

## Profile

Name :: Dr.B.Rama Bhupal Reddy  
Designation :: Associate Professor  
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### Degrees Obtained

<b>Degree</b>	<b>University</b>	<b>Field of Specialization</b>
B.Sc.,	Sri Venkateswara University, Tirupati.	Mathematics –Physics- Chemistry
M.Sc.,	Sri Venkateswara University, Tirupati.	Fluid Mechanics and Computer Proramming
M.Phil.,	Sri Venkateswara University, Tirupati.	Heat Transfer
Ph.D	Sri Venkateswara University, Tirupati.	Heat Transfer

**Years of Experience** :: 27 Years

### **Memberships in Professional Bodies** :: 02

1. Indian Society for Technical Education, LM 16986, Life Member.
2. Andhra Pradesh Society for Mathematical Sciences, Life Member.

### **Research Papers Published** :: 74

1. “Analysis of Turbo Machinery Flows Using Streamline Curvature Technique”, Proceedings of the International Conference on INTELLIGENT FLEXIBLE AUTONOMOUS MANUFACTURING SYSTEMS Towards Rapid Design Exploration and Optimization at Coimbatore, 10-12<sup>th</sup> January 2000, pp.283-290.

2. "Numerical Solutions of Developing flow in a Vertical Channel with Asymmetric wall temperature", Proceedings of National Conference on ADVANCED TRENDS IN MECHANICAL ENGINEERING RESEARCH AND DEVELOPMENT at J.N.T.U., Anantapur, 21-23<sup>rd</sup> of June 2000, pp.256-264.
3. "Analysis of High pressure turbine Nozzle guide van and Rotor blades using Streamline curvature technique", Proceedings of National Conference on ADVANCED TRENDS IN MECHANICAL ENGINEERING RESEARCH AND DEVELOPMENT at J.N.T.U., Anantapur, 18<sup>th</sup> October 2001, pp.139-144.
4. "Numerical Solutions of Laminar Free Convection between Vertical flat plates with asymmetric heating including dissipation", Proceedings of National Conference on ADVANCED TRENDS IN MECHANICAL ENGINEERING RESEARCH AND DEVELOPMENT at J.N.T.U., Anantapur, 18<sup>th</sup> October 2001, pp.145-154.
5. "Laminar Forced flow along a flat plate neglecting viscous dissipation", Proceedings of National Conference on ADVANCED TRENDS IN MECHANICAL ENGINEERING RESEARCH AND DEVELOPMENT at J.N.T.U., Anantapur, 18<sup>th</sup> October 2001, pp.155-164.
6. "MHD Combined Convection Flow in a Vertical Channel Bounded by Porous Media", Journal of Pure and Applied Physics, Vol.21, No.4, Oct-Dec., 2009, pp.693-706(ISSN 0974-8970).
7. "Effect of Magnetic Field on a Fully Developed Combined Convection Flows in a Vertical Channel", International Journal of Computing and Applications, Vol.5, No.2, July-Dec., 2010, pp.153-163(ISSN: 0973-5704).
8. "Buoyancy Effects on MHD Laminar Mixed Convection in Vertical Channels", International Journal of Computational Intelligence Research and Applications, Vol.4, No. 2, July-Dec., 2010, pp.111-119(ISSN: 0973-6794).
9. "Effect of Magnetic Field on Developing Laminar free Convection between Vertical Flat Plates with Asymmetric Heating", Journal of Pure and Applied Physics, Vol.22, No.3, July-Sep., 2010, pp.479-490(ISSN 0974-8970) .
10. "Fully Developed Laminar Mixed Convection between Vertical Parallel Plates", Journal of Pure and Applied Physics, Vol.22, No.3, July-Sep., 2010, pp.529-538(ISSN 0974-8970).
11. "Magneto Hydrodynamic Peristaltic Transport through a Porous Medium in an Asymmetric Channel with Heat Transfer", International Journal of Applied Mathematics", Oct-2010 to March 2011, Vol.1, Issue 2, pp 119-134(ISSN: 0976-7937).
12. "The Effect of Magnetic Field on Fully Developed Laminar Free Convection between Vertical Plates Heated asymmetrically", International Journal of Applied Mathematics, Oct-2010 to March 2011, Vol.1, Issue 2, pp.135-145(ISSN: 0976-7937).
13. "MHD Effects on Moving Vertical Porous Plate with Homogeneous Chemical Reaction", Journal of Computer and Mathematical Sciences (An International Research Journal), Vol. 2, Issue 2, 30 April, 2011, pp.274-285(ISSN: 0976-7937).

