Curriculum Vitae

Dr. Kishor S. Rambhad

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College of Engineering and Management, Palghar

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Date of Birth: 16/07/1985

Current Address: St. John College of Engineering and Management, Palghar.

Career Objective

To Utilize my Academic Experience, Research Skill and Willingness in Making an Organization Successful.

Educational Qualifications

S.N.	Degree	Branch/ Specialization	University	Year of Passing	Percentage/ CGPA	Division	
		-			CGIA		
		Mechanical	R.T.M. Nagpur	January	NA	NA	
	Ph.D.	Engineering	University, Nagpur	2020	11/1		
1.		Title: An experimental investigation in application of concentric solar collector					
		in solid desiccant dehumidification.					
2.	M.Tech.	Heat Power	Visvesvaraya National		7.08	First	
		Engineering	Institute of Technology	2011			
			(VNIT), Nagpur				
3.	B.E.	Mechanical	R.T.M. Nagpur	2007	63.07	First	
		Engineering	University, Nagpur	2007			

Professional Experience

S.N.	Organization	Designation	From	To	Duration
1.	St. John College of Engineering and	Associate	18.08.2021	Till Date	1 Year
	Management, Palghar	Professor	16.06.2021		5 Months
2.	JSPM Narhe Technical Campus,	Assistant	08.12.2018	12.08.2021	2 years
	Pune.	Professor	08.12.2018		8 Months
3.	G. H. Raisoni College of	Assistant	28.05.2012	07.12.2018	6 years,
3.	Engineering Nagpur (Autonomous)	Professor	20.03.2012		6 months
	Smt. Bhagwati Chaturvedi College	Assistant	13.07.2010	03.06.2011	1 year,
4.	of Engineering Nagpur	Professor	06.06.2011	09.04.2012	9 months
5	Smt. Radhikatai Pandav College of	Lecturer	16.10.2007	13.07.2010	2 years,
3	Engineering Nagpur				9 months
6.	Bajaj Steel Ind. Limited, Nagpur	Supervisor	06.06.2007	12.10.2007	4 months
	Total Experienc	15 Years 5 Months			

Technical Software Skills

- AutoCAD
- Autodesk Inventor (CAD Modeling)
- ANSYS (Fluent/CFD)

Area of Specialization/Interest/Research

- Thermal Engineering
- Adsorption Technology
- Heat Transfer Augmentation Technique
- Solar Energy

Publications in Journal and Conference

Publication/Indexing	SCI	ESCI	Scopus	UGC Care	Other	Total
Research Paper	4	1	9	1	19	34
Book Chapter	-	-	1		1	2
Book	-	-	-		1	1
International	-	-	7		7	14
Conference						
National Conference	-	-	-		10	10
Total						61

International Journal-34

- Transforming Conventional Construction Binders and Grouts into High-Performance Nanocarbon Binders and Grouts for Today's Constructions, Buildings, (19 July 2022), 12, 1041. https://doi.org/10.3390/buildings12071041 (SCI, Scopus)
- 2. Experimental and theoretical study for suitability of hybrid nano enhanced phase change material for thermal energy storage applications, Journal of Energy Storage (Elsevier) 51(2022)104431, (18 March 2022), https://doi.org/10.1016/j.est.2022.104431 (SCI, Scopus)
- **3.** Performance of oil-based thermal storage system with parabolic trough solar collector using Al₂O₃ and soybean oil nanofluid, International Journal of Energy Research (Willey), (03 May 2021), 1-22, (**SCI**, **Scopus**)
- **4.** Solid desiccant dehumidification and regeneration methods: A review, Renewable and sustainable energy reviews (Elsevier), January 2016, Vol 59, pp 73–83, (**SCI, Scopus**) https://doi.org/10.1016/j.rser.2015.12.264

