

Academic Profile

Dr. G. Manavendra
Professor and Head
Department of Mechanical Engineering
Bapuji institute of Engg and Technology,
Davangere 577 004, Karnataka, INDIA
manudvg1@gmail.com
[linkedin.com/in/gowdra-manavendra-
b0510968](https://www.linkedin.com/in/gowdra-manavendra-b0510968)



<https://scholar.google.co.in/citations?user=dTxsAA8AAAAJ&hl=en>

Work Experience : 26 Years

- Worked as a lecturer in Mechanical Department of Bapuji Institute of engineering and Technology Davangere from 1994 to 1999.
- After the completion of Masters Degree, ie from 1999, appointed as a lecturer in Mechanical Department of Bapuji Institute of Engineering & Technology, Davangere
- Promoted as Senior lecturer from August 2006 in the Department of Mechanical engineering
- Promoted as Assistant Professor from August 2008 in the Department of Mechanical engineering
- Promoted as Associate Professor from September 2012 in the Department of Mechanical engineering
- Promoted as Professor from August 2019 in the Department of Mechanical engineering

Educational Qualification:

- Ph.D [Mechanical Engineering] From Visvesvaraya Technological university, 2012.
- M.Tech [Thermal Power Engineering] from PDACE Gulberga , Gulberga University 1997, First class with Distinction.
- B.E [Mech] from Bapuji Institute of Engineering and Technology, Mysore University , 1991 with first class

Awards:

- Awarded as a best teacher for 5 times from the college for achieving 100% result in the subjects handled.

Membership:

- Life Member of Indian Society for Technical Education.
LM 27478
- Institution of Engineers India
M-1681731

Core Subjects Taught For U G:

Basic thermo dynamics	Applied thermo dynamics	Heat and Mass Transfer
Fluid mechanics	Energy conversion engineering	Energy engineering
Power plant engineering	Elements of mechanical engineering	Energy and Environment

Core Subjects Taught For P G:

Thermodynamics and combustion	Advanced power plant cycles	Advanced heat transfer
Design of heat transfer equipment for thermal power plant	Advanced Fluid Mechanics	Engine flow and Combustion

Seminars/Workshops/Events Organized:

- Organized AICTE-ISTE Two week Short term training programme on RAM & MTS from 16th- 27th august 2004.
- Organized one day national work shop on Combustion & CFD modeling of IC engine ON 15th APRIL 2009.

Seminar/ Workshops Attended:

1. Attended one day workshop on quality circle at Bapuji institute of engineering & technology, Davangere on 28th July 1997.
2. Attended three weeks short term course on induction training programme for engineering teachers at REC Calicut from 14th February 6th march 2001.
3. Attended two weeks short term training programme on Computer Integrated Manufacturing at Bapuji institute of engineering & technology, Davangere from 12th 24th August 2002.
4. Attended one day work shop on Recent Advances in Renewable Energy Technologies jointly organized by BNMIT and ASTRA, IISC Bangalore on 12th April 2003.
5. Attended two weeks short term training programme on Micro-Machining & Micro-Electro Mechanical at Bapuji institute of engineering & technology, Davangere from 21st July to 1st August 2003.
6. Attended two days national work shop on Vermicompost at Bapuji institute of engineering & technology, Davangere on 23rd-24th December-2003.
7. Attended two days work shop on Solid Waste Management in Urban Areas at Bapuji institute of engineering & technology, Davangere on June 11th-12th 2004.
8. Attended one day work shop on Water and Waste Water Management in Urban Areas at Bapuji institute of engineering & technology, Davangere on June 18th 2004.
9. Attended one day national work shop on Power Tools at Bapuji institute of engineering & technology, Davangere on 18th April 2005.

