RESUME

| Name Age | :- <u>Dr.Vijaykumar Hari Patil</u> :- 46+years | 00 |
|------------------------------------|---|----|
| Present Position, Working Place | :- Principal | |
| Address for Communication | Godavari College of Engineering, Jalgaon Mob No. 9373950013 E-mail: - <u>vhpatil76@yahoo.co.in</u> | |

Educational Qualification:

| Sr. No. | Examination | University/Board/ Institute | Year | % obtained |
|------------|-------------------------------------|-----------------------------|----------|---------------|
| 1 | S.S.C. | Nagpur | 1991 | 84% |
| 2 | H.S.C. | Amravati | 1993 | 76% |
| 3 | B.E. Mechanical Engg. | Amravati | 1997 | 69.09% |
| 4 | M.E. Mechanical Engg. | R.G.P.V., Bhopal | 2005 | 75.88% |
| 5 | Ph.D. Production Engineering. | Amravati | Feb 2018 | Awarded |

Title of Ph.D. Thesis:

Failure Analysis and Performance Evaluation of Boiler Tube in Thermal Power Station.

Specialization:

Tribology and Maintenance Engineering.

Areas of Interest:

Maintenance Engineering, Machine Drawing, Failure Analysis study, Nonconventional Energy sources.

Subjects Taughts:

Theory of machines, Tribology, Machine Drawing, Non-Conventional Energy, Industrial Engineering, Engineering Drawing.

STTP/Workshop/Seminars Attended: 13

- 1. Attended a one week workshop on "Continuing Education and Quality improvement programmes", Conducted by IIT Bombay, on 1 to 5 April 2008 at IIT Bombay.
- Attended a one week workshop on "Finite Element Analysis" conducted by RIT, Rajaramnagar, on 10 to 14 Feb 2009 at Rajarambapu Institute of Technology, Rajaramnagar Sakharale.
- 3. Attended a two days workshop on "Institution Building and Staff Development" held at AISSMS institute of IT Pune, on 8 to 9 October 2009.
- Attended a one day workshop on "Design and Simulation of Hydraulic, Pneumatic and Electro Technical System with integrated control through Electrical, PLC, SFC and Digital Electronics using Automation Studio" at Thakare college of Engineering Nashik, on 26 February 2010.
- Attended a four days workshop on "Computer networking using Linux "Conducted by C.I.G.Trainer Hcl Pvt. Ltd. Mumbai organized by GCOE Jalgaon, on 17 to 20 March 2010.
- Attended a one day workshop on "Syllabus framing for the Master of Engineering" Under NMU Jalgaon, on 20 July 2011.
- Attended a three days workshop on "Teaching Learning Process in Engineering and Technology" GCOE, Jalgaon, 9 to 11 November 2011.
- Attended a two days workshop on "Master cam Milling and Robot Programming "at GCOE Jalgaon, 30 to 31 January 2010.
- Attended a one day workshop on "Syllabus Structure Framing "for faculty of Engineering and Technology NMU Jalgaon at RC Patel Institute of Technology, Shirpur, 11 February 2012.
- 10. Attended a one day workshop on "Elements of Mechanical Engineering and Engineering Graphics "at NMU Jalgaon, 19 March 2012
- Attended a one day workshop on "Automotive design and Analysis" conducted by Codex Design Services, COE Jalgaon, 4 March 2015
- Attended a one day workshop on "NBA" at College of Engineering, Pune, 11 April 2015 conducted by Directorate of Technical Education Maharashtra.
- 13.
- 14. Attended one day workshop on "Norms, standards, Best practices and AICTE

Reforms in Technical Education in India held on 19-08-2019 at Sant Gadge Baba Amravati University, Amravati.

Symposia /STTP/Workshop/Seminars Organized :06

- STTP on "Teaching Learning Process in Engineering and Technology" 9 to 11 Nov 2011 delivered expert lecture on "Teaching Learning Process in Class Rooms."
- Organised a one day workshop on "Automotive design and analysis" conducted by codex design services, at GF'S GCOE Jalgaon, 4 march 2015 in association with IIT Delhi work as co-ordinator.
- Organised two days' workshop on Pedagogy and use of ICT in class room in association with faculties of IIT Bombay, at GF'S GCOE Jalgaon on 20 & 21 January 2018, worked as chief co-ordinator.
- 4. Organised "Spirit 2009", a national level paper presentation competition at GF's GCOE Jalgaon in Feb 2009, worked as coordinator.
- Organized a National Conference on Current Trends in Engineering, Science, Technology & Management (NACCTESTM-2017) worked as Convenor on 21 March 2017.
- 6. Organized Two Days workshop on IPR and Patenting Awareness of Invention and Innovation "WIPAII- 2019", 28-29 November 2019.