https://www.sciencedirect.com/science/article/abs/pii/S1364032115016470

- 5. Multi-Point Face Milling Tool Condition Monitoring Through Vibration Spectrogram and LSTM-Autoencoder, International Journal of Performability Engineering, (31/08/2022) 2022, Vol. 18, Issue (8), pp 570-579. doi: 10.23940/ijpe.22.08.p5.570579 (Scopus)
- 6. Vibration monitoring system based on ADXL335 accelerometer and Arduino Mega2560 interface, Journal of Algebraic Statistics, Volume 13, No. 2, (26 May 2022), p. 2291-2301https://publishoa.com ISSN: 1309-3452 (ESCI)
- 7. An approach towards higher electrical conversion efficiency of solar photovoltaic module using phase change materials, Energy Storage, Wiley Publication, First published: 13 June 2022, https://doi.org/10.1002/est2.379 (ESCI, Scopus)
- 8. Modification in gate valve using flexible membrane pipe for flow measurement, SN Applied Science (Springer), 3,852 (03 November 2021), https://doi.org/10.1007/s42452-021-04831-x (ESCI, Scopus). https://link.springer.com/content/pdf/10.1007/s42452-021-04831-x.pdf https://doi.org/10.1002/er.6808, https://onlinelibrary.wiley.com/doi/10.1002/er.6808
- 9. Heat Transfer and Fluid Flow Analysis for Turbulent Flow in Circular Pipe with Vortex Generator. SN Applied Science (Springer) 3, 709 (25 June 2021). https://doi.org/10.1007/s42452-021-04664-8 (ESCI, Scopus)
 https://link.springer.com/content/pdf/10.1007/s42452-021-04664-8.pdf
- 10. Performance evaluation of energy storage system coupled with flat plate solar collector using hybrid nanofluid of CuO+Al2O3/water, Journal of Physics: Conference Series (IOP), June 2021, 1913 (2021) 012067, doi:10.1088/1742-6596/1913/1/012067 (WoS, Scopus) https://iopscience.iop.org/article/10.1088/1742-6596/1913/1/012067
- 11. An insight into biomechanical study for replacement of knee joint, Materials Today: Proceedings, Volume 47, Part 11, May 2021, Pages 2957-2965. https://doi.org/10.1016/j.matpr.2021.05.202 (WoS, Scopus). https://www.sciencedirect.com/science/article/pii/S2214785321037780?dgcid
- **12.** Enhancing the effectiveness of green technology in manufacturing industry, Materials Today: Proceedings, Volume 47, Part 14, May 2021, Pages 4298-4305, https://doi.org/10.1016/j.matpr.2021.04.592 (**WoS, Scopus**). https://www.sciencedirect.com/science/article/pii/S2214785321035185?dgcid
- 13. New diesel-neem biodiesel blend (D75NB25) containing nano iron oxide, silicon dioxide and zinc oxide for diesel engine: An experimental investigation, Materials Today: Proceedings, Volume 47, Part 11, May 2021, Pages 2701-2708 https://doi.org/10.1016/j.matpr.2021.03.004 (WoS, Scopus). https://www.sciencedirect.com/science/article/pii/S2214785321019350

- **14.** Regeneration of composite desiccant dehumidifier by parabolic trough solar collector: An experimental investigation, Materials Today: Proceedings, December 2018, Vol 5, Issue 11, pp 24358–24366 https://doi.org/10.1016/j.matpr.2018.10.231(**WoS, Scopus**). https://www.sciencedirect.com/science/article/pii/S2214785318325264
- 15. Surface roughness and hole size in BTA drilling using an artificial neural network, Samriddhi: A Journal of Physical Sciences, Engineering and Technology, Volume No. 14, Issue- 2, April June 2022 (UGC Care)
- **16.** CFD Analysis of Solid Desiccant Dehumidifier Wheel, International Journal of Analytical, Experimental and Finite Element Analysis Volume 8, Issue 1, March 2021, pp 12 20 https://doi.org/10.26706/ijaefea.1.8.20210302, https://www.rame.org.in/pdf/volume8/issue1/vol8-issue1-ijaefea20210302.pdf
- **17.** Design of Glass Cleaning Robot for High Buildings, International Journal of Analytical, Experimental and Finite Element Analysis Volume 8, Issue 1, March 2021, pp 21 26 https://doi.org/10.26706/ijaefea.1.8.20210303, https://www.rame.org.in/pdf/volume8/issue1/vol8-issue1-ijaefea20210303.pdf
- **18.** Simulation and Optimization of Silica Gel and Molecular Sieve Desiccant Wheel for Air Dehumidification, Journal of Thermal Engineering and Technology Volume 5 Issue 1, May 2020, pp 11-27.
- **19.** A Review on Automotive Bumper Beam Design and Analysis, Journal of Automotive Engineering &Technology, Volume 5, Issue 1, May 2020, pp 18-35.
- **20.** Experimental analysis of hydraulic oil cooler by application of heat pipe, International Journal of analytical, Experimental and Finite Element Analysis, Volume 6, Issue 2, April 2019, ISSN: 2394-5133 (Print), ISSN: 2394-5141 (Online), pp 49 52.
- **21.** Performance evaluation of forced convection desiccant bed solar dryer integrated with sensible heat storage material, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 2, Vol. 5, June 2018 e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 24-35
- **22.** An Experimental investigation of solar assisted air heating for solid desiccant regeneration using parabolic trough solar concentrator, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 3, Vol. 4, September 2017. e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 45-47.
- **23.** Solar Thermal Energy in India- A Review, IJSART Volume 3, Issue 11 November 2017, ISSN [Online]: 2395-1052, PP 268-271

