




H.K.E Society's

Poojya Doddappa Appa College of Engineering, Kalaburagi

FACULTY PROFILE

Personal Details	
Name: DR. MALLINATH C. NAVINDGI	
Designation: PROFESSOR	
Department: MECHANICAL ENGINEERING	
College Address: P.D.A COLLEGE OF ENGINEERING	
Contact: 9449071428	
E-mail id (College mail id): mcnavindagi@pdaengg.com	

Areas of Interest	I.C.Engines , Automobile Engineering, Alternate Fuels, Biofuels
--------------------------	---

Subjects Taught	
UG	PG
I C Engines	Theory of I C Engines
Design of Machine Elements - I & II	
Mechanics of Materials	
Kinematics of Machines	
Dynamics of Machines	
Mechanical Engineering Science	
Engineering Graphics	

Academic Background

Degree	Specialization	Name of the Institute	University	Month & Year of Passing
PhD	IC Engines	JNTU, Hyderabad	Jawaharlal Nehru Technological University, Hyderabad	2015
PG (ME)	Automobile Engineering	VJTI, Mumbai	University of Mumbai, Bombay	1991
UG (B.E)	Mechanical Engineering	P.D.A. College of Engineering, Kalaburagi	Gulbarga University, Gulbarga	1987

Work Experience			
Name of the Institution	Position	From	To
P.D.A College of Engineering, Kalaburagi	Lecturer	03.03.1987	02.03.1992
	Senior Grade Lecturer	03.03.1992	02.03.1997
	Selection Grade Lecturer	03.03.1997	31.12.2005
	Associate Professor	01.01.2006	18.04.2015
	Professor	19.04.2015	TILL DATE

Total Experience	Teaching	34 Years	Research	06	Administration	02
-------------------------	-----------------	-----------------	-----------------	----	-----------------------	----

Total Number of Publications	International Journal	National Journal	International Conference
	77	01	12

S.No.	Title of the Paper	Name of the Journal	Year of Publication
1.	Experimental Analysis and Performance Test of a Direct Injection Diesel Engine Fuelled with Madhuca Indica Biodiesel	International Journal of Innovative Research in Technology (IJIRT)	Aug-2021
2.	Extraction and Enhancement of Properties of Castor Oil Biodiesel for Better Performance in DI Engine	International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)	July-2021
3.	Electrical Multipurpose Agriculture Vehicle	International Research Journal of Engineering and Technology (IRJET)	July-2021
4.	Study and Design of 4-Stroke IC Engine Parts In CatiaV5	International Research Journal of Modernization in Engineering Technology and Science	July 2021
5.	Green Mediated Synthesis of Macroporous	Asian Journal of Chemistry	June 2021

	Hierarchical CeO ₂ Nanoparticles using Mimosa pudica Leaf Extract for Humidity Sensing Application		
6.	Weed Management using Agricultural Robot	International Research Journal of Modernization in Engineering Technology and Science	May 2021
7.	An Experimental Study on performance of sugarcane Bioethanol blend on VCR Engine	International Association of Research Scholars - International Research Journal	Jan 2021
8.	A Review of Performance test on Single Cylinder Diesel Engine by using Punnai Bio Diesel and Their Blends with Iso Butanol as an Additive	International Research Journal of Modernization in Engineering Technology and Science (IRJMETS)	Sept 2020
9.	Experimental Investigation on a Single Cylinder Diesel Engine Using Karanja Biodiesel with Diethyl Ether Additive	International Journal for Scientific Research & Development (IJSRD)	Sept 2020
10.	A Review on dependence of Biodiesel Properties on the Structure of Fatty Acids	International Journal of Academic Engineering Research (IJAER)	Aug 2020
11.	An Experimental Study on Performance of Sugarcane Bioethanol blend on VCR Engine	IARS International Research Journal	Aug 2020
12.	Experimental Investigation of Injection Parameters on Engine Performance Using Neem Biodiesel and Optimization using Taguchi Method	International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES)	March - 2020
13.	Experimental Investigation of Performance and Emission Characteristics of Diesel Engine working with Neem Biodiesel and Ethanol Blend with EGR	International Journal of Engineering and Technology (IRJET)	Aug 2019
14.	CFD Investigation on Optimized Basket Profile Elements in Ljungstrom Air Preheater	International Journal of Engineering, research and Technology (IJERT)	Aug 2019
15.	A Review on the effect of Nanoparticles as an Additive with Biodiesel-Diesel Blend	International Journal of Engineering Applied Sciences and Technology (IJEAST)	July 2019
16.	Study of fuel properties of Diesel Biodiesel Blend with Nano-Particles as Additives	International Journal of Engineering and Technology (IRJET)	July 2019
17.	A brief about Aluminium Oxide Nano Particle dispersion in to Biodiesel	International Journal of Innovative Science and Research Technology (IJSRT)	July 2019
18.	Concept of Exenergy for Temperature Systems	International Journal of Research in Advent Technology (IJRAT)	Dec 2018
19.	Heat Transfer Enhancement of Heat Exchanger using Vortex Generator	International Journal for Science and Advance Research in Technology (IJSART)	July 2018
20.	Optimization of Diesel Engine Parameters with blends of WCO Biodiesel fuel and Diethyl Ether as an Additive by Taguchi Method	International Journal of Technical Innovation in Modern Engineering & Science (IJTIMES)	July 2018
21.	Experimental Investigation of effect of various parameters on Engine Characteristics using WCO as Biofuel and finding Optimized condition using Taguchi Method	International Journal for Science and Advance Research in Technology (IJSART)	July 2018
22.	Simulation of A DAWT Diffuser Using CFD	International Journal for Science and Advance Research in Technology (IJSART)	June 2018
23.	High calorific value fuel from pyrolysis of waste	Nature Environment and Pollution	Sept 2018

