC FIELD OR THERMAL RADIATION*

Membership in Professional Bodies

- Life Member in Indian Society for Heat and Mass Transfer (ISHMT), INDIA

Author for Books

- Served as a Course Writer for Writing Course Materials (Real Analysis-II) for B.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Real Analysis-I) for B.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Mathematical Methods) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Integral Transforms and Calculus of Variations) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Integral Calculus) for B.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Functional Analysis) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Linear Algebra) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Differential Calculus) for B.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Real Analysis) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Differential Geometry) for M.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Algebra) for B.Sc (Mathematics), Tamil Nadu Open University.
- Served as a Course Writer for Writing Course Materials (Mechanics IV Semester) for M.Sc (Mathematics), Institute of Correspondence Education, University of Madras.
- Served as a Course Writer for Writing Course Materials (Operation Research III Semester) for M.Sc (Mathematics), Institute of Correspondence Education, University of Madras.
- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-II (Tamil English Medium) for Second year (Tamil Nadu Text Books).

- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-II (English Medium) for Second year (Tamil Nadu Text Books).
- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-I (Tamil Medium) for Second year (Tamil Nadu Text Books).
- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-I (English Medium) for Second year (Tamil Nadu Text Books).
- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-II (Tamil Medium) for first year (Tamil Nadu Text Books).
- Served as a Domain Expert in Writing Higher Secondary Mathematics Text Books Volume-II (English Medium) for first year (Tamil Nadu Text Books).
- Served as a Content Expert in Writing Higher Secondary Mathematics Text Books Volume-I (Tamil Medium) for first year (Tamil Nadu Text Books).
- Served as a Content Expert in Writing Higher Secondary Mathematics Text Books Volume-I (English Medium) for first year (Tamil Nadu Text Books).

Resource Person

- Served as a Chairperson in the Presentation Session, *International Conference on Research Trends in Contemporary Mathematics, Patrician College of Arts and Science*, 03/02/2023 to 04/02/2023.
- Served as State Level Resource Person for Training *D.I.E.T. staff* from 12/03/2020 to 13/03/2020 at Karur.
- Served as a Chairperson in *International Conference on Relevance of Mathematics in Real Life Scenario* organized by Vidya Sagar College, Chengalpat on 09/09/2019.
- Served as Subject Expert for *State Level KRP Training on "Specific Concept Oriented Programme (SCOPE) 2018-19* at Presidency Girls Higher Secondary School, Chennai on 12/12/2018.
- Served as State Level Resource Person in the *Mathematics (Class-XI Volume II) SRG Training* held on 7/12/2018 and 08/12/2018 at Sri Sai Ram College of Engineering, Chennai.
- Served as Resource Person in *Two-days Orientation Programme on New Text Book of Class XI, Volume I* from 31/08/2018 to 01/09/2018, Conducted by Government of Puducherry.
- Served as District Resource Person Training on *Orientation to New Text Book for Class XI, Volume I* from 22/06/2018 to 23/06/2018 held at S.S.N. Engineering College, Chennai.
- Served as Resource Person for *Centrally Sponsored In-service Training Programme in Maths* from 09/01/2013 to 11/01/2013 at Lady Willingdon Institute of Advanced study in Education(Autonomous), Chennai-600 005.
- Invited Talk on *Applications of Mathematics* at S.D.N.B. College for Women, Chennai on 24/01/2011.

Academic Auditor

Served as an External Academic Auditor in

- D.G. Vaishnava College, Chennai.
- Patrician College of Arts and Science, Chennai.

Board of Studies

- Served as Board of Studies Member in Dr. M.G.R. Deemed University, Chennai.
- Served as Board of Studies Member in Women's Christain College, Chennai.
- Served as Board of Studies Member in Ethiraj College for Women, Chennai.
- Served as Board of Studies Member in S.I.E.T. College, Chennai.
- Served as Board of Studies Member in Muthurangam Government Arts College, Vellore.

Doctoral Committee Member

- Served as a Doctoral Committee Member in various University *viz.*,
 - Madras University, Chennai.
 - V.I.T University, Chennai.
 - Vel Tech University, Chennai.
 - Vel's University, Chennai.