- **24.** Development of Mechanisms for Removing Excess Laminated Paper, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 84-87.
- **25.** Welding spatter reduction and time study: A review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 88-90
- **26.** Material Flow in Cutting of Metals Affected by Low Frequency Modulation A Review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 69-72
- **27.** Concept of Jigs and Fixture Design –A Review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 73-77.
- **28.** Methods of Improving Cutting Tool Life A Review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 78-79
- **29.** Hydraulic Systems and Hydraulic Leakages A Review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 4, Dec 2017, e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 73-80
- **30.** Solid Desiccant Dehumidification and Regeneration Techniques, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 1, Vol. 2, March 2015. e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 1-5.
- **31.** Performance of Solar Collector for Thermal Storage System Using Nanofluids: A Review, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 1, Vol. 2, March 2015. e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 6-11.
- **32.** Daylight Harvesting System: A Review on Light Harvesting Technologies in Commercial Buildings, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 1, Dec 2014. e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 13-17,
- **33.** Component Design Verification and Modification of Double Roller Ginning Machine, International Journal of Analytical, Experimental and Finite Element Analysis (IJAEFEA), Issue. 4, Vol. 1, Dec 2014. e-ISSN: 2394-5141, p-ISSN: 2394-5133, pp 22-26,
- **34.** Material handling policy framework for an emerging industry, Indian stream research journal, vol: 2 Issue:10, April 2013, ISSN No.2231-5063 PP 1-10.

International Conference-14

- Optimization of fluidity and mechanical properties of the sand casting A518 alloy by using Gray Relational Analysis Method, International Conference on Innovations in Science, Hybrid Materials and Vibration Analysis (IC-ISHVA 2022), Organized by Research Association of Masters of Engineering, Pune India, on 16-17 July 2022.
- 2. CFD analysis of Butterfly valve to optimize its design, International Conference on Innovations in Science, Hybrid Materials and Vibration Analysis (IC-ISHVA 2022), Organized by Research Association of Masters of Engineering, Pune India, on 16-17 July 2022.
- 3. Comparison of alternative fuels in single cylinder diesel engine using CFD, International Conference on Innovations in Science, Hybrid Materials and Vibration Analysis (IC-ISHVA 2022), Organized by Research Association of Masters of Engineering, Pune India, on 16-17 July 2022.
- 4. Manufacturing of foldable bicycle with finite element analysis of Push- Pull Clamp, International Conference on Innovations in Science, Hybrid Materials and Vibration Analysis (IC-ISHVA 2022), Organized by Research Association of Masters of Engineering, Pune India, on 16-17 July 2022.
- 5. Enhancing the Effectiveness of Green Technology in Manufacturing Industry, International Conference on Futuristic Research in Engineering Smart Materials (FRESM-21), Department of Mechanical Engineering, CMRIT, Bengaluru, India & Core-Facility Centre for Photochemistry and Nanomaterials, GNU, South Korea, held Online on 23rdand 24th of April, 2021
- **6.** Performance evaluation of flat plate solar collector coupled with thermal storage system using hybrid nanofluid of CuO+Al2O3/water, International conference on research frontier in science (ICRFS-21), 5-6 Feb. 2021, G. H. Raisoni College of Engineering, Nagpur.
- 7. Performance investigation of desiccant wheel for air dehumidification, International conference on smart technologies for energy, environment and sustainable development (ICSTEESD-20), 4-5 December 2020, G. H. Raisoni College of Engineering Nagpur.
- **8.** Performance investigation of automotive radiator using blend of Al2O3/water+EG nanofluid, International conference on smart technologies for energy, environment and sustainable development (ICSTEESD-20), 4-5 December 2020, G. H. Raisoni College of Engineering Nagpur.
- 9. An experimental investigation of solar assisted solid desiccant dehumidifier fabricated with silica gel and composite desiccant materials, international conference on advanced in Mechanical and Electrical Engineering ICAMEE-19, 24-25 August 2019, G. H. Raisoni