10. Attended one day work shop on Vibration and Modal Analysis at Bapuji institute of engineering & technology, Davangere on 29th April 2005

11. Attended 2 weeks workshop on Engineering Thermodynamics at UB DTCE, Davangere from 11th to 21st December 2012 conducted by ISTE & IIT Bombay

Extra/Co-curricular Activities:

- Actively take part in the annual cultural festival “Davana” as judge for selecting the college team, managing the Accommodation committee and also acts as a judge during the conduction of festival.
- Convener for VTU Youth Festival-14
- Convener for student academic council from 2014 - 2016.
- Adviser for student academic council from 2017 till date
- Convener for Prod Mech forum for 5 Years.
- Deputy Warden for the Boys hostel from 2014 to 2019.
- Warden for the Boys hostel from 2020 till date

Examinership of university / academic bodies

As paper setter and evaluator (both theory and practical exams) for UG, PG and Ph.D course of the following universities

- Visvesvaraya Technical University, Belgaum, Karnataka, India
- Kuvempu University, Karnataka,
- Davangere University, Davangere, Karnataka, India
- Worked as External Deputy Chief Superintendent
- Worked as Squad member
- BOE member for Kuvempu University 2012

Professional Development Activities

- Serving as PG Coordinator for M.Tech Thermal Power Engineering from 2017-2020

Reading / Instructional material consulted and additional knowledge resources provided to students.

- Designed Data hand book “Design of Heat Transfer Equipment’s for Thermal Power Plant” subject to M.Tech. (Thermal Power engineering) students.
- Course material for CEP “Design of Super heaters”.

Invited Lectures and Chairmanships at national or international conference/seminars etc.

Chairmanship	Recent Developments in the area of IC Engines 2015	GMIT, Davangere	National
Chairmanship	Recent trends in Mechanical Engineering 2016	GMIT, Davangere	National
Chairmanship	Trends and Innovation in Automation, Materials and Thermal Power Engineering (TIAMTE-2015)	VTU PG Studies, Mysuru	National
Evaluator	Project exhibition(2019)	MSRIT Bangalore	State level

Guidance to research leading to PhD at Visvesvaraya Technical University, Belgaum

- No. of Ph.D candidates guiding at present is 03
- No. of Ph.D awarded is 03

Papers Presented in national Conferences, Seminars, Workshops, Symposia

1. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Experimental Study of Thermal Properties of Areca Reinforced Composites”, *National conference on Advances in Materials and Manufacturing Process*, 5-6 October 2007, UBDTCE, Davangere, India.
2. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Experimental Study of Vibration Characteristics of Areca Fiber Reinforced Phenol Formaldehyde Composite”, *Proceedings of All India Seminar on Advances in Tribology & Maintenance*, 24-25 December, 2007, Medi-Caps Institute of Technology and Management, Indore, India.
3. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Study of Mechanical Properties of Areca Fiber Reinforced Phenol Formaldehyde Composite”, *National Conference on Eco-friendly Plastics and Rubber Systems*, (MACRO-2008), SJCE, Mysore, India

Papers Presented in international Conferences, Seminars, Workshops, Symposia

1. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Study of Mechanical Properties of Areca and Glass Fibers Reinforced Phenol Formaldehyde Composite”, *Proceeding of the International conference on Frontiers in Design & Manufacturing Engineering (ICDM 2008)*, School of Mechanical Sciences Karunya University Coimbatore, India.
2. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Experimental Investigation of Mechanical Properties of Areca Fiber Reinforced Phenol Formaldehyde Composites”, *Proceeding of the International conference on Advances in Mechanical and Building Sciences in The 3rd Millennium (ICAMB-2009)*, School of Mechanical & Building Sciences, VIT University, Vellore, India.
3. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Thermal stability, Mechanical Properties and Morphology of Areca Fiber Reinforced Polymer Composites”, *International conference on Frontiers in Mechanical Engineering (FIME 2010)*, NITK, Surathkal, India.
4. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Acoustic and damping characteristics of areca fiber reinforced phenol formaldehyde composites”, *Conference of BioEnvironmental Polymer Society*, P-24, Vienna, Austria (2011).

