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	Designation	Professor and Head of Department		
	Department	Mechanical Engineering		
	Qualification	B. E. Mechanical (RIT Sakharale) M. Tech. Thermal & Fluids Engineering (DBATU Lonere), Ph. D. Mechanical Engineering (IIT Delhi)		
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	Experience	Teaching :	17 Years	Research : 5 Years

Title of PhD Thesis	Development of Downdraft Gasifier Cookstoves for Domestic Application		
Research Area	Biomass Gasification, Energy Efficiency, Heat Transfer, Renewable Energy Technologies		
Research Publications	International Journal:	16	National Journals: 02
	International Conference:	06	National Conference: 03
Research Metrics	Google Scholar Citations: 251 H Index: 07 & I10 Index: 07		SCOPUS Citations: 141 H Index: 05
	Web of Science citations: 72 H Index: 03		
Publication Details	Link for Scopus Profile: https://www.scopus.com/authid/detail.uri?authorId=57188740403		
	Link for Web of Science Profile: https://publons.com/researcher/3113024/kailasnath-bhimrao-sutar/ Link for Google Scholar Profile: https://scholar.google.com/citations?user=izLaYlwAAAAJ&hl=en		
Publication Details	Publications in International Journals		
	➤ Surve, M. L., Deshmukh, P. D., <u>Kailasnath B. Sutar*</u> , Kale, B. S., Bhole, K. S. (2023, July) Computational analysis of a new airfoil for micro-capacity wind turbine. <i>International Journal on Interactive Design and Manufacturing (IJIDeM)</i> . https://doi.org/10.1007/s12008-023-01419-0		
	➤ Kulkarni, A. V.*, Kumbhar, D. G., & <u>Kailasnath B. Sutar</u> . (2023, May). Use of biofuel with nano-additives in low heat rejection engines. In <i>AIP Conference Proceedings</i> (Vol. 2716, No. 1). AIP Publishing. DOI: https://doi.org/10.1063/5.0130387		
	➤ Kore, S., <u>Kailasnath B. Sutar*</u> , & Waghmare, A. (2023). Development of a Natural Draft Metal Biomass Cookstove for Community Kitchen. <i>Journal of Advanced Research in Fluid Mechanics and Thermal Sciences</i> , 102(2), 1-20. DOI: 10.37934/arfmts.102.2.120		
	➤ <u>Kailasnath B. Sutar*</u> , Sangeeta Kohli, and M. R. Ravi. (2023) Clean cooking with downdraft biomass gasifier cookstove: Effect of gasifier performance. <i>Energy</i> , 263: 125631. DOI: 10.1016/j.energy.2022.125631		
	➤ Shelake, A, Kumbhar, DG, <u>Kailasnath B. Sutar*</u> . Desalination using solar stills: A review. <i>Environmental Progress & Sustainable Energy</i> . 2022; e14025. DOI: 10.1002/ep.14025		

- Kailasnath B. Sutar*, Hitesh Karakoti, Jahan Zeb Khan, Mujahid Momin and Himanshu Rohaj. (2022) Laboratory & Field Performance of Two In-House Developed Metal Biomass Cookstoves. *Advanced Engineering Forum* (UGC Approved Free Journal) (Vol. 46, pp. 41-53). Trans Tech Publications Ltd. DOI: <https://doi.org/10.4028/p-z83f87>
- Surve M. L., Unde S. S., Dhurpate S. A., Kailasnath B. Sutar*, Kumbhar D.G. (2021) Computational Studies on Airfoil for Micro-Capacity Horizontal Axis Wind Turbine. *Indian Journal of Science and Technology* 14(29), 2427-2438. DOI: [10.17485/IJST/v14i29.824](https://doi.org/10.17485/IJST/v14i29.824)
- Rai A., Kumbhar D. G., Kailasnath B. Sutar* (2021) Computational Investigation on Natural Convection Heat Transfer in Vertical Plate Fin Arrays. *Indian Journal of Science and Technology* 14(24): 2069-2080. DOI: [10.17485/IJST/v14i24.863](https://doi.org/10.17485/IJST/v14i24.863)
- Kailasnath B. Sutar*, Munna Kumar, Manish Kumar Patel, Arvind Kumar, Shardul R Mokashi. Experimental investigation on pot design and efficiency of LPG utilization for some domestic cooking processes. *Energy for Sustainable Development*, 56 (2020): 67-72. DOI: [10.1016/j.esd.2020.04.006](https://doi.org/10.1016/j.esd.2020.04.006)
- Kailasnath B. Sutar*, Rohit Singh, Abhiram Karmarka, Ajeet Sharma, Vedant Rathore (2019) Experimental Investigation on Thermal Performance of Three Natural Draft Biomass Cookstoves. *Energy Efficiency*, 12(3), 749-755. DOI: [10.1007/s12053-018-9705-x](https://doi.org/10.1007/s12053-018-9705-x)
- Kailasnath B. Sutar, Sangeeta Kohli*, M. R. Ravi. Design, Development and Testing of Small Downdraft Gasifiers for Domestic Cookstoves. *Energy*, 124 (2017) 447-460. DOI: [10.1016/j.energy.2017.02.076](https://doi.org/10.1016/j.energy.2017.02.076)
- Kailasnath B. Sutar, M. R. Ravi, and Sangeeta Kohli*. Design of a partially aerated naturally aspirated burner for producer gas. *Energy*, 116 (2016): 773-785. DOI: [10.1016/j.energy.2016.10.019](https://doi.org/10.1016/j.energy.2016.10.019)
- Kailasnath B. Sutar, Sangeeta Kohli*, M. R. Ravi, Anjan Ray. Biomass cookstoves: a review of technical aspects. *Renewable and Sustainable Energy Reviews*, 41(2015): 1128–1166. DOI: [10.1016/j.rser.2014.09.003](https://doi.org/10.1016/j.rser.2014.09.003)
- Dhurpate, Priyanka R., Kailasnath B. Sutar*, and Sandip A. Kale. Numerical analysis of different airfoils using QBlade software. *Imperial Journal of Interdisciplinary Research*. 2(6): (2016): 1426-30.
- Mokashi, S. and Kailasnath B. Sutar*. Survey for Analyzing Domestic LPG Utilization Trends in Households of Pune Region. *Imperial Journal of Interdisciplinary Research*. 2(7): (2016): 1344-46.
- Kodare R*. and Kailasnath B. Sutar. Computational Study on Blade of Micro-capacity Wind Turbine. *International Journal of Scientific & Technology Research*. 8(9): (2019): 2273-77.