- College of Engineering Nagpur.
- **10.** Regeneration of composite desiccant dehumidifier by parabolic trough solar collector: An experimental investigation, Int. conference on advances in materials and manufacturing applications, IConAMMA 2017, 17-19 August 2017, Bangalore, India, pp.1-9.
- 11. An experimental study and analysis of parabolic trough solar collector with and without aluminum coil, international conference on advances in mechanical engineering (ICAME-16), ISBN: 978-93-5265-488-8, 3-4 June 2016, G. H. Raisoni College of Engineering Nagpur, pp 192-197.
- **12.** An experimental analysis of parabolic trough solar collector for air heating, International Conference on Recent Trends in Engineering, Science and Technology 2016, 1 June 2016, Hyderabad, India, pp 367-373.
- 13. Heat transfer and friction factor in circular tube fitted with a ring sector, second international conference on mechanical, electronics and mechatronics engineering (ICMEME' 2013), London, UK. 17-18 June 2013, pp 157-160.
- **14.** Feasibility of Nanomaterial for solar cell, first international conference on sunrise technologies, I-cost- 2011, 13-15 Jan 2011, Bapusahed shivajirao Deore college of engineering and polytechnic, Dhule, pp. 351-354

National conferences-10

- 1. Component design verification and modification to improve machine efficiency of double roller ginning machine, national conference on advances in mechanical engineering (NCAME-2014), ISBN 198-98-5196-216-8, 17⁻ 18 December 2014, pp. 109-113.
- **2.** Daylight harvesting system: A contribution towards green building, , national conference on advances in mechanical engineering (NCAME-2014), ISBN 198-98-5196-216-8, 17⁻ 18 December 2014, pp. 142-148.
- **3.** Nanomaterial based Solar Cell, National conference on Advances in Renewable Energy Engineering, 3rd and 4th Dec.-13, pp 40-42, ISBN: 978-93-5137-583-8.
- **4.** Solar Assisted Solid Desiccant Dehumidification and Regeneration Techniques, National conference on Advances in Renewable Energy Engineering, 3rd and 4th Dec.-13, pp 80-86, ISBN: 978-93-5137-583-8.
- 5. Simultaneous heating and cooling using CO2 (R-744) as a refrigerant: National level paper presentation and intercollegiate poster competition SPARK-2013, 22nd March, 2013, K.D.K. College of engineering, Nagpur

- **6.** Twin parabolic solar collector with tracking system: National level paper presentation and intercollegiate poster competition SPARK-2013, 22nd March, 2013, K.D.K. College of engineering, Nagpur
- **7.** Failure analysis of boiler tube: Fourth national level student technical synopsium, ASSENT-2012, 21-Feb-12, Umrer College of engineering, Umrer.
- **8.** Alternate energy: Solar energy: National conference on emerging technology in engineering, SPARK-11, 26-Feb-11, KDKCE, Nagpur.
- **9.** New step to power generation: National conference on emerging technology in engineering, SPARK-11, 26-Feb-11, KDKCE, Nagpur.
- **10.** Heat transfer enhancement in Nanofluids: National conference on emerging technology in engineering, SPARK-11, 26-Feb-11, KDKCE, Nagpur

Book and Book Chapter (02)

Book Edited (01)

1. **Title-** Recent Advances in Mechanical Engineering and Nanomaterials (Volume 1), RAME Publishers Book Published on - 15 November 2021.

https://www.rame.org.in/books/book_ramen_vol1.html

Book Chapter (01)

- 1. Performance Enhancement of Thermal Energy Storage Systems Using Nanofluid, Energy Storage Systems. Engineering Optimization: Methods and Applications, pp 135–149, 05 October 2022 Print ISBN 978-981-19-4501-4, online ISBN 978-981-19-4502-1 Springer, Singapore. https://doi.org/10.1007/978-981-19-4502-1_6 (Scopus)
- **2.** Performance Investigation of Desiccant Wheels for Air Dehumidification. Smart Technologies for Energy, Environment and Sustainable Development, Vol 2. Springer Proceedings in Energy. **Springer**, Singapore. https://doi.org/10.1007/978-981-16-6879-1_26 (17.02.2022) ISBN 978-981-16-6879-1.