Papers Published:

National Conference : 07

- V.H.Patil, "Data Acquisition System for Vibration Monitoring", National Conference on Emerging Technology in Engineering and Management on 20 February 2011 at GF's Godavari College of Engg Jalgaon
- 2. V.H.Patil, "Data Acquisition System for Vibration Monitoring", National Conference on Emerging Technology in Engineering & Management on 20 Feb

2011. Paper ID -31

- V.H. Patil, "Factor Affecting Boiler Tube Failure In Pulverized Coal Boiler" National Conference On Engineering Research And Application 1 to 2 March 20121 At GF's GCOE Jalgaon.
- V.H. Patil, "Design & Development of Multicyclone Dust Collector in Industrial Boiler", NACCTESTM-2017, 21 March 2017 at GF's Godavari College of Engg Jalgaon. Paper Id-19
- V.H. Patil, "Study on Solar Dryer Technologies", NACCTESTM-2017, 21 March, 2017 at GF's Godavari College of Engg Jalgaon. Paper Id-17
- V.H. Patil, "A Review on Effect of Magnetic Field to Improve Fuel Consumption in S.I. Engine", NACCTESTM-201, 21 March, 2017 at GF's Godavari College of Engg Jalgaon. Paper Id-1
- V.H. Patil, "A Review on Manufacturing of Cooling Tower", NACCTEST-2018, 20 March 2018 at GF's Godavari College of Engg Jalgaon. Paper Id-16.

International Conference: 09

- V.H. Patil, "Factors Affecting Boiler Tube Failure In Pulverized Coal Fire Boiler", An International Conference on Engineering Research & Application (ICERA-2012) On 01-02 March 2012 at Gf's Godavari College of Engg Jalgaon. pp 719-728.
- V.H. Patil, "Non-Conventional Energy Sources", An International Conference On Emerging Trends in Technology and It's Application 6 to 7 March 2013 at GF's Godavari College of Engg Jalgaon.
- Kiran G. Gayakwad, Atul Patil, V.H. Patil, "Corrosion of Boiler Tube", ICMSET-2014 on 15/02/2014 at GF's Godavari College of Engg Jalgaon Paper Id-ME0103.
- D.J. Waghulde, V.H.Patil, A.A.Patil, "A Review on Effect of Fin Pitch and Velocity on Heat Transfer Through Automobile Engine Cylinder Fin", on 15/02/2014 at GF's Godavari College of Engg Jalgaon Paper Id-ME0202.
- J.A.Ingale, V.H.Patil, A.A.Patil, "A Review on Evaluation of The Deformation Induced by Solar Radiation on Solar Panel", on 15/02/2014 at GF's Godavari College of Engg Jalgaon Paper Id-ME0203.

- 6. Laxi mikant P.Narkhede, A.A.Patil, V.H.Patil, "Intake port optimization", on 15/02/2014 at GF's Godavari College of Engg Jalgaon Paper Id-ME0206.
- Likhil D. Pethkar, Atul Patil, V. H. Patil, "Nano fluid Heat Exchanger: A Critical Review", at GF's Godavari College of Engg Jalgaon on 15/02/14. Paper Id- ME0209.
- V.H. Patil, "Experimental Analysis of Heat Transfer Enhancement of Wavy Twisted Tape Insert", 2nd International Conference on Science Technology And Management on 27 Th Sep 2015 at Delhi University, Conference Center, New Delhi. ISBN : 978-81-931039-6-8.
- V.H. Patil, "A Review on Experimental Investigation of Solar Dryer For Tomato Drying", 4 th International Conference On Recent trends in engineering & technology (ICRTET 2015) from 02 to 04 July 2015, at SNJB'S Late Sau. Kantabai Bhavarlalji Jain College of Engineering Nashik. Paper ID-668.