Viva Voce Examiner

- Served as Ph.D Viva-Voce Examiner in various University *viz.*,
 - University of Madras, Chennai.
 - Thiruvallur University, Vellore.
 - Vinayaka Mission University, Salem.
 - Vel's University, Chennai

Publications

• International/National Journals

1. T. Christy , **G.Palani**, Impact of MHD and nanofluid flow-through a vertical plate with varying heat and mass flux, *Communicated for Publications*.
2. T. Christy , **G.Palani**, Divided Square Difference Cordial Labeling Of Some Spider graphs, *Communicated for Publications*.
3. T. Christy , **G.Palani**, and E.Chandrasekaran, A Family Of Spider Graph On Sum Divisor Cordial Labeling, *Communicated for Publications*.
4. T. Christy , **G.Palani**, An Application on Root Square Mean Labeling of Ladder Graph, *Communicated for Publications*.
5. P. Ganesan, **G.Palani**, John R. Graef, and E. Thandapani, Oscillation of Fourth Order Nonlinear Semi-Canonical Neutral Difference Equations Via Canonical Transformations, *Communicated for Publications*.
6. T. Christy and **G.Palani**, Divided Square Difference Cordial Labeling of Join Some Spider graphs, *E3S Web of Conference*, 387, 05006, 2023, ICSERT-2023. (**SCOPUS Journal**). <https://doi.org/10.1051/e3sconf/202338705006>
7. **G.Palani**, A. Arutchelvi, Similarity solution for MHD nanofluid with internal heat generation in the presence of radiation and chemical reaction, *International Journal of Applied Mechanics and Engineering*, Vol.28(1),71-83, 2023. (**SCOPUS Journal**).
8. R. Parthiban and **G.Palani**, A Numerical Analysis of Motion of a Micropolar Liquid on an Elongating/Contracting Penetrable Plane Wall with Radiation, *International Journal of ambient energy*, (**Accepted for Publication**).
9. E. Ragulkumar,**G.Palani**, P. Sambath and Ali J Chamkha, *Dissipative MHD free convective nanofluid flow past a vertical cone under radiative chemical reaction*Scientific reports. 13-2878, 2023. (**SCOPUS Journal**). <https://doi.org/10.1038/s41598-023-28702-0>
10. P. Muralikshna, R. Vinodhkumar and **G.Palani**, (T, S) -Normed cubic fuzzy β -Subalgebras, *A Springer Proceedings in Mathematics and Statistics*, (communicated)
11. **G.Palani** A. Arutchelvi, MHD nanofluid flow past an inclined plate with Soret and Dufour effects, *JP Journal of Heat and Mass Transfer*, Vol.31,123-145, 2023. (**SCOPUS Journal**).
12. P. Muralikshna, R. Vinodhkumar and **G.Palani**, Multiplication and Translation of Cubic β -ideals *South East Asian Journal of Mathematics and Mathematical Sciences*, Vol.18(3),247-254, 2022. (**SCOPUS Journal**).
13. P. Muralikshna, R. Vinodhkumar and **G.Palani**, β -Ideals of β -subalgebras via Cubic Intuitionistic Set *Thai Journal of Mathematics*, Vol.20(3),1337-1352, 2022. (**SCOPUS Journal, SCImago, Web of Science**).
14. **G.Palani**, A. Arutchelvi, Radiation and Magnetohydrodynamic effects on convective nanofluid past an inclined plate in the presence of a chemical reaction, *International*

Journal of Applied Mechanics and Engineering, Vol.27(3),115-126, 2022. ([SCOPUS Journal](#)).