Selected Research Publication: Peer reviewed international journals

1. **G.Manavendra**, S. Kumarappa, C.S. BhaskarDixit, and G.C.Mohankumar, “Characterization of Areca Fiber Reinforced Phenol Formaldehyde composites” *International Journal of Materials Science* Volume 5, Number 3 pages 299-308 (2010).
2. **G.Manavendra**, S.Kumarappa, and G.C.Mohankumar., “Experimental investigation of Thermal Properties of Areca Fiber Reinforced Phenol Formaldehyde Composites”, published in *international Journal of advanced Materials SAMPE*, April issue, 22, (2011).
3. DS Akshatha **G Manavendra** S Kumarappa “Performance evaluation of Neem biodiesel on CI engine with diethyl ether as additive” *International Journal of Innovative Research in Science, Engineering and Technology* Volume 2 Issue 8 Pages 3729-3736. (2013)

4. M. N Channappagoudra, **G.Manavendra** Sunil Thaned, K. Ramesh “Optimization of Combustion Chamber Geometry for a Direct Injection Diesel Engine:A Review” *Journal International Journal of Engineering Research & Technology* Volume 2 Issue 11 Pages 568-577(2013)
5. MN Channappagoudra, Sunil Thaned, NR Banapurmath, K Ramesh, **G Manavendra** “Effect of swirl on DI diesel engine operated with honge biodiesel” *International journal of engineering research and applications* Volume 3 Issue 6 Pages 595-60(2013)
6. Jagadeesh Sannagoudra, **G.Manavendra**, S.Kumarappa, “Effect of injection pressure on the performance and emission characteristics of single cylinder diesel engine using esterified cottonseed oil and neemseed oil as biodiesel” *International Journal of Innovative Research in Science, Engineering and Technology* Volume 2 Issue 8 Pages 3956-3963(2013)
7. D.N. Basavarajappa1 , **G. Manavendra** N. R. Banapurmath , S.V. Khandal” Effect of Combustion Chamber Shapes & Injection Strategies on the Performance of Uppage Biodiesel Operated Diesel Engines” *Universal Journal of Renewable Energy* Volume 2 Pages 67-98(2014)
8. Praveen A. **Manavendra.G** Harari1, Akshatha D. S Simarouba “Biodiesel as an Alternative Fuel for CI Engine: Review” *International Journal of Innovative Research in Science, Engineering and Technology* Volume 2 Pages 72-78(2014)
9. Nataraj Kashipural , Banapurmath NR **Manavendra G** , Nagaraj AM “Effect of Combustion Chamber Shapes on the Performance of Dual Fuel Engine Operated on Rice Bran Oil Methyl Ester and Producer Gas” *Journal Pet Environ Biotechnol* Volume 6 Issue 4 Pages 1-8(2015)
10. Nataraja KM1 , **Manavendra G**, Banapurmath NR, Yaliwal VS “Effect of Turbo Charging on the Performance of Dual Fuel (DF) Engine Operated on Rice Bran Oil Methyl Ester (RBOME) and Coconut Shell Derived Producer Gas Induction”, *Journal of Petroleum & Environmental Biotechnology* Volume 6 Issue 3 Pages1(2015)
11. DN Basavarajappa, **G. Manavendra** NR Banapurmath, VS Yaliwal “Comparative study on effect of blending, thermal barrier coating (LHR) on UOME biodiesel fuelled engine” *International Journal of Engineering, Science and Technology* Volume 7 Issue 02(2015)
12. Praveen A. Harari, **Manavendra.G.**“Experimental investigation on the combustion parameters of b20 neem blend in ci engine by varying injection timing and nozzle hole diameter” *IJARIE* volume 1Issue 04 Pages 503-510(2015)
13. **Dr. G.Manavendra** PowarDigvijay D. “Comparative Thermal Analysis of Shell and Tube Heat Exchanger using Bell Coleman Method and CFD” *IJLTEMAS* Volume 4 Issue 1Pages26-30(2015)
14. Shilpa.D **Dr.G. Manavendra.** “A Study of Thermal Stability and Activation Energy on Natural Fibres for Bio Composite Applications”, *International Journal for Scientific Research & Development*, Volume3 Issue 09 Pages 304-310(2015)
15. ArunPattanashetti, **Dr.G.Manavendra** Dr.N.R.Banapurmath “Effect of Injection Timing on the Performance and Emission Characteristics of CI Engine Fuelled with Diesel – Compressed Biogas and ROME – Compressed Biogas”*International Journal of Innovative Research in Science, Engineering and Technology*, Volume 4 Issue 9 Pages 9227-9235(2015)
16. **G Manavendra** Vinay atgur Suresh B, “Analogy between the thermal conductivity and electrical conductivity for common liquids” *International Journal of Inventions in Engineering & Science Technology*, Volume 1 Issue 1 Pages 57-65(2015)