14. "MHD -Laminar Mixed Convection in Vertical Channels using Finite Difference Method", Journal of Computer and Mathematical Sciences (An International Research Journal), Vol. 2, Issue 2, 30 April, 2011, pp.322-335(ISSN 0976-5727).
15. "A Numerical Study on Developed MHD Laminar Mixed Convection in Vertical Channels", Journal of Computer and Mathematical Sciences (An International Research Journal), Vol. 2, Issue 2, 30 April, 2011, pp.336-351(ISSN 0976-5727).
16. "Finite Element Analysis of Blood flow and Apply of Pressure in the Human thumb and Applications in Disease Invention", International Journal of Science and Advanced Technology, Vol.1, No.2, April, 2011, pp.67-72(ISSN 2221-8386).
17. "Finite Difference Analysis on Convective Heat Transfer flow through a Porous Medium in a Vertical Channel with Magnetic Field", Int. J. of Appl. Math and Mech., Vol.7(7), 2011, pp.74-94(ISSN: 0973-0184).
18. "Finite Difference Analysis of Magneto Hydrodynamic Fluid in a Vertical Channel with Plane Poiseulle and Couette Flows", Global Journal of Computational Science and Mathematics, Vol.1 No.1, 2011, pp.65-79(ISSN 2248-9908).
19. "Mathematical Model Governing Magnetic field Effect on Bio- magnetic fluid flow and Orientation of Red blood cells", Pacific Asian Journal of Mathematics, Vol. 5 No.1 January-June 2011,pp. 1-18(ISSN: 0973-5240).
20. "A Numerical Study on Developed Laminar Mixed Convection in Vertical Channel", International Journal of Mathematics Research, Vol. 3, No.6 (2011), pp. 539-556(ISSN: 0976-5840).
21. "Indian Economic Policy-Some Issues", International Journal of Marketing and Technology, Vol.1, Issue 5, October 2011, pp.143-170(ISSN: 2249-1058).
22. "Industrial Energy-What Role for Policies?", International Journal of Management, IT and Engineering, Vol.1, Issue 5, October 2011, pp.90-118(ISSN : 2249-0558).
23. "WTO: Revise Agreement on Trade related Investment Measures", International Journal of Physical and Social Sciences, Vol.1, Issue 2, October 2011, pp.108-117(ISSN: 2249-2496).
24. "Need and Importance of Professional Growth", International Journal of Research in Social Sciences, Vol.1, Issue 2, November 2011, pp.47-56(ISSN: 2249-2496).
25. "Optimization in Goal Programming for Allocating Students to Colleges", Mathematical Modelling and Applications to Industrial Problems (MMIP-2011), pp.287-295 Macmillan Advanced Research Series, MacMillan Publishers India Ltd., 2011 ISBN 978-93505-9024-9).
26. "Finite element modelling of bone by using Hydroxyapatite as bioactive nanomaterial in bone grafting, bone healing and the reduction of mechanical failure in the bone surgery", 2011 International Conference on Nanoscience, Technology and Societal Implications, Bhubaneswar, India, December 8 -10, 2011, pp. 1-5 (ISBN: 978-1-4577-2305-2).
27. "Buoyancy Effects on Laminar Mixed Convection in Vertical Channel", International Journal of Computational and Applied Mathematics, Vol. 7, No. 1(2012), pp.91-101(ISSN 1819-4966).