	<p>Publications in Conference Proceedings</p> <ul style="list-style-type: none"> ➤ Kulkarni, A. V*, Kumbhar, D. G., & <u>Kailasnath B. Sutar</u>. (2023, May). Use of biofuel with nano-additives in low heat rejection engines. In <i>AIP Conference Proceedings</i> (Vol. 2716, No. 1). AIP Publishing. 10.1063/5.0130387 ➤ Sandeep S. Kore; <u>Kailasnath B. Sutar*</u>; Akash Waghmare, Development of a Natural Draft Metal Biomass Cookstove for Community Kitchen. In <i>International Conference on Recent Advances in Fluid Mechanics (ICRAFM 2022)</i>, organized by Manipal Institute of Technology, Manipal, Karnataka, India on 4th-6th Oct. 2022. ➤ Amit Shelake*, Dnyaneshwar Kumbhar and <u>Kailasnath B. Sutar</u>. A Comprehensive Review of Methods for Analysis of Solar Still. <i>International Conference on Innovations in Energy Management and Renewable Resources (IEMRE) 2022</i>, organized by Institute of Engineering & Management, Kolkata on 25th-27th February, 2022. ➤ <u>Kailasnath B. Sutar</u>, Sangeeta Kohli*, M. R. Ravi. Some issues in testing of biomass cookstoves. <i>Proceedings of the 24th National and 2nd International ISHMT-ASTFE Heat and Mass Transfer Conference (IHMTTC-2017)</i> BITS Pilani, Hyderabad, India. 27th-30th Dec. 2017. ➤ <u>Kailasnath B. Sutar</u>, Sangeeta Kohli*, M. R. Ravi. Some issues in testing of biomass cookstoves. ➤ <i>2014 ETHOS Conference, Kirkland, Washington, USA, 24-26th Jan. 2014.</i> ➤ <u>Kailasnath B. Sutar</u>, Sangeeta Kohli*, M. R. Ravi. Development of a laboratory model of a domestic downdraft gasifier cookstove. <i>IVth International Conference on Advances in Energy Research</i>, Indian Institute of Technology Bombay, Mumbai, 10-12th Dec. 2013, pp. 611-618. ➤ <u>Kailasnath B. Sutar</u>, Sangeeta Kohli*, M. R. Ravi. Poster Presentation on: Issues in laboratory testing of biomass cookstoves. <i>Indo-US Workshop on Biofuel Combustion and Sprays</i>, Indian Institute of Science Bangalore, 22nd-23rd June, 2011.
Workshop/ Seminar/	<ul style="list-style-type: none"> ➤ Online faculty development programme on "Recent Advances in Mechanical Engineering Design" from 20th July to 24th July, 2021. This FDP was sponsored by AICTE Training & Learning (ATAL) Academy with a grant of Rs. 93000/- ➤ Online faculty development programme on "Research Opportunities in Robotics & Automation" from 24th Nov. to 28th Nov, 2020. This FDP was sponsored by AICTE Training & Learning (ATAL) Academy with a grant of Rs. 93000/- ➤ Online faculty development programme on "Research in Energy Technologies" from 6th July to 11th July, 2020. ➤ Online faculty development programme on "Research Opportunities in Advance Manufacturing Processes" from 22nd June to 28th June, 2020.

