

Dr. YOGENDRA KUWAR

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Mobile no. 7022444360

Current affiliation

Assistant Professor
Department of Mechanical Engineering,
SVNIT Surat (Gujrat)-India

Membership

- Member of the International Institute of Refrigeration (IIR) since 2021.
- Life member of the Indian Cryogenic Council (ICC) since 2021.

Academic qualifications

- Post-Doctoral from IIT Bombay 2021 in the area of Cryogenics Engineering.
- Ph.D. from IISc Bangalore 2020 in the area of Refrigeration and Heat Transfer
- M.Tech from SVNIT Surat 2011 with specialization in Thermal Engineering
- B.E. Mechanical from NMU 2009.

Area of research interest: Heat transfer, refrigeration, and cryogenics:

PhD Research: Experimental and Theoretical Analysis of Automotive Air Conditioning Systems with low GWP Refrigerants and their Blends.

Post Doctorate Research: Experimental and Theoretical Analysis of Cryogenics Systems such as cryocoolers, liquefaction systems, and insulations.

Subject Taught at SVNIT:

M.Tech: Cryogenic Engineering, Industrial refrigeration, Design of heat exchangers, Numerical Methods for Engineers, Micro Hydro Power Plant.

B.Tech: Instrumentation and Controls, Gas Dynamics, Theory and Analysis of Cryogenics Systems, Micro Hydro Power Plant, Computer Programming for Mechanical Engineering.

Project:

	Project title	Funding Institute	Amount	Duration	Status
1	Low GWP refrigerants for Vapour Compression Refrigeration system	SEED GRANT SVNIT-Surat	10 Laks	2 year	completed

Petant:

	Title	Patent office	Patent no	Year	Status
1	Liquid Nitrogen-based Refrigeration System (Product Patent)	Indian Patent Office	547632	2024	Granted
2	Closed-loop pulsating heat pipe-based solar cooker (Product Patent)	Indian Patent Office		2025	Filed
3	Wind Energy driven atmospheric water harvesting system by vapour compression refrigeration cycle. (Product Patent)	Indian Patent Office		2025	Filed

Publications

Journal papers:

1. Kuwar, Y.V., and G.S.V.L Narasimhan, Performance of automotive air conditioning system with R134a and R1234yf, International Journal of air-conditioning and refrigeration. Vol. 28, No. 2, (14 pages), 2020. DOI: 10.1142/S2010132520500133
2. Yogendra Kuwar, Performance Evaluation of Eco-friendly R1234ze (E) Refrigerant in an Automotive Air Conditioning System, International Journal of Heat Transfer, Wiley Publication, Vol:52, No.2,1-23, 2023. doi:10.1002/htj.22959
3. Yogendra Kuwar, Performance evaluation of VCR system with pure and various blends of R134a, R1234yf, and R1234ze (E) refrigerants, International Journal of Heat Transfer, Wiley Publication, Vol:53, No.2,1-26, 2024. doi: 10.1002/htj.23065
4. B. G. Prashantha, Yogendra Vasanthrao Kuwar, G. S. V. L. Narasimham, S. Seetharamu and Devappa, Design and analysis of thermoacoustic air source heat pump water heaters, International Journal of air conditioning and refrigeration, Vol:32, No.2,1-26, 2024. doi: 10.1007/s44189-024-00057-9

Conference papers:

5. Yogendra Kuwar, Carbon Dioxide Separation and Storage for Sustainable Development With Low Temperature Methods ICSEE - 2024.
6. Sudheer Yadav and Yogendra Kuwar, Heat load calculation of car air conditioning system through the mathematical model to obtain the net refrigeration effect, International Conference on Recent in Engineering and Science, SVNIT, Surat, 2023.
7. Yogendra Kuwar, 'Minimization of losses in turbo machines, Converges 10, a state-level technical symposium by R. C. Patel Institute of Technology, Shirpur, March 2010.

Work experience

#Industrial

Company Name: JSW-Ispaat Pvt Ltd

Designation: Post Graduate Engineer Trainee (

Duration: June 15, 2011, to October 08, 2011.

#Academic

1 . Institute Name: SVNIT-Surat

Designation: Assistant Professor (Level-10)

Department: Mechanical Engineering

Duration: May 24, 2021, to present.

2. Institute Name: NMIMS University Mumbai, MPSTME

Designation: Assistant Professor

Department: Mechanical Engineering

Duration: November 15, 2011, to June 29, 2013.

Subjects Taught: Engineering Mechanics, Thermodynamics, Fluid Mechanics, TOM.

Achievement

- Participated in a 2-week workshop on 'Research Methodology' by "IIT, Bombay, and ISTE," 2012
- Training and Placement member in SVNIT Surat for the 2011 batch.
- National Level Ultimate Frisbee Championship runner-up at NCUC Bangalore 2019.
- GATE qualified 2009 (Mechanical)
- Industrial training for two months in the area of maintenance of the commercial vehicle, Ujwal Automotive Pvt Ltd., Dhule, Maharashtra.

Personal profile

Name: Yogendra Vasantao Kuwar

Permanent Address: At Post Nakane, Tal Dist Dhule-424001, Maharashtra.

Date of birth: October 01, 1984.

Status: Married

Nationality: Indian.

Languages are known: Marathi, English, and Hindi (Read, Write, and Speak)