Patents Filed (03)

- 1. Title- Design and development of charcoal cooler, Inventors- K. S. Rambhad, Anurag Chaudhary, Himanshu Sharma, Himanshu Warudkar, Ashwin Badhiye, Applicants- G. H. Raisoni College of Engineering, Nagpur and G.H.R. Labs and research Centre, Nagpur, Authority- Indian Patent Office, Patent application no.-201821012328, Date of file 31/03/2018, Date of publication- 04.10.2019, Status- Awaiting for examination.
- 2. Title- Design and fabrication of cauliflower harvester, Inventors- K. S. Rambhad, Sachin Tonge, Nikhil Awhale, Kalyani Deshmukh, Mayur Gadekar, Applicants- G. H. Raisoni

- College of Engineering, Nagpur and G.H.R. Labs and research Centre, Nagpur, Authority-Indian Patent Office, Patent application no.-201621007965, Date of file 08/03/2016, Date of publication-08.09.2017, Status- Under examination.
- **3.** Title- Design and fabrication of Bricks handling machine, Inventors- K. S. Rambhad, Piyush Chikhale, Junaid Sheikh and Dnyanesh Kanhere, Applicants- G. H. Raisoni College of Engineering, Nagpur and G.H.R. Labs and research Centre, Nagpur, Authority-Indian Patent Office patent, Patent application no.-3859/MUM/2013, Date of file 10/12/2013, Date of publication-31.07.2015, Status- Under examination.

Copyright Granted (02)

- 1. Ppt Title: Experimental Performance of Solar Powered Solid Desiccant Dehumidification System, ROC Number: L-105347/2021, Diary Number: 12705/2021-CO/L, Date of Application: 08/06/2021, Date of Receipt: 08/06/2021.
- **2.** Poster title: Experimental Analysis of Solar Assisted Solid Desiccant Dehumidification System, ROC Number: L-92550/2020, Diary Number: 6536/2020-CO/L, Date of Application: 12/05/2020, Date of Receipt: 03/07/2020.

Externally Funded Project (01)

1. Received grant of Rs. 1,00,000/- from Innovation & Entrepreneurship Development Cell (IEDC), for "Design and fabrication of Bricks handling machine" in session 2013-14.

Professional Society Membership (03)

- 1. International Association of Engineers Membership.
- **2.** IAENG Society of Artificial Intelligence.
- **3.** IAENG Society of Mechanical Engineering.

Conference/FDP/Workshop/ STTP/Webinar Organized (07)

- International Conference on Trends in Engineering, Applied Sciences and Management (IC-TEAM-2022) on 8th 9th April 2022 at St. John College of Engineering and Management, Palghar.
- **2.** One Day Webinar on Intellectual Property Rights (IPR) on 30th July 2022 at St. John College of Engineering and Management, Palghar.
- 3. ISHRAE Approved Five—Days Faculty Development Program on "Python for Mechanical & Civil Engineering" from 4th to 9th July 2022 at St. John College of Engineering and Management.
- 4. Training of CNC on 28th Jan 2022, at St. John College of Engineering and Management,

- Palghar.
- 5. Webinar on "Selection of Project Title" at JSPM Narhe Technical Campus, on 18.07.2020.
- **6.** One Day Workshop on "Research/Review Paper Writing" at JSPM Narhe Technical Campus, on 12.05.2020.
- 7. One Day Workshop on "Research/Review Paper Writing" at JSPM Narhe Technical Campus, on 08.05.2021.

FDP/Workshop/ STTP/Webinar Attended/Participated (37)

ATAL and AICTE Sponsored (08)