15. P. Muralikshna, R. Vinodhkumar and [G.Palani](#), Cubic Fuzzy beta-ideals of beta-algebras *Italian Journal Pure & App-Mathematics*, Vol.48,806-813, 2022. ([SCOPUS Journal](#)).
16. R. Parthiban and [G.Palani](#), Similarity Solution of stagnation-Spot flow of a Micropolar Fluid above a flat exponentially elongating penetrable surface with concentration and heat production/absorption, *Journal of Naval Architecture and Marine Engineering*, . Vol.19, 57-70, 2022. ([SCOPUS Journal](#)).
17. P. Muralikrishna, A. Borumand Saeid, R. Vinodkumar, [G.Palani](#), An Overview of Cubic Intuitionistic β -Subalgebras, *Proyecciones Journal of Mathematics* Vol.41 No: 1, 23-44, February 2022. ([SCOPUS Journal](#)).
18. P. Muralikshna, R. Vinodhkumar and [G.Palani](#), Neutrosophic cubic β -Subalgebras, *Neutrosophic sets and systems*, Vol.48, 417-432. ([SCOPUS Journal](#)).
19. R. Parthiban and [G.Palani](#), Similarity Solution of Stagnation-Point flow and Heat Transfer of a Micropolar Fluid Towards a Horizontal Permeable Exponentially Elongating Sheet with Radiation, Heat Production/Immersion, *International Journal of Applied Mechanics and Engineering*, Vol.26(4),179-191, 2021. ([SCOPUS Journal](#)).
20. R. Parthiban, [G.Palani](#), Seema Tinker, R. P. Sharma, A Numerical Approach to Slip Flow of a Micropolar Fluid above A Flat Permeable Contracting Surface, *International Journal of Applied Mechanics and Engineering*, Vol.26(2),173-185, 2021. ([SCOPUS Journal](#)).
21. [G.Palani](#) and E. J. Lalith Kumar, Dusty Gas Flow over a semi-infinite vertical cone, *JP Journal of Heat and Mass Transfer*, Vol.22(2),201-216, 2021, ([SCOPUS Journal](#)).
22. A.Sarojini and [G.Palani](#), Effects of Pressure work over a semi-infinite vertical oscillating cylinder, *International Journal of Applied Mechanics and Engineering*, Vol.26(1),215-225, 2021. ([SCOPUS Journal](#)).
23. M.Radhakrishnan and [G.Palani](#), Effects of Mass Transfer on Varying Viscosity and Thermal Diffusivity Over a Vertical Plate with Applied Magnetic Field and Heat Flux, *Solid State Technology*, Vol.63(5), 7676-7686, 2020.
24. P. Muralikshna, R. Vinodhkumar and [G.Palani](#), Applications of cubic level set on β -Subalgebras, *Advances in Mathematics:Scientific Journal*, 9(3),1359-1365,2020. ([SCOPUS Journal](#)).
25. [G.Palani](#) and Santhana Krishnan Narayanan, Exact Solutions for Couple Stress Fluid with Slip Boundary Conditions in Porous Plane-Poiseuille Flow, *International Journal of Innovative Science and Technology*, Vol.5(5), 1621-1628, 2020.
26. [G.Palani](#) and A. Sarojini, Thermal Radiation, Heat Generation and Soret Effects on Vertical Oscillating Cylinder, *International Journal of Innovative Science and Technology*, Vol.5(5), 52-54, 2020.
27. E. Chandrasekaran, George E. Chatzarakis, [G. Palani](#), E. Thandapani, Oscillation criteria for advanced difference equations of second order, *Applied Mathematics and Computation*, 372(2020), 124963. ([SCI Journal](#))
28. P. Muralikshna, R. Vinodhkumar and [G.Palani](#), Some aspects on cubic fuzzy β -Subalgebra of β -algebra, *Journal of Physics:Conference Series*, 1597(2020)012018, ICNTMMA-2019. ([SCOPUS Journal](#)).