International Journal: 27

- Atul M. Zope , Vijay H. Patil, Amol S. Dhande & Kantilal P. Rane, "Design, Implementation and Utilization of Finite Element Method".
- V.H. Patil, "Design and Optimization of Flow Field of Tangentially Fired Boiler", International Journal Of Mechanical Engineering, volume 1 issue 4-2014
- Jitesh A Ingale, V.H. Patil and A. A. Patil , "A Review On Evaluation Of The Deformations Induced By Solar Radiations On Solar Panel Frame", Vol. 3, No. 3, July, 2014, pp. 116-128
- 4. Ingale J .A., Patil V.H.& Patil A.A., "Failure Analysis And Performance Evaluation Of The Solar Panel Frame", Volume 2 (12): 59-70
- Y.J. Wagh & V.H.Patil, "Design and Optimization of Flow Field of Tangentially Fired Boiler", volume1, Issue 4 August 2014, pp. 01-08
- Laxmikant P. Narkhede, V.H. Patil & Atul Patil, "2D CFD Simulations of Nozzle Flow Analysis for Carburettor", Vol-1, Issue.-4, September 2014, Pp.105-111
- 7. Ashish N. Sarode, Atul A. Patil & Vijay H. Patil, "A Critical Review on Low Temperature Solar Water Heater Collectors", Vol. 3, No. 1, Dec 2014, pp.67-70.
- Mukund Pande, Atul A. patil and Vijay H. Patil, "Improvement in COP of Refrigeration Tutor by Using Single Embossed Plate Coil Evaporator Over a Bonded Coil Evaporator", Vol. 2, Issue 1, January 2015, pp. 198-201.

- Rajendra P. Patil, Atul Patil, Vijay H. Patil & T. A. Koli, "Analysis of Steady State Heat Conduction in Different Composite Wall," Vol. 4, Issue 7, July 2015, pp.5394-5400
- Sudhir U. Patil & V. H. Patil, "A Review on Experimental Investigation of Solar Dryer For Tomato Drying", e-ISSN No.:2349-9745, Date: 2-4 July, 2015, pp.1963-1966
- V.H. Patil, "Experimental Analysis of Heat Transfer Enhancement of Wavy Twisted Tape Insert", 2nd International Conference on Science, Technology and Management ISBN: 978-81-931039-6-8, 27 September 2015.
- 12. Paresh A. Joshi & V.H.Patil, "Experimental Analysis of Heat Transfer Enhancement of Wavy Twisted Tape Insert", Vol 04, Special Issue (01), Sep 2015, pp. 295-310.
- Mr. Iqbal Mansuri, V. H. Patil & A.A.Patil, "Experimental Investigation of Radiator System for a Stationary C.I. Engine", Volume 1, Issue 5, October 2015, pp.1-7.
- Ravindra A Patil, Prof. Tushar A Koli & V.H.Patil, "Performance, Emissions And Combustion Evaluation of C.I. Engine Using Biofuel", Volume 5, Issue 1, January 2016, pp. 119-124.
- 15. Kiran G. Gayakwad, V.H.Patil & C.R.Patil, "Experimental Study on Heat Recovery from Continuous Blow down Water And Reduced Feed Water Consumption By Utilizing It In CFBC Boiler", Vol. 6, Issue 5, (Part - 7) May 2016, pp.15-19
- Swapnil Suresh Patil, V.H.Patil & A.A.Patil, "Design Development & Analysis of Hybrid Air-Conditioner", Volume 4 Issue 5, May 2016, pp 102-106.
- Rameshwar V. Wagh, Atul A. Patil & Vijay H. Patil, "An Overview of Solar Water Heating System Using Phase Change Material", Vol. 5, Issue 6, June 2016, pp 9755-9759.
- Rohit Joshi, Vijay Patil , Atul Patil & Tushar Koli, "Experimental analysis of Thermostatic expansion valve, Constant expansion device & Cap tube on vapour compression refrigeration system", Volume-2, Issue-6, June 2016, pp 356-360.
- P.S.Patil, T.A. Koli & V. H. Patil, "Thermal Performance of Solar Tunnel Dryer by Using Various Absorbing Materials", Volume 4, Issue 8, August -2017, pp 406- 416.

