



CURRICULUM VITAE

Name:	Dr. KALLAPPA. M. AKKOLI	
Designation:	Associate Professor	
Department:	Mechanical Engineering	
Specialization & Research Interests:	ENERGY TECHNOLOGY	
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Address:	At/Post: Ammanagi Taluk: Hukkeri District: Belagavi Karnataka - 591236	

2. ACADEMIC QUALIFICATION (in reverse Chronological order):

Degree	Year	University/Board
Ph.D.	2020	VTU, Belagavi
M.Tech.	2008	VTU, Belagavi
B.E.	2001	KU Dharwad

3. ANY OTHER QUALIFICATION:**4. PROFESSIONAL EXPERIENCE:**

Organization/Institute/University	Position Held	Duration
Hirasugar Institute of Technology, Nidasoshi	Lecturer	24-02-2004 to 31-09-2009
Hirasugar Institute of Technology, Nidasoshi	Sr. Lecturer	01-02-2009 to 31-10-2014
Hirasugar Institute of Technology, Nidasoshi	Asst. Professor	01-11-2014 to 30-11-2020
Hirasugar Institute of Technology, Nidasoshi	Associate. Professor	01-12-2020 to till date

5. ADMINISTRATIVE ASSIGNMENTS:

Position Held	Duration	Nature of Work
Warden Boys Hostel	2/12/2013 to 23/01/2021	Looking After Hostel Work
HOD Mechanical Engineering	6 Months	HOD
First Year Coordinator	2020 to 12/12/2022	Coordination
Dean Research and Development	12/12/2022 to Till Date	Cordination of Research Activities

6. COURSES TAUGHT:

- BASIC AND APPLIED THERMODYNAMICS
- FLUID MECHANICS
- ENERGY ENGINEERING
- TURBOMACHINES

- HEAT AND MASS TRANSFER
- POWER PLANT ENGINEERING
- HYDRAULICS AND PNEUMATICS
- BIOMASS ENERGY RESOURCES
- NON CONVENTIONAL ENERGY SOURCES
- INTERNAL COMBUSTION ENGINES

7. RESEARCH SUPERVISION:

A. Ph.D.:

- i. Awarded : ---
- ii. Submitted : ---
- iii. Ongoing : 03

B: M.Tech.

- i. Awarded : 04
- ii. Submitted : 01
- iii. Ongoing : 02

C. BE/B.Tech Degree Oriented (Bachelor Level Dissertation):

- i. Awarded : 20
- ii. Submitted : 02
- iii. Ongoing : 01

8. CONTRIBUTION TO CORPORATE LIFE OF THE INSTITUTE:

- NBA Criteria Coordinator
- NAAC Steering committee member
- AICTE-PMSSS- Nodal Officer
- Director HSIT Employees co-operative society

9. MEMBERSHIP OF SOCIETIES/PROFESSIONAL BODIES:

- Life Member of ISTE
- Member of IAENG
- ISRD

10. PUBLICATIONS:

A. BOOKS/MONOGRAPHS:

1. Authored:

2. Edited:

B. PAPERS IN REFEREED/PEER REVIEWED JOURNALS:

1. Alur, S. A., M. M. Shivashimpi, K. M. Akkoli, N. R. Banapurmath, D. Sakthivel, Yogesh Diliprao Sonawane, Saiful Islam, Prabhakar Sharma, Mohammad Amir Khan, and Abdul Razak. "Optimization and modelling of EGR rate and MIS for POME fuelled CRDI diesel engine." *Case Studies in Thermal Engineering* (2023): 103170.
2. Akkoli KM, Kamate SC, Topannavar SN, Bhavimani AR, Banapurmath NR, Veza I, Soudagar ME, Khan TY, El-Shafay AS, Kalam MA, Shivashimpi MM. Influence of Injection Pressure and Aluminium Oxide Nano Particle-Added Fish Oil Methyl Ester on the Performance and Emission of Compression Ignition Engine. *Energies*. 2022;15(24):9491. doi: <https://doi.org/10.3390/en15249491>.
3. Kothiwale GR, Akkoli KM, Doddamani BM, Kattimani SS, Ağbulut Ü, Afzal A, Kaladgi AR, Said Z. Impact of injector nozzle diameter and hole number on performance and emission characteristics of CI engine powered by nanoparticles. *International journal of Environmental Science and Technology*. 2022:1-22. doi: <https://doi.org/10.1007/s13762-022-04397-0>.
4. Patil, B. B., Topannavar, S. N., Akkoli, K. M., Shivashimpi, M. M., & Kattimani, S. S. (2022). Experimental investigation to optimize nozzle geometry and compression ratio along with injection pressure on single cylinder DI diesel engine operated with AOME biodiesel. *Energy*, 254, 124185.
5. Akkoli, K. M., N. R. Banapurmath, M. M. Shivashimpi, Manzoore Elahi M. Soudagar, Irfan Anjum Badruddin, Mashhour A. Alazwari, V. S. Yaliwal et al. "Effect of injection parameters and producer gas derived from redgram stalk on the performance and emission characteristics of a diesel engine." *Alexandria Engineering Journal* 60, no. 3 (2021): 3133-3142.
6. Akkoli, K. M., Banapurmath, N. R., Soudagar, M. E. M., Khan, T. M., Baig, M. A. A., Mujtaba, M. A., ... & Goudadi, S. A. (2021). Effect of Producer Gas from Redgram Stalk