29. **G.Palani**, A. Arutchelvi, Heat transfer effects on free convection viscous dissipation flow past an inclined plate, *AIP Conference Proceedings* 2112, 020055 (2019).(**SCOPUS Journal**)
30. **G.Palani**, A. Arutchelvi, Heat and Mass Transfer Effects on MHD Nanofluids Past Over an Inclined Plate, *International Journal of Engineering and Technology*, 7(4.10), 873-879, 2018.
31. **G.Palani**, J.Desdemona Kirubavathi and E.Chandrasekaran, Soret and Dufor Effects on a semi infinite inclined plate, *International Journal of Engineering and Technology*, 7(4.10), 336-339, 2018. (**SCOPUS Journal**)
32. **G.Palani**, A.Sarojini and R.Dhanasekaran, Analysis of non constant viscosity on a vertical oscillating cylinder with MHD effects, *International Journal of Engineering and Technology*, 7(4.10), 67-71, 2018. (**SCOPUS Journal**)
33. **G.Palani** and J.Desdemona Kirubavathi, Radiative free convection flow past an inclined plate with variable surface temperature, *International Journal of Pure and Applied Mathematics*, 113(10), 271-279, 2017.
34. A. Sarojini and **G.Palani**, Transverse magnetic field applied on oscillating vertical cylinder with heat and mass flux, *International Journal of Pure and Applied Mathematics*, 113(10), 262-270, 2017.
35. **G.Palani** ,U. Srikanth and K.Y.Kim, Combined effects of viscous dissipation and MHD on free convection flow past a semi-infinite vertical plate with variable surface temperature in the presence of heat source, *Journal of Engineering Thermophysics*, 26(1), 113-124, 2017. (**SCI Journal**)
36. **G.Palani** and U. Srikanth, Double diffusive natural convection flow past a semi-infinite vertical plate with chemical reaction, *Indian Journal of Science and Technology*, 10(8), February 2017.
37. **G.Palani** and E.J.Lalith Kumar, Magneto Hydro Dynamic free convective flow over a non isothermal vertical cone with joule heating and viscous dissipation, *Indian Journal of Science and Technology*, 9(S1), December 2016.
38. **G.Palani** and J.Desdemona Kirubavathi, Natural convection from an inclined plate immersed in a temperature stratified medium, *International Journal of Mathematics and Engineering with computers*, 7(2), 147-157, 2016.
39. J.Desdemona Kirubavathi and **G.Palani**, On Diffusion of chemically reactive species in convective flow past an inclined plate with variable surface temperature and variable mass diffusion, *International Journal of Applied Mechanics and Engineering*, 21(4), 905-922, 2016. (**SCOPUS Journal**)
40. **G.Palani** and A.Sarojini, Radiative heat flow past a semi-infinite vertical oscillating cylinder with constant heat flux, *Journal of Fluid Mechanics*, 7(2), 117-129, 2015.
41. **G.Palani** and E.J.Lalith Kumar, Heat and Mass transfer effects on a free convective flow past a semi-infinite vertical cone with thermal radiation and chemical reaction, *JP. Journal of Heat and Mass Transfer*. 12(5), 103-129, 2015. (**SCOPUS Journal**).
42. **G.Palani** and U. Srikanth, A Numerical study on unsteady free convection flow past a semi-infinite vertical plate with variable surface temperature and temperature dependent viscosity, *International Journal of Fluid Mechanics*, 7(2), 97-106, 2015.

43. **G.Palani** and U. Srikanth, MHD Dusty fluid flow past a semi-infinite vertical plate with constant heat flux, *International Review of Pure and Applied Mathematics*, 11(2), 189-205, 2015.
44. **G.Palani**, E.J.Lalith Kumar and K.Y.Kim, Free convection effects on a vertical cone with variable viscosity and thermal conductivity, *Journal of Applied Mechanics and Technical Physics*, 57(3), 473-482, 2016. **(SCI Journal)**
45. E.J. Lalithkumar and **G.Palani** , MHD Free convection flow of water at 4°C past a semi-infinite vertical cone with variable surface heat flux, *International Journal of Fluid Mechanics*, 7(2), 107-116, 2015.
46. **G.Palani** and A.R.Ragavan, Free convection flow past a vertical cone with chemical reaction in the presence of magnetic field, *Journal of Engineering physics and thermo physics*, 88(5), 1256-1263, 2015. **(SCI Journal)**
47. **G.Palani**, J.Desdemona Kirubavathi and Kwang-Yong Kim, Free convection effects on inclined plate with variable viscosity and thermal diffusivity, *Thermophysics and Aeromechanics*, 21(1), 65-85, 2014. **(SCI Journal)**
48. **G.Palani** and J.Gnanambigai, Theoretical Solution of impulsively started vertical porous plate with variable temperature under the influence of magnetic field and thermal radiation, *Journal of Engineering Thermophysics*, 23(2), 129-136, 2014. **(SCI Journal)**
49. **G.Palani**, A.R.Ragavan and E.Thandapani, Effects of viscous dissipation on a MHD free convective flow past a semi-infinite vertical cone with variable surface heat flux, *Journal of Applied Mechanics and Technical Physics*, 54(6), 960-973, 2013. **(SCI Journal)**
50. **G.Palani**, Influence of magnetic field by free convection flow past an impulsively started vertical cylinder in the presence of Dufour and Soret Effects, *Journal of Engineering Thermophysics*, 21(4), 259-277, 2012. **(SCI Journal)**
51. E.Thandapani, A.R.Ragavan and **G.Palani**, MHD free convection flow over an isothermal vertical cone with temperature dependent viscosity, *Thermophysics and Aeromechanics*, Vol.19, No.3, pp.615-628, 2012 **(SCI Journal)**.
52. P.Bala Anki Reddy, N. Baskara Reddy and **G.Palani** Convective flow past a vertical plate under the influence of magnetic field and thermal radiation subjected to a variable surface temperature in the presence of heat source/sink, *Thermophysics and Aeromechanics*, 19(3), 489-501, 2012. **(SCI Journal)**.
53. E.Thandapani, A.R.Ragavan and **G.Palani**, Finite Difference Solution of Unsteady Natural Convection Flow Past a Non Isothermal Vertical Cone Under the Influence of Magnetic Field and Thermal Radiation, *Journal of Applied Mechanics and Technical Physics*, 53(3), 408-421, 2012. **(SCI Journal)**
54. **G.Palani** and Kwang-Yong Kim, The influence of magnetic field and thermal radiation by natural convection past a vertical cone subjected to a variable surface heat flux, *Applied Mathematics and Mechanics*, 33(5), 605-620, 2012. **(SCI Journal)**.
55. **G.Palani** and Kwang-Yong Kim, Joule Heating and Viscous Dissipation Effects on MHD Flow Past a Semi-infinite Inclined Plate With Variable Surface Temperature, *Journal of Engineering Thermophysics*, 20(4), 501-517, 2011. **(SCI Journal)**
56. **G.Palani** and Kwang-Yong Kim, On the diffusion of a chemically reactive species in convective flow past a vertical plate, *Journal of Applied Mechanics and Technical Physics*, 52(1), 57-66, 2011. **(SCI Journal)**