- 20. V.H. Patil, Shadab Shaikh Bismillah & K. M. Mahajan, "A Review on Performance Improvement of Vortex Tube", Volume 4, Issue 1, Jan 2018, pp 1-6
- 21. V.H. Patil, Shadab Shaikh Bismillah & K. M. Mahajan "Performance Improvement Of Vortex Tube With Hollow Conical Valve", International Journal Of Advanced Engineering Research & Technology, Volume 6 Issue 2, Feb 2018, pp 153-159.
- 22. Harsha Nathjogi, Tushar A.Koli and Vijay H.Patil "Experimental investigation of Auto Tracking Solar Operated Air Cooler with cooling cabin." International Journal of Innovations in Engineering and Science, Volume 4, Number 10, 2019, ISSN: 2456-3463.
- 23. Umesh N.Patil, M.P.Thakur, T.A.Koli and V.H.Patil "An Investigation of Performance Improvement in Refrigeration Test Rig by using Phase Change Material (PCM)" International Journal of Innovations in Engineering and Science, Volume 4, Number 10, 2019, ISSN:2456-3463.
- 24. M.A.Salve, T.A.Koli and V.H.Patil "Experimental Heat Transfer analysis of Helical Fin with Parabolic crosses Section" International Journal of Research in Engineering, Science and Management. Volume -2 issue -8 2019 pp.(1-4) (ISSN: 2581-5792).
- 25. Umesh N. Patil, Prof. M.P. Thakur, Prof. T. A. Koli, Dr. V. H. Patil "An Investigation Of Performance Improvement In Refrigeration Test Rog By Using Phase Change Material: Research, International Journal Of Innovation in Engg. And Science, ISSN:2456-3463,

Vol. 4 Issue 10, 2019.

- 26. Prasanna P. Gawande, Prof. M.P. Thakur, Prof. T. A. Koli, Dr. V. H. Patil " Experimental And Development VRF System by using Multiple Expansion Valve in air conditioning system" International Journal Of Innovation in Engg. And Science, ISSN:2456-3463, Vol. 4 Issue 10, 2019
- 27. Prof. Prashant P. Kharche, Dr. Sharad V. Kshirsagar, Dr. Vijay H. Patil "Feed-Forward Neural Network with Back propagation Training Based Fault Detection in Rolling Element Bearing using Time Domain Features and Frequency Domain" International Journal of Future Generation Communication and Networking, Vol. 13, No. 3s, (2020), pp. 1351–1358

Extra Academic Activities

- Worked as a Judge for project competition held at D.N. Patel College Of Engineering Shahada on 25/03/2011
- 2. Worked as Subject Expert in Selection Committee of North Maharashtra University at R.C. Patel Institute of Technology on Monday Dec 30, 2013.
- Worked as Subject Expert in Selection Committee of North Maharashtra University at KCE Society's College of Engineering & Information Technology Jalgaon on March 19, 2014.
- 4. Worked as a judge for state level paper presentation competition for diploma students (YANTRIKA-2015) on 28/01/2015.
- 5. Worked as Session Chair In International Conference "REVELATION-2K15" at Padm. Dr V.B. Kolte College of Engineering, Malkapur on 21, 22, & 23 March 2015.
- Worked as Session Chair in International Conference on Recent Trends in Engineering & Science 2016, at Padm. Dr V.B. Kolte College of Engineering ,Malkapur on 28 Feb 2016.
- Served as Chairman, board of paper setters, and member board of paper setters for Mechanical Engineering, Automobile Engineering and Production Engineering for subjects assigned by the North Maharashtra University Jalgaon.
- Worked as Member of Ad-hoc Board of Studies for the Subject Mechanical Automobile and Production Engineering in the year 2016 as per Notification No.25/2016.
- Worked as Member of Ad-hoc Board of Studies for the Subject Mechanical Automobile and Production Engineering in the year 2017 as per Notification No.20 /2017.
- Currently working as member board of studies in the Subject Mechanical Automobile and Production Engineering form 17/10/2018 up to 31/08/2022 as per University Notification No. 36/2018.
- Work as member & chairman for Local Inspection Committee of North Maharashtra University & DBATU, Lonere.
- 12. Work as member for Gradation Committee of Colleges, Appointed by

Dr.Babasaheb Ambedkar Marathwada University, Aurangabad.

 Working as Ph.D Research Guide at K.B.C. North Maharashtra University, Jalgaon with Ph.D Guide Recognition Letter No.-KBCNMU/11/PGR /PHD/ MECH.ENGG/2036/2019 Dated-29 May 2019.