28. "Finite Difference Analysis of Laminar Mixed Convection with Vertical channel in down flow", International Journal of Research in Engineering and Applied Sciences(IJREAS), Vol. 2 , Issue 1, January 2012, pp 28-38(ISSN : 2249-3905).
29. "A Numerical Study on Developed Laminar Mixed Convection with Vertical channel in down flow", International Journal of Physical and Social Sciences (IJPSS), March 2012. Volume 2, Issue 3, pp.72-88(ISSN: 2249-5894).
30. "Finite Difference Analysis of MHD Laminar Mixed Convection with Vertical channel in down flow", International Journal of Computational Intelligence Research and Applications, Vol.6 No.1 Jan – June (2012), pp.19-26(ISSN 0973-6794).
31. Buoyancy Effects on Laminar Mixed Convection in Vertical Channel in down flow", International Journal of Applied Engineering Research, Vol. 7, No. 4 (2012), pp.397-409(ISSN 0973-4562).
32. "The Effect of Magnetic Field on a Developing Flow and Flow Reversal in a Vertical Channel with Asymmetric Wall Temperatures", International Journal of Information & Computation Technology, Vol. 2, No.2 (2012), pp. 75-92(ISSN 0974-2239).
33. Finite Difference Analysis of Laminar Mixed Convection in Vertical Channel", International Journal of Advance Mathematics and Mathematical Science (Open Access Journals), Vol. 1, No. 1, January-June, 2012, pp. 17-24(ISSN-2278-0866).
34. "Mathematical Modelling of Nano-Fiber Membrane System in Food Industry Waste Water Treatment", International Journal of NanoScience and Nanotechnology (IJNN), Vol.3, No.3, 2012, pp.127-138(ISSN 0974-3081).
35. "Multi-User Quantum Key Distribution using Wavelength Division Multiplexing", International Journal of Computer Network and Information Security (IJCNIS), Vol.6, June 2012, pp.43-48(ISSN: 2074-9090(print), ISSN: 2074-9104(on line)).
36. "Forced Convection Flow of a Jeffrey Fluid in Horizontal Porous Channel with Hydrodynamic Anisotropy", International Journal of Applied Mathematics, Vol.3, Issue.1, Apr.'12-Sep.'12, pp.425-443(ISSN: 0975-7937).
37. "Laminar MHD Flow in the Entrance Region of a Plane Channel", International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS), Vol.1, No.3, September 2012, pp.16-23(ISSN: 2278-6252).
38. "Laminar MHD Flow in the Entrance Region of an Annular Channel", IOSR Journal of Mathematics (IOSR-JM), Vol.3, Issue 1, Sep-Oct. 2012, pp.40-45(ISSN 2278-5728).
39. "Laminar MHD Flow in the Entrance Region of an Annular Channel With Dissipation", International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS), Vol.1, No.5, Nov 2012, pp 29-42(ISSN: 2278-6252).
40. "Laminar MHD Flow in the Entrance Region of a Plane Channel With Dissipation", IOSR Journal of Mathematics (IOSR-JM), Vol. 4, Issue 2, Nov-Dec. 2012, pp 01-09(ISSN 2278-5728).
41. "Virtual Backbone Content Routing in Wireless Adhoc Network", Journal of Computer and Mathematical Sciences (An international Research Journal) Vol.3, Issue 6, 31 December 2012, pp597- 614(ISSN 0976-5727).