57. **G.Palani** and Kwang-Yong Kim, Numerical study on a vertical plate with variable viscosity and thermal conductivity, *Archive of Applied Mechanics*, 80, 711-725, 2010. **(SCI Journal)**
58. **G.Palani** and Kwang-Yong Kim, Free Convection of a dusty gas flow along a semi-infinite vertical cylinder, *International Journal for Numerical Methods in Fluids*, 63, 517-532, 2010. **(SCI Journal)**
59. **G.Palani** and Kwang-Yong Kim, Viscous Dissipation effects on Heat transfer in flow past an inclined plate, *Journal of Applied Mechanics and Technical Physics*, 51(2), 241-248, 2010. **(SCI Journal)**
60. Ibrahim A.Abbas and **G.Palani**, The effects of Magneto Hydrodynamic flow past a semi-infinite vertical plate with variable surface temperature, *Applied Mathematics and Mechanics*, 31(3), 329-338, 2010. **(SCI Journal)**
61. **G.Palani** and U. Srikanth, MHD Flow past a semi-infinite vertical plate with mass transfer, *Nonlinear Analysis: Modelling and Control*, 14(3), 345-356, 2009. **(SCOPUS Journal)**.
62. **G.Palani** and Kwang-Yong Kim, Effects of Mass transfer on free convective flow past a semi-infinite inclined plate with variable surface temperature, *Journal of Engineering Physics and Thermo Physics*, 82(5), 872-881, 2009. **(SCI Journal)**
63. **G.Palani** and Kwang-Yong Kim, Numerical Solutions of Unsteady flow past a semi-infinite inclined plate with temperature oscillations, *Journal of Mechanical Science and Technology*, 23(6), 1710-1717, 2009. **(SCI Journal)**
64. **G.Palani** and Ibrahim A.Abbas, Free Convection MHD flow with thermal radiation from an impulsively started vertical plate, *Non-linear analysis, Modeling and control*, 14(1), 73-84, 2009. **(SCOPUS Journal)**.
65. **G.Palani** and Kwang-Yong Kim, Heat and Mass Transfer effects on vertical plates, *Journal of Engineering, annals of Faculty of Engineering Hunedoara*, **Tome VI**(2008), Fascicule 1, 201-206.
66. **G.Palani** and Kwang-Yong Kim, The Effects of MHD on free convection flow past a semi-infinite isothermal inclined plate, *Journal of Engineering Physics and Thermo Physics*, 81(4), 724-731, 2008. **(SCOPUS Journal)**
67. **G.Palani** Convection Effects on flow past an inclined plate with variable surface temperatures in water at 4°C , *Journal of Engineering, annals of Faculty of Engineering Hunedoara*, Tome VI, Fascicule 1, 75-82, 2008.
68. **G.Palani** and P. Ganesan, Heat transfer effects on Dusty Gas flow past a semi-infinite inclined plate, *Engineering Research*, 71(3-4), 223-230, 2007. **(SCI Journal)**
69. **G.Palani**, viscous dissipative fluid flow past a semi-infinite vertical plate with variable surface temperature, *International Journal for Numerical Methods in Fluids*, 55(12), 1157-1169, 2007. **(SCI Journal)**
70. **G.Palani** and P. Ganesan, Transient Unsteady natural convection MHD flows past a semi-infinite vertical plate with constant heat flux, *International Journal of Applied Mechanics and Engineering*, 12(1), 125-134, 2007.
71. P. Ganesan and **G.Palani**, Unsteady free convection flow past a semi infinite isothermal vertical plate with mass flux, *Journal of Thermophysics and Aeromechanics*, 12(3), 379-386, 2005.