Extra Adminstrative Activities:

- 1. Working as member of Local Management Committee of Gf's Godavari College of Engineering, Jalgaon.
- Working as member of Governing Body of Gf's Godavari College of Engineering, Jalgaon.
- 3. Working as Incharge Principal/ Dean Academic/ Head of Department of Mechanical Engineering at Gf's Godavari College of Engineering, Jalgaon.
- 4. Worked as member of Local Inspection Committee of North Maharashtra University.
- Worked as Chairman, Local Inspection Committee of D.B.A.T.U, Lonere for Marathwada Institute of Technology, Aurangabad on 13/05/2018.
- Worked as Chairman, local inspection committee of D.B.A.T.U, Lonere for CSMSS, Shahu College of Engineering, Aurangabad on 14/05/2018.
- 7. Worked as Member, Board of Studies in Mechanical Engineering in the Faculty of Engineering and Technology of North Maharashtra University Jalgaon.
- Worked as NAAC Coordinator for NAAC process of GF Godavari College of Engineering Jalgaon.
- 9. Represented Godavari College of Engineering, Jalgaon as Institute representative before the Director, Directorate of Technical Education, Govt. of Maharashtra and to the Regional Officer, All India Council of Technical Education, New Delhi during the course of increase/decrease in intake, introducing new course in the institution and Extension of Approval process.

| Sr No | Name of Student | Title of Thesis |
|-------|--------------------------------|--|
| 01 | Chaudhari Piyushkumar B. | Erosion Failure Analysis of Boiler Tube in CFBC Boiler at J.K.Paper Ltd., Songadh |
| 02 | Ingale Jitesh Ashok | Failure Analysis and Performance Evaluation of Solar Panel Frame |
| 03 | Patil Sudhir U. | Comparative Analysis of Natural and Forced type Solar Dryer for Different Collector Geometries |
| 04 | Wagh Yogesh Jaywant | Furnace Burner Design for Power Plant Industry Using CFD and its Optimization |
| 05 | Gayakwad Kiran G. | Heat Recovery From Continuous Blowdown and Reduced Feed Water Consumption in CFBC boiler at J.K.Paper Mill, Songadh |
| 06 | Mansuri Iqbal Husain | Experimental Investigation of Radiator System for a Stationary C.I. Engine |
| 07 | Yugendersing Rupsing Girase | Design Development and Experimental Analysis of Evaporative Cooler for Horticulture Product. |
| 08 | Swapnil Suresh Patil | Design Development and Analysis of Hybrid Air Conditioner Using Conventional VCC, Peltier Module and Earth Heat Exchanger. |
| 09 | More Nikhil G. | Experimental Investigation of Dual Purpose Solar Collector. |
| 10 | Gaikwad Kiran G | Heat Recovery from Continuous Blow Down and Reduced Feed Water Consumption in CFBC Boiler at J.K.Paper Ltd, Fort Songarh |
| 11 | Atole Jagdish S. | Experimental Investigation of Thermal Performance of Heat Pipe Using Hybrid Nano Fluid. |
| 12 | Waghulde Devendra | Analysis of Engine Cylinder Fins Under Varing Fin Para meters |
| 13 | Nilesh Mahajan | Design & Development of CPC Collector for Solar Water Heating System |

Details of Ph.D. Students Guiding:

| Sr. No | Name of Student | Guide/Co -Guide | Title of Thesis | Date Of Registration |
|-----------|--------------------------------|--------------------|---|-------------------------|
| 01 | Tushar Ananda Koli | Co-Guide | Experimental Investigation Of Process Capability For Lathe Machine Using Non-metallic Gears | 21/05/2018 |
| 02 | Yogesh Jayawant Wagh | Co-Guide | Experimental Investigation Of The Tribological Performance Of an Automotive Engine Operating With Graphene Based Nano-Lubricant" | 21/05/2018 |
| 03 | Kishor Madhukar Mahajan | Guide | Design and Experimental Investigation of Solar Assisted Hybrid Dryer for Drying of Turmeric | 02/11/2020 |
| 04 | Prashant Pralhad Kharche | Guide | Experimental Investigation of Influence of Process Parameters of Laser Beam Machining on AL6061 Material | 28/08/2021 |

Laboratory Development, Equipment Design and Development:

- 1. Laboratory In charge of Theory of Machines.
- 2. Development of Pneumatic Trainer Kit in P.G. Laboratory
- 3. As Head of Department worked in procuring and instalment of various equipment of all 11 laboratories of Mechanical Engineering Department at GF'S Godavari College of Engineering Jalgaon.

Proficiency in Computers

Worked on Windows environment. Thorough knowledge on Microsoft Office, AUTO CAD

Membership of Professional Societies

Member of Indian Society of Technical Education (Membership No. LM 46511.)

Member of ASM International.

Vision for Future

- 1. Plan to develop my college as centre for high level research and innovation in the field of Engineering.
- 2. To focus on consultancy works and collaborative projects with industries.

Dr. Vijaykumar H. Patil.