17. **G Manavendra** vinay atgur suresh B “Experimental investigation of thermal conductivity of liquids by guarded hot plate method”. *IJIRSET* Volume 4 Issue 11 Pages 10491-10498(2015)
18. K. M. Natara , **G. Manavendra** N.R. Banapurmath , V.S. Yaliwal “Development of cooling and cleaning systems for enhanced gas quality for 3.7 kW gasifier-engine integrated system” *International journal of engineering, science and technology* Volume8 Issue 01 Pages 43-56 (2016)
19. Vinay Atgur, **Manavendra.G**,G.P.Desai “Experimental Investigation of Thermal Conductivity and Specific Heat and Thermal Degradation of Vegetable Oils For A Range Of Temperature” *Research Journal of Chemical and Environmental Sciences* Volume 4 Pages 107-111(2016)
20. S Narendra , **G Manavendra** S Rajesh5M Nischay , “Experimental investigation on performance of single cylinder four stroke spark ignition engine with modification of piston crown”*International Journal of Research in Engineering and Technology* Volume 5 Issue 08 (2016)
21. Sunil E M **G.Manavendra** “Experimental investigation on thermal properties of bagasse fly ash reinforced epoxy composite” *International Research Journal of Engineering and Technology (IRJET)* Volume 4 Issue 09 Pages 444-450(2017)
22. **Dr. G Manavendra** Bharath G Wadone “CFD Analysis of Co-current Spray Dryer with Swirler at Air Inlet” *International Journal of Engineering and Technology (IJET)* Volume 9 Issue 5 Pages 3708-3715 (2017)
23. Punith kumar K, **G Manavendra** Chetana B M, N R Banapurmath “Performance and Emission Characteristics of Nano Biodiesel Blends Fuelled With Diesel Engine” *International Research Journal of Engineering and Technology (IRJET)* Volume 4 Issue 09 pages 1-7(2017)
24. Manjunath N Channappagoudra **Manavendra.G** K. Ramesh “Investigation on the performance, combustion & emission characteristics of single cylinder four stroke ci diesel engine operated with dairy scum oil methyl ester” *International journal of engineering sciences & management* Pages27-36 (2017)
25. **G.Manavendra** Mruthyunjayagouda “Experimental Investigation of Thermal behaviour on Rice Husk Ash-Alumina Reinforced with Al6063 Alloy Matrix” *International Journal of Innovative Research in Science, Engineering and Technology* Volume 6 Issue 4 Pages 5454-5460 (2017)
26. Manjunath Channappagoudra, K Ramesh, **G Manavendra** “Comparative investigation of the effect of hemispherical and toroidal piston bowl geometries on diesel engine combustion characteristics” *Biofuel Research Journal* Volume 19 Issue 3 Pages 854-862 (2018)
27. Manjunath Channappagoudra K. Rameshand **Manavendra.G** “Effect of Injection timing on diesel engine performance, combustion and emission characteristics operated with Dairy Scum Biodiesel” *International Journal of Current Engineering and Technology* Volume 8 Issue 3 Pages 5124-5125 (2018)
28. Manjunath Channappagoudra, K Ramesh, **G Manavendra** “Bio-ethanol additive effect on direct injection diesel engine performance, emission and combustion characteristics – an experimental examination’ *International Journal of Ambient Energy* Pages 1-10 Publisher Taylor & Francis (2018)