- 1. AICTE Training and Learning (ATAL) Academy Online FDP on "3D Printing and Design" from 14/12/2021 to 18/12/2021 organized by Christian College of Engineering and Technology, Bhilai.
- 2. AICTE Training and Learning (ATAL) Academy Online FDP on "Innovations in Manufacturing of Novel Materials and Composites" from 23/11/2021 to 27/11/2021 organized by Christian College of Engineering and Technology, Bhilai.
- 3. AICTE Training and Learning (ATAL) Academy Online FDP on "Recent trends in renewable energy" from 20/09/2021 to 24/09/2021 organized by University Institute of Technology, Rajiv Gandhi technical university.
- 4. All India Council for Technical Education (AICTE) AQIS Sponsored One Week Short Term Training Program (STTP-Part-III) on "Perspective on Bharat Stage (BS) VI Norms in IC Engines" from 2.11.2020 to 7.11.2020, organized by Department of Automobile Engineering, Government Polytechnic, Nagpur.
- 5. AICTE Sponsored one-week short term training program on "Current Biomedical Applications Of 3d Printing and Additive Manufacturing" from 2.11.2020 to 7.11.2020, organized by Department of Biomedical Engineering and Technology Incubation Centre (BETiC) And Centre of Excellence Additive Manufacturing and Design Department of Mechanical Engineering, G. H. Raisoni College of Engineering, Nagpur.
- 6. AICTE Training and Learning (ATAL) Academy Online FDP on "Operations Management" from 5.10.2020 to 9.10.2020 organized by Christian College of Engineering and Technology.
- 7. AICTE Training and Learning (ATAL) Academy Online FDP on "Computational Fluid Dynamics" from 28.09.2020 to 02.10.2020 organized by Govt College of Engineering and Research Avasari.
- 8. One-week online Faculty Development Program on "Outcome Based Education: A Step Towards Excellence" from 11-15 May 2020 under Margdarshan Scheme of AICTE, New Delhi, conducted by Government College of Engineering, Karad.

ISTE/ISHRAE Workshops (04)

- ISHRAE Approved Five—Days Faculty Development Program on "Python for Mechanical & Civil Engineering" from 4th to 9th July 2022 at St. John College of Engineering and Management.
- 2. One-week ISTE approved Online/SF-STTP/FDP Programme on "Robotic Process Automation Design and Development V3.0" held during 27.06.2022 to 01.07.2022 organized by Thakur College of Engineering and Technology, Mumbai, Maharashtra
- 3. Two-day ISTE workshop on "Research Methodology in Education Technology", conducted by Indian Institute of Technology Bombay, on 2nd and 9th Feb, 2013 at G. H. Raisoni College of Engineering. Nagpur.
- 4. Two-week ISTE workshop on "Engineering Thermodynamics" conducted by Indian Institute of Technology Bombay, 11–21 December, 2012 at G. H. Raisoni College of Engineering. Nagpur.

NPTEL FDP (02)

- 1. Twelve-week **NPTEL** course on "IC Engine and Gas Turbine" with 90% marks, conducted by Indian Institute of Technology Guwahati under SWAYAM during Jan-Apr 2020.
- Twelve-week NPTEL course on "NBA Accreditation and Teaching-Learning in Engineering (NATE)" with 88% marks, conducted by Indian Institute of Science Bangalore under SWAYAM during Jan-Apr 2020.

Other FDP/Workshops (25)

- 1. Virtual Workshop on "Recent Trends in Additive Manufacturing" Organized by Christian College of Engineering and Technology, Bhilai, from 22-09-2021 to 23-09-2021.
- 2. Webinar on "National Education Policy 2020" Conducted by Priyadarshini College of Engineering, Nagpur, on 15 April 2020.
- 3. Faculty Development Program on "Advancement in Renewable Energy" held from 17th to 23rd March 2021 organized by Government College of Engineering, Nagpur.
- 4. Syllabus implementation workshop for the subject of "Applied Thermodynamics" on 22nd February 2021 organized at Dr. D. Y. Patil Institute of Technology, Pimpri, Pune-18.
- Faculty Development Program on "Tools and Techniques for Effective Research Writing" held from 7th to 11th December 2020 organized by Department of Electrical and Electronics Engineering, PES Institute of Technology and Management, Shivamogga, Karnataka
- 6. Webinar on "National Education Policy 2020 Higher Education Perspectives" Conducted by National Institute of Technical Teacher Training and Research (NITTTR), Bhopal on 17.09.2020.