72. P. Ganesan and **G.Palani**, Viscous Dissipation Effects on Impulsively started isothermal inclined plate, *Journal of Energy, Heat and Mass Transfer*, 27, 83-91, 2005.
73. P. Ganesan and **G.Palani**, Unsteady free convection flow of dusty gas past a semi-infinite inclined plate with constant heat flux, *International Journal of Applied Mechanics and Engineering*, 9(3), 483-492, 2004.
74. P. Ganesan and **G.Palani**, Finite Difference analysis of unsteady natural convection MHD flow past an inclined plate with variable surface heat and mass flux, *International Journal of Heat and Mass Transfer*, 47(19-20), 4449-4457, 2004. (**SCI Journal**)
75. P. Ganesan and **G.Palani** Transient free convection flow of a viscous dissipative fluid past a semi-infinite incline plate, *International Journal of Applied Mechanics and Engineering*, 8(3), 395-402, 2003.
76. P. Ganesan and **G.Palani**, Natural convection effects on impulsively started inclined plate with heat and mass transfer, *Heat and Mass transfer*, 39(4), 277-283, 2003. (**SCI Journal**)
77. P. Ganesan and **G.Palani**, Free convection effects on the flow of water at $4^{\circ}C$ past a semi-infinite inclined plate, *Heat and Mass Transfer*, 39(8-9), 785-789, 2003. (**SCI Journal**)
78. P. Ganesan and **G.Palani**, Free Convection effects on impulsively started semi-infinite inclined plate with constant heat flux, *Journal of Energy, Heat and Mass Transfer*, 24, 213-221, 2002.
79. P. Ganesan and **G.Palani**, The effects of Mass transfer on the MHD flow past on an impulsively started isothermal inclined plate, *Journal of Energy, Heat and Mass Transfer*, 24, 1-12, 2002.
80. P. Ganesan and **G.Palani**, Natural convection effects on an impulsively started isothermal inclined plate, *Acta Mechanica*, 153, 127-132, 2002. (**SCI Journal**)

• International/National Conference Proceedings

1. **G.Palani**, Finite difference solution of unsteady natural convection flow past an inclined plate under the influence of thermal radiation , Proceedings of the tenth ISHMT / ASME Heat and Mass transfer conference and twenty first National Heat and Mass transfer conference, 28/12/2010 -30/12/2010, IIT Madras, India.
2. E.Thandapani, A.R.Ragavan and **G.Palani**, A Numerical study of MHD free convection flow past a vertical cone with temperature oscillations , Proceedings of the tenth ISHMT / ASME Heat and Mass transfer conference and twenty first National Heat and Mass transfer conference, 28/12/2010 -30/12/2010, IIT Madras, India.
3. **G.Palani**, Numerical solution of unsteady natural convection effects on the flow of water at $4^{\circ}C$ past a semi-infinite isothermal vertical plate, Proceedings of the eight ISHMT / ASME Heat and Mass transfer conference and Nineteenth National Heat and Mass transfer conference, 3/1/2008-5/1/2008, Hyderabad, India.
4. P. Ganesan and **G.Palani**, Numerical Solution of Unsteady MHD flow past a semi-infinite isothermal vertical plate, Proceedings of the sixth ISHMT / ASME Heat and Mass transfer conference and Seventeenth National Heat and Mass transfer conference, 5/1/2004-7/1/2004, Kalpakam, India, pp. 184-187.