	de oiled seed cakes	Technology	
24.	Experimental Investigation Methods to Improve Performance of DI Engine using Pongamia Biodiesel by varying parameters	International Journal of Engineering and Technology (IRJET)	May 2018
25.	Production and characterization of Bio-Oil by Pyrolysis of Mahua De-Oiled Seed Cake	Energy Technology & Environmental Science, ChemistrySelect -ChemPubSoc Europe	Mar 2018
26.	Effect of Cetane Improver on the performance and emission characteristics of biodiesel fuelled DI diesel engine with exhaust gas recirculation technique	International Journal of Engineering Development and Research (IJEDR)	Aug 2017
27.	Effect of Supercharging and Combustion Improving additives on the performance and combustion characteristics of biodiesel diesel engine fuelled with mahua Biodiesel	International Journal of Engineering Development and Research (IJEDR)	Aug 2017
28.	Numerical Investigation and Improvement in Cryogenic Gas Turbine,	International Journal of Innovative Technology and Research (IJITR)	June-July 2017
29.	Numerical study and optimization of heat treatment processing annealing	International Journal of Innovative Technology and Research (IJITR)	July 2017
30.	Production of Solid Fuel Biochar from De-Oiled Seed Cake by Pyrolysis	IOSR Journal of Mechanical and Civil Engineering	Mar. - Apr. 2017
31.	Production of solid fuel Biochar from De-oiled Seed cake by Pyrolysis	IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE)	April-2017
32.	Investigation of Performance and Combustion Characteristics of DI Diesel Engine fuelled with Ternary Fuel Blend at Different Injection Pressure	World Journal of Engineering and Technology (WJET)	February-2017
33.	An Experimental Investigation of DI Diesel Engine Fuelled with Emulsions of Mahua Bio-Oil	International Journal of Science and Research	January 2017
34.	An Experimental Investigation of DI Diesel Engine Fuelled with Emulsion of Mahua Bio-Oil	International Journal of Science and Research (IJSR)	January-2017
35.	Effect of Exhaust gas recirculation on performance and Emission of Direct Ignition Diesel Engine Fuelled with Diesel-Biodiesel-Ethanol Blend	International Journal of Emerging Technology (IJET)	October-2016
36.	Analysis of physiochemical properties of SDe-Oiled Neem seed cake for their suitability in producing Bio-Oil	International Journal of Mechanical and Production Engineering	Sept-2016
37.	A study of fuel properties of ternary blend Diesel-Mahua Methyl Ester Ethanol	International Journal of Mechanical and Production Engineering	Sept-2016
38.	Optimization of Mango Seed Biodiesel Blends for CI Engines	International Research Journal of Engineering and Technology (IRJET)	July 2016
39.	Experimental Investigation of various parameters for Optimized performance of CI Engine using Corn Biodiesel	International Journal of Innovative Science, Engineering & Technology (IJSET)	July 2016
40.	Certain Investigations on the performance, Combustion, Emission Characteristics and Vibration Analysis of CI Engine using Canola Biodiesel as an alternative Fuel.	International Journal of Innovative Science, Engineering & Technology (IJSET)	July 2016
41.	Performance Guarantee Test Assessment of CFBC Boiler	International Journal of Innovative Science, Engineering & Technology (IJSET)	July 2016
42.	Numerical Investigation on Performance of Heat Sink Source by using CFD	International Journal of Innovative Science, Engineering & Technology	July 2016