- 7. Workshop on "Role of Professional Bodies in Engineering" conducted by MMCOE and BVCOE on 14.09.2020 under ISHRAE Pune Chapter.
- 8. Webinar on "Trending Automotive Industrial Practice" Conducted by B. N. College of Engineering and Technology, Lucknow on 21.08.2020.
- 9. Two-day workshop on curriculum implementation of Engineering Thermodynamics for Second Year- Mechanical, Automobile and Mechanical (SW) conducted by Savitribai Phule Pune University on 17-20 June 2020.
- 10. Awareness Program on Industrial Engineering and its Applications in Industry, conducted by JSPM Narhe Technical Campus, Pune on 22.05.2020.
- 11. One-week faculty development program on "Report writing using LATEX software" conducted by JSPM Narhe Technical campus, Pune on 11-16 May 2020.
- 12. Faculty Awareness Program on NAAC Revised Accreditation Framework 2020 conducted by JSPM Narhe Technical Campus, Pune on 11-15 May 2020.
- 13. Faculty Awareness Program on NBA and Outcome Based Education (OBE) conducted by JSPM Narhe Technical Campus, Pune on 02.05.2020.
- 14. Online certification quiz on "Teaching Sustainable Development Goals" organized by Microsoft, on 28.12.2018.
- 15. Online certification quiz on "STEAM (Science, Technology, Engineering, Art and Mathematics) Integration with Minecraft" organized by Microsoft, on 28.12.2018.
- 16. Online certification quiz on "Microsoft Innovative Educator" organized by Microsoft, on 22.12.2018.
- 17. One-week faculty development program on "Design of solar PV System" organized by G. H. Raisoni Academy of Engineering and Technology, Nagpur on 26-30 June 2018.
- Three-day faculty development training program on MS- Excel at GHRCE, Nagpur, 18-20 May 2017.
- 19. Two-day residential program for PG/PhD scholars at Indian Institute of Technology, Bombay, 22-23 December 2014.
- 20. Pedagogy Workshop for Teaching Faculty in the QEEE Institutes conducted by IIT Bombay. Part- I is on 12, 13, 14 June 2014; and part- II is on 24, 25, 26 July 2014.
- 21. Two-week course work on Research methodology and quantitative methods- for Ph.D scholar, 01/08/2013 to 12/08/2013 at G. H. Raisoni College of Engineering. Nagpur.
- 22. Two-days "Faculty Induction Training Program" 5th to 6th June 2012 at GHRAHE, Shraddha house, Nagpur.
- 23. Three-day workshop on "Quest for The Best" 30th May to 1st June 2011 at Priyadarshini Institute of Engineering and Technology, Nagpur,

- 24. Three-day workshop on "Improving Teaching Competencies" 24th to 26th Dec. 2010 at Priyadarshini Indira Gandhi College of Engineering, Nagpur.
- 25. Two-day workshop on Value Addition of Faculty in Engineering Education, 31st July to 1st Aug. 2009 at SRPCE, Nagpur.

Editorial Board Member and Reviewer

- 1. Editor-in-Chief in Journal of Thermal and Fluid Science, RAME Publisher.
- **2.** Editor and reviewer in International Journal of Analytical, Experimental and Finite Element Analysis, RAME Publisher.
- **3.** Guest Editor for Material Today Proceedings for International Conference on Recent Advances in Mechanical Engineering and Nanomaterials, Volume 61, Issue P3, 2022.
- **4.** Conference Organizing chair in International Conference on Trends in Engineering, Applied Sciences and Management (IC-TEAM 2022)
- **5.** Convener and Editor in International Conference on Recent Advances in Mechanical Engineering and Nanomaterials (ICRAMEN-21)
- **6.** Reviewer in Energy Storage (Wiley online library).
- 7. Reviewer in Environmental and Climate Technologies (Riga Technical University)
- **8.** Reviewer in Applied Thermal Engineering (Elsevier Journal).
- **9.** Reviewer in International Journal of Refrigeration (Elsevier Journal).
- **10.** Reviewer in Journal of Thermal Science (Springer Journal).
- 11. Reviewer in Environment, Development and Sustainability (Springer Journal).
- **12.** Reviewer in ACS Sustainable Chemistry & Engineering (American Chemistry Society, ACS Publications).
- **13.** Reviewer in The Open Petroleum Engineering Journal (Bentham Open Journal).
- **14.** Reviewer in international conference on Smart Technologies for Energy, Environment & Sustainable Development-18 (ICSTEESD-18).
- **15.** Reviewer in International Conference on Advances in Mechanical Engineering (ICAME-16), held at G.H. Raisoni college of Engineering, Nagpur.
- 16. Reviewer in Part E: Journal of Process Mechanical Engineering (SAGE Publisher)
- 17. Reviewer in Physica Scripta, IOP Science
- **18.** Reviewer in Journal of Advanced Research in Fluid Mechanics and Thermal Sciences (Akademia Baru Publishing (M) Sdn Bhd, Malaysia)

Faculty as a Resource Person (09)

1. Session Chaired at International Conference on Innovations in Science, Hybrid Materials and Vibration Analysis (IC-ISHVA 2022), held on 16-17 July, 2022.