5. P. Ganesan and **G.Palani**, Convective flow over an inclined plate with variable heat and mass flux, Proceedings of the fourth ISHMT / ASME Heat and Mass transfer conference and Fifteenth National Heat and Mass transfer conference, 12/1/2000-14/1/2000 Pune, India, pp.323-329.

Paper Presented in Conference / Workshop

1. *Seminar on Developing New curriculum-2017* held at Anna University, Chennai-600 025 from 20/07/2013 to 22/07/2013.
2. Sixth ISHMT/ASME Heat and Mass transfer and Seventeenth National Heat and Mass transfer conference held at Kalpakkam, India during 5/1/2004-7/1/2004.
3. Sixteenth Annual Conference of the mathematical society, held at Banaras Hindu University, Varanasi, India, 26/12/2000-27/12/2000.
4. Fourth ISHMT/ASME Heat and Mass transfer conference held at Pune, India during 12/1/2000-14/1/2000.

Participation in Conference / Workshop

1. Participated in Five Days online Faculty Development Program on *Teaching and Learning Strategies of Differential Equations & Applications in Science and Engineering*, organized by *Department of Mathematics, N.I.T. Warangal* from 28/12/2020 to 01/01/2021.
2. Participated in Webinar on *An Invitation to Functional Analysis*, organized by *Department of Mathematics, Quaide-E-Millath Govt Arts College for Women* on 24/06/2020.
3. Participated in Webinar on *Some Interesting Aspects of Fuzzy Mathematics* organized by *Department of Mathematics, Stella Maris College, Chennai* on 11/06/2020, 12/06/2020, 15/06/2020 & 16/06/2020.
4. Participated in Webinar on *Graphs from Commutative Rings* organized by *Department of Mathematics, Presidency College, Chennai* on 10/06/2020.
5. Participated in Webinar on *New Directions in Applied Mathematics* organized by *Department of Mathematics, Annamalai University* on 03/06/2020 & 04/06/2020.
6. Participated in Webinar on *Algebraic Graph Theory* organized by *Government Arts College for Men(Autonomous), Nandanam, Chennai* on 01/06/2020.
7. Participated in Webinar on *Introduction to Machine Learning* organized by *Sacred Heart College (Autonomous), Tirupattur, Tamil Nadu* on 29/05/2020.
8. Participated in Webinar on *Recent Research Directions in Distance in Graphs* organized by *Ayya Nadar Janaki Ammal College, Sivakasi* on 28/05/2020.
9. Participated in Webinar on *Research Methods and Writing Skills in Mathematical Sciences* organized by *Bon Secours College for Women, Thanjavur* from 25/05/2020 to 27/05/2020.

10. Participated in Webinar on *Graph Theory and its Applications* organized by *Pioneer Kumaraswamy College, Nagercoil*, on 23/05/2020.
11. Participated in *Webinar series on L^AT_EX* organized by *School of Advanced Sciences, Vellore Institute of Technology, Chennai* from 18/05/2020 to 22/05/2020.
12. Participated in Two day Online Hands-on Training Workshop on "*Design, Develop and Deliver online courses through MOODLE platform*" with the technical support of *DIRECTORATE OF TECHNICAL EDUCATION* organized by *Tamil Nadu State Council for Higher Education* on 15/05/2020 and 16/05/2020.
13. Participated in *R training* organized by *PG & Research Department of Mathematics, Jamel Mohamed College (Autonomous) in association with Spoken Tutorial Project, IIT Bombay, MHRD, Govt. of India* from 11/05/2020 to 14/05/2020.
14. Participated in two days online conference on *Fuzzy logic and Neural networks approaches for Engineering Solutions* organized by *Journal of Advanced Engineering Research and powered by hexacube india* on 03/05/2020 and 04/05/2020.
15. A two day workshop on Applications of SCILAB, Ethiraj College for Women, Chennai, during 2nd and 3rd February, 2015.
16. National Seminar on Changing Paradigms of Higher Education: XII Five Year Plan Initiatives, held on December 1, 2013 at St.Aloysius College (Autonomous), Mangalore, Karnataka.
17. XVIII Ramanujan Symposium on Recent trends in Dynamical systems and Mathematical Modelling, held at Ramanujan Institute for Advanced study in Mathematics, Chennai, India, during September 25-27, 2013.
18. Tenth ISHMT/ASME Heat and Mass transfer and Twenty first National Heat and Mass transfer conference held at IIT Madras, India during December 28-30, 2011.
19. National Seminar on "Graph Theory and its Applications" Meenakshi College for Women, Kodambakkam, Chennai-24, on 8th September, 2010.
20. Three-Day skill-based training program on "e-LITERACY" organized by ICT Academy of Tamil Nadu in Association with University of Madras, during March 1-3, 2010.
21. National conference on Mathematical Applications and Techniques, SRM University, Kattankulathur, India, during January 5-6, 2007.