		(IJSET)	
43.	Technical Report to increase the boiler efficiency by installing Bagasse Drier in Bagasse based Cogen Power Plant	International Journal for Scientific Research & Development (IJSRD)	July 2016
44.	Experimental Analysis of a direct Ignition Diesel Engine Fuelled with Biodiesel Blend using ethanol as fuel additives	ELSEVIER Energy Procedia	June-2016
45.	Autonomous farming Robot	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)	May 2016
46.	Investigation of performance and emission of diesel engine fuelled with diesohol	International Journal of Scientific and Engineering Research (IJSER)	May 2016
47.	Analyzing the de-oiled neem seed cake for its suitability in producing bio-oil	Elsevier energy procedia	May 2016
48.	Analysis of Physiochemical Properties of De-Oiled Mahua Seed Cake for their Suitability in Producing Bio-Oil	International journal of innovative research in science, engineering and technology	April 2016
49.	Performance, combustion and emission analysis of Mahua Bio-oil	International Journal of Advancement in Engineering Technology, Management and Applied Science (IJAETMAS)	April 2016
50.	Analysis of physiochemical properties of De-oiled Mahua seed cake for their suitability in producing Bio-oil	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)	April-2016
51.	A study of fuel properties of ternary blend fuels	International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)	April-2016

Memberships in Professional Bodies	
S.No.	Name of the Professional Body
1.	Life Member of ISTE (LMISTE)
2.	Member of Institute of Engineers (MIE)
3.	Member of Society of Automotive Engineers (SAE)

Programs Organized	
1.	03-Days National Conference on Recent Advance in Mechanical Engineering (RAME-2012) Sept-2012
2.	ATAL AICTE Sponsored one week FDP on "Alternative fuels : Biofuel" at P D A College of Engineering, Kalaburagi 04th to 08th October ,2021

Awards	
1.	Best Performing Teacher Award from the President of HKE Society on 15Th Aug, 2014.

PhDs Awarded under Supervision				
Sl. No	Candidate Name	Candidate USN	Year of Registration	Research Topic
1	Sharnappa Pani	3PD13PMN06	September 2013	Experimental Investigation of Performance and emission characteristics of DI diesel Engine fuelled with Diesel-

				Biodiesel with additives
2	Hanumanth Mulimani	3PD13PMN08	September 2013	Thermo-Chemical conversion of waste biomass into bio-oil and its utilization in diesel Engine

PhDs Ongoing Under Supervision			
SNo .	Name	Date of Registration	Research Topic
1.	Mahesh Reddy 3PD17PMA02	8.9.2017	Energy Analysis for Solar Energy Devices
2.	Shrikar G Kulkarni 3PD19PME03	7.7.2018	Investigation on performance evaluation of biofuel operated IC engines for agricultural sprayer
3.	Narsimha Kulkarni 3PD19PME01	29.6.2018	Study on Performance Combustion and Emission Analysis of Cotton Seed Biodiesel (COME) With Additives Cerium oxide (CeO ₂) and Ferrous oxide (Fe ₂ O ₃) in the Form of Nano Particles on a Supercharged LHR CI Engine
4.	Manjunath N D 3PD16PMJ16	1.1.2016	Effect of Nano-particle with blended bio-diesel on performance emission and combustion characteristics of DI diesel engine

List of KSCST Sponsored Projects under supervision		
Academic Year	Title of the Project	Name of the students
2016-17	The use of bio medical waste pyrolytic oil blends as fuel in diesel engine	1. Ms. Shraddha.S Hangargi 2. Mr. Robin 3. Mr. Rahul.B 4. Mr. Narsingrao.Satish Basude
2017-18	Experimental Investigation to Improve the Engine Characteristics of Diesel Engine using Biodiesel with Additives	1. Mr. Sharankumar G S 2. Mr. Mahesh Avantagi 3. Mr. Vikas Mathapati 4. Mr. Vinay Kalmoodkar
2019-20	Optimization of Engine parameters for a improved performance of CI Engine using Cotton seed Biodiesel as an alternate fuel	1. Akshatha N M 2. Akash 3. Chetan 4. Akash Biradar
2020-21	Extraction and Enhancement of Properties of Castor oil Biodiesel for Better Performance in DI Engine	1. Aruna B. Sthavarmath 2. Shruti Sajjan 3. Pooja Chitanalle 4. Roopa

Training Programmes Attended Recently	
1.	NPTEL FDP on "IC Engines and Gas Turbines" IIT Guwahati 27th January to 17th April ,2020
2.	NPTEL FDP on "Automotive Electrical and Auxiliary Systems" IIT Guwahati 27th January to 17th April, 2020
3.	Cyber Security & Forensics, PDACEK, 7Th to 11Th DECEMBER 2020
4.	Design Thinking, PDACEK, 18Th to 22Nd JANUARY 2021
5.	Sustainability Engineering, PDACEK, 8Th to 12Th FEBRUARY 2021
6.	IPR/ Patents for startup, Incubator, Innovation Center, PDACEK, 22 nd & 23 rd March, 2021