42. "A Numerical Study on Developed MHD Laminar Mixed Convection with Vertical Channel in Down-flow", *Journal of Computer and Mathematical Sciences (An international Research Journal)* Vol.3, Issue 6, 31 December 2012, pp 615-629(ISSN 0976-5727).
43. "Laminar Flow in the entrance region of a plane channel with dissipation", *International Journal of Research in Engineering and Applied Sciences (IJREAS)*, Vol. 2, Issue 12, December 2012, pp 16-27(ISSN: 2249-3905).
44. "Finite Difference Analysis of a Free Convection Flow Along a vertical walls in a porous medium", *International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS)*, Vol. 1, No. 6, December 2012, pp 17-30(ISSN: 2278-6252).
45. "A New Transmission Control Protocol for Satellite Networks ", *International Journal of Intelligent Systems and Applications (IJISA)* Vol.5, No.1, December 2012, pp 59-68(ISSN: 2074-904X (print), ISSN: 2074-9058(on line)).
46. "Buoyancy Effects on MHD Laminar Mixed Convection with Vertical channel in down flow", *International Journal of Computers, Information Technology and Engineering (IJCITAE)* Vol.6, No. 2, July- December 2012, pp 127-135(ISSN: 0973-743X).
47. "A Numerical study on Developed Laminar Mixed Convection in Vertical Channel with Dissipation", *International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS)*, Vol.2, No.1, January 2013, pp 35-50(ISSN 2278-6252).
48. "Self Organized Detection of Relationships in a Network", *International Journal of Information Technology and Computer Science (IJITCS)*, Vol.5, No.2, January 2013, pp 80-87(ISSN: 2074-9007(print), ISSN: 2074-9015(on line)).
49. "Laminar flow in the entrance region of an annular channel with dissipation", *International Journal of Physical and Social Sciences(IJPSS)*, Vol. 3, Issue 2, February 2013, pp32-47(ISSN 2249-5894).
50. "Buoyancy Effects on Laminar Mixed Convection in Vertical Channel with Dissipation", *IOSR Journal of Mathematics (IOSR-JM)*, Vol. 4, Issue 6 (Jan-Feb 2013), pp38-45(ISSN: 2278-5728).
51. "Hierarchical Structure for Dynamic Replication and Scheduling using Data Grids", *International Journal of Advanced Research in Engineering and Applied Sciences(IJAREAS)*, Vol. 2, No.5, May 2013, pp 69-80(ISSN: 2278-6252).
52. "Deniable Encryption Key", *IOSR Journal of Computer Engineering (IOSR-JCE)*, Vol.11, Issue 4(May-June 2013), pp.08-12(e-ISSN: 2278-0661, p-ISSN: 2278-8727).
53. "Thermal Effects in Stokes' Second Problem for Unsteady Second Problem for Unsteady Second Grade Fluid Flow through a Porous Medium under the Effect of a Magnetic Field", *IOSR Journal of Mathematics (IOSR-JM)*, Vol.7, Issue2 (July-August 2013), pp.05-14(e-ISSN: 2278-5728, p-ISSN: : 2319-765X).
54. "Error Behaviour in High Speed Channel Links", *International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS)*, Vol.2, No.8, August 2013, pp.21-35(ISSN: 2278-6252).
55. "Advanced Artificial Eye implementation for Detecting Monochrome objects for Industrial Automation using ARM7 TDMI based LPC2148 Microcontroller", *International Journal of*

Advanced Research in Engineering and Applied Sciences(IJAREAS), Vol.2, No.8, August 2013, pp.36-60(ISSN: 2278-6252).