Refresher and Orientation Courses

1. Refresher Course in Mathematics and Statistics, conducted by UGC-HRDC, Bharathiar University, Coimbatore from 04/12/2019 to 17/12/2019.
2. Refresher Course in Mathematics, conducted by UGC-HRDC, University of Hyderabad, Hyderabad from 14/09/2016 to 04/10/2016.
3. Refresher Course in Mathematics, Batch XXVI conducted by UGC-ASC, University of Madras from 11/11/2010 to 01/12/2010.
4. Orientation Programme(Intensive Training) conducted by UGC-ASC, University of Madras from 09/07/2009 to 05/08/2009

Additional Responsibilities

- Served as a Expert Committee Member for the Screening cum Evaluation for the Aided College Career Advancement Scheme (CAS) in D.G.Vaishnava College, Chennai.
- Serving as a Vice President in Parents Teachers Association, Dr Ambedkar Govt Arts College.
- Served as Chairman for Question Paper setting in End Semester Exam, Vel-Tech University, Chennai.
- Served as a Subject Expert to review Maths and Science Kit to provide for Government School Childrens from 6th standard to 10th standard.
- Served as a Subject Expert to reviewing scripts written for the concepts to be converted into digial content, Samagra Shiksha and State Council for Educational Research developing digital concent for the concepts in Class XI and XI.
- Served as a coorddinator for devloping College Website.
- Served as a Coordinatior for Curriculum Development Cell to organize *Learning Outcome Based Frame work* syllabus for Under graduate and Post graduate level.
- Served as a Committee member for State Level Selection Committee to select books for school libraries from the Library Grant of Samagra Shiksha.
- Actively participated in the revision of syllabus for B.Sc (Maths) and M.Sc(Maths).
- Served as Member of the Autonomy Review Report Documentation and Preparation Committee for the UGC Expert Committee to Evaluate the Performance and Academic attainments for Extension of Autonomous status on 07/04/2017 and 08/04/2017.
- Served as Member of Technical Committee of OMR software newly installed in the office of the COE from 2017-2019.
- Served as Member of the Committee in conducting TNPSC Examination at Dr Ambedkar Govt.Arts College during the period 2016-2019.
- Served as Organizing Committee Member for the National Conference on *Prevention and Treatment of Non Communicable Diseases* by the Department of Home Science from 11/12/2019 to 12/12/2019.
- Disciplinary Committee.
- Act as Nodal officer for MHRD statistical data collection for the years 2011-12, 2012-13 and 2013-14.
- Served as Placement Officer from 17/09/2012 to 15/04/2013.

Additional Controller of Examination

- Appointed as *Additional Controller of Examination* in *Dr. Ambedkar Govt. Arts College* from Feb 2022 to Feb 2025.

Role of Observer

- Served as an Observer for Conduction of *National Institute of Electronics and Information Technology* Recruitment Examination at *Thiruthangal Nadar College* on 17/12/2017

Member of Scrutinizing Board

- Served as a Member of the Question Paper Scrutinizing Board for End Semester Exam at
 - University of Madras, Chennai.
 - Tamil Nadu Open University, Chennai.
 - Various Autonomous Colleges affiliated to University of Madras, Chennai.

Awards

- **Marquis Who's Who in the world**
 - Biography published in the Marquis Who's Who in the world, 27th Edition, 2010.
 - Biography published in the Marquis Who's Who in the world, 28th Edition, 2011.
 - Biography be published in the Marquis Who's Who in Science and Engineering, 9th Edition, 2011.
- **Outstanding Author**
 - Outstanding Author of Applied Mathematics and Mechanics (English Edition), Springer 2014.