- 2. Delivered a guest lecture on project report writing on 9th May 2022, at SJCEM Polytechnic, Palghar
- **3.** Speaker for workshop on "How to Write Research Paper" Conducted by Civil Department, St. John College of Engineering and Management on 14.03.2022.
- **4.** Session Chaired at International Conference on Recent Advances in Mechanical Engineering and Nanomaterials ICRAMEN 2022 held on 19-20 Feb. 2022.
- **5.** Expert lecture delivered on Subject-Thermodynamics at JSPM Narhe Technical Campus, on 01.11.2021 for Second Year Mechanical Engineering Students.
- **6.** Speaker for one day workshop on "Research/Review Paper Writing" at JSPM Narhe Technical Campus, on 08.05.2021.
- **7.** Speaker for Webinar on "Selection of Project Title" at JSPM Narhe Technical Campus, on 18.07.2020.
- **8.** Speaker for one day workshop on "Research/Review Paper Writing" at JSPM Narhe Technical Campus, on 12.05.2020.
- **9.** Session chaired at Impetus-15, "A technical paper presentation" organized by Dr. Babasaheb Ambedkar College of Engineering and Research, Nagpur, on 2.03.2015.

PG Project Guided (01)

1. Experimental investigation on composite desiccant wheel for dehumidification of air in domestic application- 2017-18.

UG Project Guided (18)

- 1. Design and fabrication of glass cleaning robot for high building-2020-21.
- **2.** CFD analysis of solid desiccant dehumidification system-2020-21.
- **3.** Design and Fabrication of Automatic potato chips making machine-2020-21.
- **4.** Simulation performance of desiccant dehumidification system for agriculture application-2019-20.
- **5.** Testing & Performance Evaluation of Bumper Beam-2019-20.
- **6.** Experimental analysis of hydraulic oil cooler by application of heat pipe-2018-19.
- 7. Design and fabrication of garbage picker machine -2017-18.
- **8.** Design and development of Saw cutter with human protection attachment-2017-18.
- **9.** Design and fabrication charcoal cooler -2017-18.
- **10.** Design and development of Mobile operated automatic chips Maker-2016-17.
- **11.** Design and development of almond seed sheller- 2016-17.
- 12. Design and fabrication of cauliflower cutting machine-2015-16.
- **13.** Design and fabrication of bricks handling machine-2015-16.

- **14.** Component design verification and modification to improve machine efficiency of double roller ginning machine-2014-15.
- **15.** Design and fabrication of Naturolight pipe-2014-15.
- **16.** Design and fabrication of simultaneous heating and cooling using CO₂ (R-744) as a refrigerant-2012-13.
- 17. Design and fabrication of twin parabolic collector with solar tracking system- 2012-13.
- **18.** Design and fabrication of bricks handling system-2013-14.

Subjects Taught - PG Level

1. Thermal System Design

Subjects Taught – UG Level

- 1. Thermodynamics/Engineering Thermodynamic
- 2. Applied Thermodynamics/Thermal Engineering
- 3. Internal Combustion Engine
- **4.** Turbomachinery/Power Engineering
- **5.** Automobile Engineering
- **6.** Heat Transfer
- **7.** Fluid Machinery
- **8.** Thermal Power Plant/Energy Conversion
- **9.** Refrigeration and Air-conditioning
- 10. Engineering Drawing/Engineering Graphics

Major Portfolios Handled

- 1. HOD, Mechanical Engineering
- 2. IQAC and NAAC Coordinator
- **3.** Asst. Sr. Supervisor for the SPPU Exam Oct. 2020
- **4.** Convener and Editor of ICRAMEN-2021
- **5.** PG Coordinator of Program "Heat Power Engineering"
- **6.** Departmental Project Coordinator
- 7. Departmental R & D Coordinator
- **8.** Module Coordinator-Thermal Domain.
- **9.** CAE (Class Assessment Examination) in-charge
- 10. RTMNU University Practical Coordinator
- 11. Engineering Graphics and Workshop Subject Coordinator

- **12.** Committee Member in International Conference on Advanced in Mechanical Engineering-16 held at G. H. Raisoni College of Engineering, Nagpur
- 13. Skill Enhancement Program Subject Coordinator -AutoCAD
- 14. Committee Member in National Conference on Renewable Energy Engineering-13 held at G.H. Raisoni College of Engineering, Nagpur
- **15.** Departmental TNA Coordinator

Date: 12.01.2023

Place: Palghar (Dr. Kishor S. Rambhad)

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