- and Combustion Chamber Types on the Emission and Performance Characteristics of Diesel Engine. *Energies*, 14(18), 5879.
7. K. M. Akkoli, S.N. Topannavar, S. A. Goudadi, M. M. Shivashimpi, 2020. Biomass Characterization and Gasifier Design for Agricultural Residues, *Iranian (Iranica) Journal of Energy and Environment* 11(3): 198-203.
 8. K. M. Akkoli, P. B. Gangavati, N. R. Banapurmath, and V. S. Yaliwal, Comparative study of various biofuel combinations derived from agricultural residues on the performance and emissions of CI engine, *International Journal of Sustainable Engineering*, Taylor and Francis, 2019 (DOI: 10.1080/19397038.2019.1634774). (Published) (RG Journal Impact: 0.87)
 9. K. M. Akkoli, P. B. Gangavati, M.R. Ingalagi, R.K. Chitgopkar, "Assessment and Characterization of Agricultural Residues" *Materials today proceedings*, Volume 5, Issue 9, Part 3, 2018, Pages 17548-17552.
 10. K. M. Akkoli, P.B. Gangavati, N.R. Banapurmath, Effect of Cooling Cleaning System on the Performance and Emission Characteristics of Producer Gas Operated Dual-Fuel CI Engine, *International Journal of Applied Engineering Research* ISSN 0973-4562 Volume 14, Number 3 (2019) pp. 687-693.
 11. Ingalagi, M., Akkoli, K.M., Kattimani, S.S., Chitgopkar, R., & Chiniwalar, G.V., Influence of Pair of Vortex Generators on the Hydraulic Performance for Air Flow through a Rectangular Duct, *International Journal of Pure and Applied Mathematics*, Volume 120 No. 6 2018, 925-933. (<https://acadpubl.eu/hub/2018-120-6/1/66.pdf>)
 12. K M Akkoli, B M Dodamani, Jagadeesh A, Ravi, C "Design and Construction of Food waste Biogas plant for Hostel Mess" Published in *International Journal of Scientific Research and Development*, ISSN 2321-0613 Vol 3, Issue 3, May 2015.
 13. K M Akkoli, P B Gangavati "Review on Assessment Methods of Agriculture Residues." *Global Research and Development Journal for Engineering* 1, 7 2016: 59 - 63.
 14. K. M. Akkoli, P. B. Gangavati "Review on Energy Conversion Processes and Characterization of Agricultural Residues" *Journal of Renewable Energy and Resources* Volume 1 Issue 2, Page 9-22 MANTECH PUBLICATIONS 2016.
 15. K. M. Akkoli, P. B. Gangavati, M.R. Ingalagi, R.K. Chitgopkar "BioEnergy and Conversion Processes" *Journal of Renewable Energy and Resources* Volume 2 Issue 3, Page 1-8 MANTECH PUBLICATIONS 2017.

16. Umesh Gudnavar, K.M.Akkoli, Modeling and Analysis of Down Draft Gasifier, International Journal of Management, Technology And Engineering, ISSN NO: 2249-7455, Volume IX, Issue IV, APRIL/2019,p 2899-2908.

C. PAPERS IN CONFERENCES PROCEEDINGS:

1. K. M. Akkoli, S. N. Topannavar, S. A. Goudadi, Effect of Cottonseed Oil Methyl Ester on Performance and Smoke of CI Engine, "International Conference on Recent Trends In Engineering and Technology (ICRTET 2023)"
2. Akkoli, K. M. and Gangavati, P B and Banapumath, N R and Yaliwal, V S, Performance and Emission Characteristics of Producer Gas Operated Dual Fuel Diesel Engine with Cooling Cleaning System (February 12, 2019). Advances in Power Generation from Renewable Energy Sources (APGRES) 2019, Available at SSRN: <https://ssrn.com/abstract=3417208> or <http://dx.doi.org/10.2139/ssrn.3417208>, 1-12
3. K M Akkoli, P B Gangavati "Fuel Analysis and Design of Downdraft Gasifier for Agriculture Crop Residues" The International Conference on Energy, Environment and Engineering (ICEEE 2016 from 29/3/2016 to 2/4/2016) at CIT, Coimbatore.
4. M. P. Marajakke, K. M. Akkoli, R. K. Chitgopkar, "Solar Energy for Cooking using Thermic Fluid" Journal of Advances in Science and Technology Vol. 12, Issue No. 25, (Special Issue) December-2016, ISSN 2230-9659 Vol. 12, Issue No. 25, (Special Issue) December-2016
5. K. M. Akkoli, P. B. Gangavati, S. N. Topannavar "Biomass Characterization and Design of Downdraft Gasifier for Agricultural Residues" Special Section on Current Research Topics in Power, Nuclear and Fuel Energy, SP-CRTPNFE 2016, from the International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India
6. S.N.Topannavar, P.B.Gangavati, K.M.Akkoli, "Experimental study of an effect of compressed secondary airflow characterization on exhaust gas emissions in the biomass fluidized bed", Special Section on Current Research Topics in Power, Nuclear and Fuel Energy, SP-CRTPNFE 2016, from the International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India
7. S.N.Topannavar, P.B.Gangavati, K.M.Akkoli" Experimental study to extract energy by the influence of characterized secondary air injection in the fluidized bed" Special