29. **Manavendra.G** Manjunath Channappagoudra Ramesh K “Effect of injector opening pressure on dairy scum biodiesel operated diesel engine” *International Journal of Current Advanced Research* Volume 7 Issue Issue 4 Pages 12151-1216(2018)
30. Manjunath Channappagoudra, K Ramesh, **G Manavendra** “Influence of compression ratio on diesel engine fueled with dairy scum oil methyl ester” *AIP Conference Proceedings* Volume 2039 Issue 1 Pages 020007 (2018)
31. Manjunath Channappagoudra, K Ramesh, **G Manavendra** “Effect of piston bowl geometry on diesel engine performance operated with dairy scum biodiesel” *International Journal of Ambient Energy* Pages 1-11 Publisher Taylor & Franci (2018)
32. Dr.G.Manavendra Deviprasad N Mirashi Kole Prashanth “Assessment of AQI Measurement in Different Areas of Davangere City and its Effect on Human Health” *International Journal of Innovative Research in Science, Engineering and Technology* Volume 7 Issue 12 (2018)
33. Vinayakrishna D Kunthe, **Dr. G Manavendra**,Mr. Vaibhav M Sondur “Effect of thermal properties on fly ash based concrete” *International Research Journal of Engineering and Technology* Volume 5 Issue 12 Pages 396-400 (2018)
34. Manjunath Channappagoudra, K Ramesh, **G Manavendra** “Effect of 5 hole nozzle and re-entrant toroidal piston bowl geometry on dairy scum biodiesel operated diesel engine” *AIP Conference Proceedings* Volume 2039 Issue 1 Pages 020003 (2018)
35. **Manavendra.G** Manjunath Channappagoudra, K. Ramesh “Effect of Bio-CNG Flow Rate on Modified Diesel Engine Run with Dual Fuel” *International Journal of Engineering & Technology* Volume 7 Pages 644-653 (2018)
36. K Hari krishna vinay atgur **G Manavendra** “Comparative analysis on toroidal fins with variable thickness rectangular splines for heat transfer enhancement” *Inernational journal of engineering & technology* Volume 7 Issue 2 Pages 605-608(2018)
37. Manjunath channappagoudra,**G.Manavendra**, K.ramesh “Comparative study of standard engine and modified engine with different piston bowl geometries operated with B20 fuel blend” *Journal of renewable energy* Volume 133 Pages 216-232 Publisher Elsevier (2019)
38. Satish Kumar.L, **Dr.G.Manavendra** Hariyapla Manjunatha “Experimental and cfd estimation of heat transfer in helically coiled heat exchangers” *International Research Journal of Engineering and Technology* Volume 6 Issue 11 Pages 1651-1657 (2019)
39. Krishna Mounica, YV Hanumantha Rao, Vinay Atgur, **G Manavendra** “Comparative Study on Parabolic Trough Collector by using Different Heat Transfer Fluids” *International Journal of Vehicle Structures & Systems* Volume 11 Issue 4 Pages 456-460 (2019)
40. Abdul Naseer, YV Rao, Vinay Atgur, Shaik Moulali, **G Manavendra** “Numerical Studies on Combustion Characterization of Four Stroke Diesel Engine” *International Journal of Vehicle Structures & Systems (IJVSS)* Volume 11 Issue 3 (2019)
41. **G. Manavendra**,Manjunath Channappagoudra ,K. Ramesh “Influence of Exhaust Gas Recirculation on Dairy Scum Biodiesel Operated Diesel Engine Performance” *European Journal of Sustainable Development Research*, Volume 3 Issue 1Pages 1-13(2019)
42. Shaik Moulalia **G. Manavendra**, Vinay Atgura and G.P. Desai “Thermophysical Properties of Pongama Honge Oil Methyl Ester and Rubber Seed Oil Methyl Ester for Wide Temperature Range” *International Journal of Vehicle Structures & Systems* Volume 11 Issue 4 Pages 452-455 (2019)

43. Channappagoudra Manjunath, K Ramesh, **G Manavendra** “Effect of injection timing on modified direct injection diesel engine performance operated with dairy scum biodiesel and Bio-CNG” *Renewable Energy*. 147(1) 1019-1032 (2020)
44. Vinay Atgur, **G Manavendra**, G.P. Desai “Production and Thermal Characterization of Ethanol Blends from Black Jaggery” *International Journal of Recent Technology and Engineering* Volume 8 Issue 6 Pages 5398-5401(2020)
45. Vinay Atgur, **G Manavendra** “Expeimental investigation on thermal characterization of gasoline-ethonal blends” *Jurnal of physics conference series* 1473,012042 (2020)
46. S Basavarajappa, **G Manavendra**, S B Prakash, “A review on performance study of finned tube heat exchanger” *Jurnal of physics conference series* 1473,012030 (2020).