56. "Fatigue Analysis and Design of Different compressor Rotor Blade of an Orpheus Engine", International Journal of Advanced Research in Engineering and Applied Sciences(IJAREAS), Vol.2, No.9, September 2013, pp.40-54(ISSN: 2278-6252).
57. "System Fault-Tolerance using Multi-Agent System", International Journal of Management, IT & Engineering (IJMIE), Vol.3, Issue 11, November 2013, pp.238-247(ISSN: 2249-0558).
58. "Knowledge Representation and Information Processing in a Framework", International Journal of Advanced Research in IT and Engineering(IJARIE), Vol.2, No.11, November, 2013, pp.21-42(ISSN: 2278-6244).
59. "A Numerical study on MHD Laminar Mixed Convection in Ducts with Asymmetric Wall Heat fluxes", International Journal of Engineering and Scientific research, (IJESR), Vol.2, Issue.1, January 2014, pp 101-117(ISSN: 2347-6532).
60. "Design Manufacturing and Cost Estimation of Camshaft used in two Wheeler", IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), Vol.11, Issue 1, Version-IV, February 2014, pp53-67(e-ISSN: 2278-1684, p-ISSN: 2320-334X).
61. "Improving Boiler Efficiency by using Air Pre-heater", International Journal of Advanced Research in Engineering and Applied Sciences(IJAREAS), Vol.3, No. 2, February 2014, pp 11-24(ISSN: 2278-6252).
62. "Survey of Adapting Cloud Computing in Healthcare", International Journal of Advanced Research in Engineering and Applied Sciences (IJAREAS), Vol.3, No. 3, March 2014, pp 11-20(ISSN: 2278-6252).
63. "Design Evaluation and Optimization of a Nozzle used in Diesel Engine", International Journal of Engineering & Scientific Research (IJESR), Vol. 2, Issue 4, April 2014, pp53-82(ISSN: 2347-6532).
64. "Thermal effects on stokes' second problem for couple stress fluid through a porous medium", Journal of computer and mathematical sciences, Vol. 5, Issue 2, 30 April 2014 pp123-131(ISSN 0976-5727(print),ISSN 2319-8133 (online)).
65. "Recreation of an Agent Based System Performance in an Active and Unforeseen Situation", Journal of computer and mathematical sciences, Vol. 5, Issue 2, 30 April 2014 pp209-217(ISSN 0976-5727(print), ISSN 2319-8133 (online)).
66. "Thermal effects in stokes' second problem for unsteady second grade fluid flow through porous medium", IOSR Journal of Mathematics (IOSR-JM), Vol. 10, Issue 3 ver.1 (May-June 2014), pp01-07(e-ISSN: 2278-3008,p-ISSN:2319-7676).
67. "Influence of Heat Transfer on an Oscillatory Flow of Jeffrey Fluid through a Porous Medium in a Tube ", International Review of Applied Engineering Research (IRAER) ,Vol.4,No-2(2014),pp. 185-191(ISSN 2248-9967).
68. Modelling and optimization of shape of a heat sink fins on motherboard, Journal of Computer and Mathematical Sciences, Vol.6(5), May 2015,pp. 228-251(ISSN 0976-5727 (print), ISSN 2319-8133 (on line)).

69. Optimization of petrol engine flywheel for variable speeds, IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X, Volume 12, Issue 3 Ver. II (May. - June. 2015), PP 01-15 (e-ISSN: 2278-1684, p-ISSN: 2320-334X).
70. Solar Tracking using Micro Controller, IOSR Journal of Electronics and Communication Engineering (IOSR-JECE) e-ISSN: 2278-2834,p-ISSN: 2278-8735, Vol. 11, Issue. 3, Ver. III(May-June 2016) , pp 12-21.
71. A Study on Fuzzy Transportation Problems under Approximation Methods, Journal of Computer and Mathematical Sciences, *Vol.7(9)*, 459-468, *September 2016*(ISSN 0976-5727 (print), ISSN 2319-8133 (on line)).
72. A Longest Path within a Short Period to Reach Using Optimization Techniques, Journal of Computer and Mathematical Sciences, , *Vol.7(9)*, 477-481, September 2016 (ISSN 0976-5727 (print), ISSN 2319-8133 (on line)).
73. Design of Movie Theatre by STAADD Pro Analysis and LSM – A Study, IOSR Journal of Mathematics, Volume 12, Issue 6 Ver. I (Nov. - Dec.2016), PP 09-27e-ISSN: 2278-5728, p-ISSN: 2319-765X.
74. Public Auditing Architecture Allows the Detector to Verify the Truthfulness by using Homomorphic Linear Authenticator, International Journal of scientific Engineering and Technology Research (IJSCTR), Volume 5, Issue 46, November-2016, PP 9577- 9582, ISSN: 2319 - 8885.

**Conferences Attended            ::2**

1. National Seminar on Computational Techniques in Continuum Mechanics – Presented two papers entitled (1) “Effect of Magnetic field ..... Flat plate heated asymmetrically”, (2) “Hall Current effects on MHD Poiseuille flow in an Infinite channel”, 29<sup>th</sup> – 31<sup>st</sup> January 1990, Department of Mathematics, Anna University, Madras – 25.
2. International symposium in Mathematics and its applications – paper presented entitled “Numerical solutions of Laminar MHD flow of a Plane channel”, June 15<sup>th</sup> -16<sup>th</sup>,1995, Department of Mathematics, S.V. University, Tirupati.