7.	Ergonomics Applications for Higher Productivity, PDACEK, 24 th TO 26 th March, 2021
8.	Equity: Achievements and Challenges in India' jointly organized by NPIU and SPIU of Maharashtra, national Conference organized by College of Engineering, Pune, 15 th March 2019 to 16 th March 2019
9.	TEQIP sponsored one day seminar on 'Effective teaching and learning in OBE & Life Skills for Engineers, PDA College of Engineering, Kalaburagi, 9th March, 2019
10.	IPR: Opportunities and challenges, organized by Bundelkhand Institute of Engineering & Technology, Jhansi, 7th July, 2020
11.	ATAL AICTE Sponsored one week FDP on "Design Thinking" at P D A College of Engineering, Kalaburagi 18th to 22th January ,2021
12.	ATAL AICTE Sponsored one week FDP on "Sustainability Engineering" at P D A College of Engineering, Kalaburagi 8th to 12th Feb ,2021
13.	AICTE Sponsored Two week FDP on "Recent Developments in Advanced Composite Materials, Manufacturing and Sustainability" at P D A College of Engineering, Kalaburagi 10th to 22th January, 2020
14.	TEQIP Sponsored one week FDP on "Geometric Dimensioning & Tolerance (GD&T)" at P D A College of Engineering, Kalaburagi 25th to 30th April ,2018

Special Lectures Presented			
SNo	Title	Period	Venue
1.	Zuari Fertilisers and Chemicals Ltd. (ZFCL), Goa	04.12.2012 to 06.12.2012	As resource person to deliver lectures for graduate Engineers on topics - Overhaul and maintenance of Steam Turbines
2.	Zuari Agro Chemicals Limited Goa	09.12.2013 to 11.12.2013	As resource person to deliver lectures for graduate Engineers on topics- Overhaul and maintenance of I C Engines
3.	Paradeep Phosphates Limited Bhubaneswar, Orissa	13.12.2014 to 16.12.2014	As resource person to deliver lectures for graduate Engineers on topics - Overhaul and maintenance of Turbochargers
4.	Paradeep Phosphates Limited Bhubaneswar, Orissa	09.12.2015 to 11.12.2015	As resource person to deliver lectures for graduate Engineers on topics - Overhaul and maintenance of Turbochargers
5.	Delivered lecture as Resource person on 'Maintenance and effective utilization of Batteries' for graduate Engineers of Amarja Batteries Ltd., Bangalore.	24.03.2016 to 25.03.2016	Amarja Batteries Ltd., Peenya, Bangalore.
6.	Delivered lecture as Resource person in TEQIP sponsored FDP on "Emerging trends in Mechanical Engineering" (ETIM 2018)	13.03.2018 to 17.03.2018	Bundelkhand Institute of Engineering & Technology, Jhansi
7.	Delivered lecture as Resource person for a 5-day Faculty Development Programme on "Recent Trends in Thermal Engineering", an online programme.	09.06.2020	Ballary Institute of Technology and Management, Ballary

8.	Delivered lecture as Resource Person for online Faculty Development Program on Green Energy for Sustainable Development Indian Centric Approach	12.08.2020	Bheemanna Khandre Institute of Technology, Bhalki, School of Engineering Central University of Karnataka, Kalaburagi and Green Club, Kalaburagi
9.	Delivered lecture as Resource person AICTE - Online one week short term Training Programme on “Creating the smart and Green Society through advanced Technology of Green Energy”	10.12.2020	Malnad College of Engineering, Hassan

Role & Responsibilities	
1.	Head of the Department Since 2021
2.	Department NBA Criteria Coordinator Since 2018
3.	Coordinator of Techno-vision, Annual College Students Projects Exhibition.
4.	IC Engines Lab Incharge (Since 1993)
5.	PG Coordinator (Since 2014)
6.	BOE Chairman (2020-21)
7.	BOE Member (2016-18)
8.	BOS Member (2018-19)
9.	BOS Member at BEC Bagalkot (Since 2017)
10.	BOS Member for Sharanbasav University, Kalaburagi (2018-19)
11.	BOS Member for BIET, Jhansi (2018-19)
12.	TEQIP Action Plan Coordinator
13.	TEQIP Academic Nodal Officer
14.	TEQIP Twinning Activity Coordinator
15.	NAAC Coordinator
16.	External Expert Committee Member at VTU RC Kalaburagi