Conference/FD PsOrganized	<ul style="list-style-type: none"> ➤ Online faculty development on <i>Future materials: nano-composites</i> from 22nd June, 2020 to 28th June, 2020. ➤ Conducted a three days <i>Leadership Training Programme</i> for faculty members in BV (DU) COEP on 16th, 17th July, 2019 and 30th Aug. 2019. ➤ National Level <i>Paper Presentation Competition</i> on 26th & 27th March, 2019 ➤ Workshop on <i>3D Printing & its Applications</i> on 24th and 25th Jan. 2019 Core team member for <i>NANOCON-018</i> organised by BVDUCOEP on 25th and 26th Oct. 2018 ➤ National Seminar on <i>Research in Renewable Energy</i> from 21st to 25th Feb. 2017 in the Department of Mechanical Engineering, BVDUCOE, Pune Workshop on <i>Welding and NDT Techniques</i> from 5th to 9th Sept. 2016 in the Department of Mechanical and Production Engineering, BVDUCOE, Pune
Workshop/ Seminar/Conferences/ FDPs attended	<ul style="list-style-type: none"> ➤ Online Faculty Development Program on <i>Renewable Energy Sources: a way ahead</i> organised by Cummins College of Engineering for Women, Nagpur from 15th - 21st May, 2020. ➤ 17 online Sessions on <i>Innovation, IPR, Entrepreneurship, and Start-ups</i> organized by Institution's Innovation Council (IIC), MHRD's Innovation Cell, New Delhi from 28th April to 22nd May, 2020. ➤ Online Faculty Development Program on <i>Outcome Based Education: a step towards excellence</i> organised by Government College of Engineering, Karad from 11th -15th May, 2020. ➤ Third workshop on <i>AICTE-UKIERI Technical Leadership Development</i> from 11th -13th June, 2019 at North East Hill University, Shillong, Meghalaya ➤ Second workshop on <i>AICTE-UKIERI Technical Leadership Development</i> from 20th -23rd Feb. 2019 at Acarya Institute of Technology, Bengaluru. ➤ First workshop on <i>AICTE-UKIERI Technical Leadership Development</i> from 13th -16th Nov. 2018 at AICTE Main Auditorium, New Delhi. ➤ Advanced Training programme on <i>Energy Efficiency</i> organised by CII Pune on 24th and 25th Jan. 2018.
	<ul style="list-style-type: none"> ➤ Faculty Development Program on <i>Automation Studio, Prosimulator (Power Plant Simulator), Delcam (CAD/CAM Simulator), Witness Simulation and CNC Simulator</i> at Department of Mechanical Engineering, BVDUCOE, Pune in association with IndiaSoft Technologies (P) Ltd. Pune 29th June to 3rd July, 2016. ➤ Faculty Development Program on <i>Industrial Automation</i>. PVG College of Engineering, Pune, 18th -19th Sept. 2015. ➤ Indo-US Workshop on <i>Biofuel Combustion and Sprays</i>. Indian Institute of Science Bangalore, 22nd-23rd June, 2011. ➤ British Council/ IIT Delhi <i>Intensive English Summer Camp</i>. Indian Institute of Technology Delhi. 12th -24th July 2010. ➤ Continuing Education Programme on <i>Computational Fluid Dynamics</i>. Dr. Babasaheb Ambedkar Technological University Lonere, Raigad, 11th-16th December, 2006.

Research Projects Completed/ Undergoing	<p>Research grant of Rs. 3.00 lacs has been sanctioned through Institutionally Funded Research Project (IFRP) under TEQIP-II for the research project entitled "Experimental Investigation on Thermal and Emission Performance of Four Biomass Cookstoves" Starting Date: 18.05.2016 End Date: 17.05.2018</p> <p>Principle Investigator: Dr. Kailasnath B Sutar</p> <p>Project Outcomes: Development of Biomass Cookstove Research Laboratory One publication in SCI Journal</p>
Patent Filed/ Published/ Granted	<p><i>Title:</i> An Airfoil for a Blade of a Wind Turbine</p> <p><i>Patent Application No.</i> 201621025413 dated 25.07.2016</p> <p><i>Inventors:</i> Dhurpate Priyanka R. & Sutar Kailasnath B.</p> <p><i>Applicant:</i> Bharati Vidyapeeth Deemed University College of Engineering Pune</p> <p><i>Status:</i> Published in 2018 and is now under Examination</p>
Professional Memberships	<p><i>Life Member:</i> ISTE. Membership No. LM27809 dated 15th Oct. 1999</p>
Awards/ Achievements	<ul style="list-style-type: none"> ➤ Awarded with <i>Level 5 Certificate in Management & Leadership</i> by CMI (Chartered Management Institute) UK on 26th Nov. 2019. ➤ Selected for <i>Technical Leadership Development Programme</i> under AICTE- UK India Education Research Initiative (UKIERI) in academic year 2018-19. ➤ <i>Best Researcher Award</i> of Bharati Vidyapeeth Deemed University, Pune on 26th April, 2017. ➤ <i>Academic Excellence Award</i> of Bharati Vidyapeeth University, Pune on 10th May, 2016 ➤ <i>MHRD Scholarship for Research Scholars:</i> at IIT Delhi from 2nd Jan. 2010 to 31st Dec. 2014 ➤ <i>National Merit Scholarship</i> from 1993-1998. ➤ <i>GATE-2006, 2001, 1999 qualified</i>