**Workshops Attended            :: 5**

1. National workshop on “Computational Methods in Continuum Mechanics” from 7<sup>th</sup> - 28<sup>th</sup> May 1988, Department of Mathematics, Osmania University, Hyderabad.
2. Orientation Programme from 13-12-1999 to 08-01-2000, Academic Staff College, S.V. University, Tirupati.
3. Refresher course in Mathematics from 16-07-2001 to 05-08-2001, Department of Mathematics, Sri Krishna Devaraya University, Anantapur.
4. Faculty Enablement Program from 8<sup>th</sup> to 12<sup>th</sup> December 2008, S.V.C.E.T, Chittoor.
5. National Workshop on “Mathematical Models for Biofluid Flows and Application”, 22-26 January 2010, Department of Mathematics, S.V. University, Tirupati.

**Achievements****:: 1) 4 Books Published**

1. PROBABILITY AND STATISTICS FOR ENGINEERS, Research India Publications (DELHI), 2015 (ISBN: 978-93-84443-08-5).
2. ADVANCED MATHEMATICS FOR ENGINEERS AND SCIENTISTS, Research India Publications (DELHI), 2015 (ISBN: 978-93-84443-09-2).
3. ELIMENTARY ENGINEERING MATHEMATICS, Research India Publications (DELHI), 2016 (ISBN: 978-93-86138-16-3).
4. MATHEMATICAL STATISTICS, Research India Publications (DELHI), 2016 (ISBN: 978-93-86138-24-8).

**2) Editorial Board Member for 5 Journals**

- International Journal of Computational Science and Mathematics (IJCSM)
- International Journal of Statistics and Analysis (IJSA)
- Mathematical Modelling and Applied Computing (MMAC)
- Global Journal of Mathematical Sciences (GJMS)
- Indian Journal of Mathematical Modelling and Applied Computing (IJMMAC)

**➤ List of the Ph.D student(s) guided**

S. No.	Name of the Student	Regd No.	Topic
1.	C. Mallikarjuna Reddy	0900PH0902	Mathematical modeling in Biological sciences- A study

**List of the M.Phil students guided**

S. No.	Name of the Student	Regd No. / Enrolement No.	Title of the dissertation
1.	K. Koteswver Rao	06DCCF3380 / 6MMH13490002	Continuous optimization modelling
2.	V. Chandra Sekhara Reddy	06DCCF3381 / 6MMH13490003	Mathematical Models in Engineering
3.	M. Lakshmi Narasimha	06DCCF3382 /	Mathematical Models in Life Sciences



	Sarma	6MMH13490004	
4.	Syed Khadar Basha	06DCCF3383 / 6MMH13490005	Modelling with a differential equations
5.	V.B. Ramesha Gowda	06DCCF3388 / 6MMH13490010	Mathematical modelling of some problems in Engineering
6.	K.R. Ravi Kumar	06DCCF3390 / 6MMH13490012	Discrete optimization modelling
7.	N. Nirmala Rani	06DCCF3394 / 6MMH13490016	Finite Elements for boundary – value problems
8.	B. Subba Rayudu	06DCCF3395 / 6MMH13490017	Modelling with systems of differential equations
9.	K.S. Ataulla	06DCCF3396 / 6MMH13490018	Velocity and temperature profiles for laminar flow in the entrance region of an annular channel
10.	P. Soma Shekhara	06DCCF3398 / 6MMH13490020	Finite elements for ordinary differential equations
11.	B.N. Veena	06DCCF3400 / 6MMH13490022	Finite difference methods for solving heat conduction problems
12.	K.Jephry Rodrigues	06DCCF3403 / 6MMH13490025	Velocity and temperature profiles for laminar flow in the entrance region of a plane channel
13.	K. Madhu Sudhana Rao	06DCCF3405 / 6MMH13490027	Free convection flow along a vertical wall in a porous medium
14.	H.R. Aravind	06DCCF3385/ 6MMH13490007	Mathematical Modelling Through Graphs
15.	S. Narasimha Murthy	06DCCF3386/ 6MMH13490008	Graph Colouring