Section on Current Research Topics in Power, Nuclear and Fuel Energy, SP-CRTPNFE2016, from the International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India

8. K. M. Akkoli, P. B. Gangavati, M. R. Ingalagi, R. K. Chitgopkar, "Assessment and Characterization of Agricultural Residues" International conference on material processing and characterization (ICMPC18) at GRIET, 17-19 March 2018 Hyderabad, India
9. K. M. Akkoli, P. B. Gangavati, N.R. Banapurmath, V.S. Yaliwal "Effect of Cooling Cleaning System on the Performance and Emission Characteristics of Producer Gas Operated Dual Fuel Diesel Engine" 3rd International Conference on "Advances in Power Generation from Renewable Energy Sources" 2019 Govt. Engg. College Banswara, India 11-12-Feb-2019.

11. Patents/Copyrights/IPR (If Any)

12. INVITED TALKS:

1. Resource person for technical talk on "Recent trends in Mechanical Engineering on 25/11/2023 at SJPN Trusts Polytechnic Nidasoshi.
2. Resource person for technical talk on "Importance of higher education" on 06/02/2023 at Government Highschool Ammanagi.
3. Resource person for technical talk on "Recent trends in Mechanical Engineering on 24/09/2019 at SJPN Trusts Polytechnic Nidasoshi.

13. RESEARCH PROJECTS (COMPLETED/ONGOING):

14. PARTICIPATION & PRESENTATIONS IN SEMINARS /SYMPOSIA/ WORKSHOPS/ CONFERENCES:

S.No.	Topic	Period	Date	Venue
1	Renewable Energy for Sustainable Development	5 Days	1st to 5th March-2022.	Bharatratna Indira Gandhi College of Engineering, Solapur.
2	An Overview of Teaching Techniques in Innovation & Design Thinking	5 Days	6th to 10th December 2021	Centre for Post-Graduation Studies, VIAT, Muddenahalli, Chikkaballapur
3	New Model Curriculum for PG courses	1 Day	6/08/2018	BNMIT, Bangalore
4	Recent Advances in Material Properties	5 Days	16/01/2017-20/01/2017	Hirasugar Institute of Technology, Nidasoshi
5	Industry, Institute, Innovation, and Interaction	1 Day	28/10/2017	Gogate Institute of Technology, Belgaum

6	Fuels, Combustion and Burners	6 Days	4/7/2016 to 9/7/2016	IIT, Chennai
7	Advanced IC Engines and Emission Control Techniques	2 Days	13/7/2015 to 14/7/2015	Sri Vidyaniketan Institute of Technology, Tirupati
8	Plagiarism awareness program	1 Day	28/6/2015	VTU, Belagavi
9	ISTE-SRM STTP on "Computational Fluid Dynamics	1 Week	9/6/2014 to 14/6/2014	Hirasugar Institute of Technology, Nidasoshi
10	Workshop on Conduction of PG Thermal Engineering Labs	1 Day	10/10/2014	VTU Regional center, Bangalore
11	Workshop on Research Facility at IUAC	1 Day	18/11/2014	VTU, Belagavi
12	Application of Renewable Energy Sources	1 Week	11/12/2013 to 17/12/2013	IIT, New Delhi.
13	Basic course on Thermodynamics	1 Week	11/11/2012 to 21/11/2012	Sponsored by IIT Bombay held at KLECET, Chikodi.
14	Turbulent flows and their Prediction	1 Week	17/3/2011 to 23/11/2011	IIT, Chennai
15	Applications of Mathematics in Engineering	1 week	30/8/2010 to 31/8/2010	Hirasugar Institute of Technology, Nidasoshi.
16	Recent Development on Rock Excavation Technology and Management	1 Week	17/7/2009 to 23/7/2009	National Institution of Technology Surathkal
17	Mission 10X faculty development course	1 Week	2/2/2009 to 5/2/2009	Conducted by Wipro held at B E C, Bagalkot
18	Introduction to Computational Fluid Dynamics	1 Week	19/11/2007 to 24/11/2007	P D A college of Engineering Gulbarga
19	NSS Programme officers Refresher Course	1 Week	27/9/2004 to 6/10/2004	Karnataka University Dharwad

15. AWARDS, FELLOWSHIPS & OTHER DISTINCTIONS:

Recognised Reviewer of International Journal "Energy Elsevier"

16. ANY OTHER SIGNIFICANT INFORMATION:

- Recognised Research Supervisor, VTU, Belagavi
- Recognized reviewer of Renewable Energy, Elsevier
- Reviewer of Green Energy, Taylor and Francis
- Reviewer of Waste and Biomass Valorization, Springer



Dr. K. M. Akkoli