BIO-DATA

1.	**Name**	Ms. Pallavi Dinesh Khaire
2.	**Designation**	**Assistant Professor**
3.	**Residential Address**	Uran
4.	**Date of birth**	21 August
5.	**Total Experience**	**16 years**
i.	**Teaching**	**16 years**
ii.	**Industrial**	-
6.	**Qualifications**	

Exam Passed	Year	Institution/ University	Branch/Specialization	Percentage/CGPI
B. E.	2008	Fr.C.R.I.T. Vashi (Mumbai university)	Mechanical	67.1
M. E.	2014	Fr.C.R.I.T. Vashi (Mumbai university)	Machine design	74

Additional Qualification:

7. **Employment Record**

Institution	Year (From To)	Designation
RAIT Nerul	8 August 2008 – 23 December 2008	Lecturer
Fr.C.R.I.T.Vashi	24 Dec 2008 - till date	Assistant Professor

8. **Undergraduate / Postgraduate Teaching Experience and Subjects Taught**

   Subjects Taught at UG level

Sr.No.	Name of Subject	Semester
1.	Refrigeration and Air conditioning	VIII
2.	Engineering Drawing	II
3.	Engineering Mechanics	I
4.	Computer Aided Machine Drawing	III
5.	Computational Methods	V
6.	Heating Ventilation Air Conditioning & Refrigeration	VI

   Subjects Taught at PG level

Sr.No.	Name of Subject	Semester
1.	Advanced Stress Analysis	I

9. **Research Experience:** 3 Years

10. **Research Funding / Consultancy Services:**

Sr.No.	Name of the Company	Address	Product	Consulting Service	Consulting Fees	Period

Research Grants:

Sr.No.	Name of Funding Organization	Type of Grant	Amount (Rs.)	Year	Name of Research Project
1.	Mumbai University	Minor Research	35000/-	2017-18	Thermo-acoustic Refrigeration

Technical Collaboration / Lab Funding with Industries

Sr.No.	Name of the Funding Organization	Type of Support	Amount (Rs.)	Year

11. Professional Societies Fellowship / Membership
National Society of Fluid Mechanics and Fluid Power (Life Member)
Council of Vibration Specialists (Senior Life Member)

12. Achievements / Awards / Position

13. Projects guided in UG/PG level
1. Design and fabrication of vertical axis windmill (UG)
2. Optimization of Blades parameters of horizontal axis wind turbine. (UG)
3. Smart Stove. (UG)
4. Simulation and Experimental study for selection of Gauge area cross section of S type load Cell. (UG)
5. Experimental study to identify the effect of bent shaft on vibration spectrum using FFT analyser. (UG)
6. Effect of Flow induced vibration through straight pipes on vibration spectrum using FFT analyzer. (PG)
7. Experimental and simulation study of flow induced vibration through straight pipes. (PG)
8. Detection and location of depth of crack in a rotor system using various vibration based diagnosis techniques. (PG)
9. Centrifugal pump fault diagnosis using ANN(UG)
10. Condition monitoring of gears (UG)
11. Condition monitoring of journal bearing (UG)
12. Fault detection in gears using Vibration analysis (PG)
13. Fault detection in journal bearing Vibration analysis (PG)
14. Tribological Behaviour of Dental Composites considering the effect of tobacco products(UG)
15. Fault detection in rolling element bearing using Machine learning (UG)

14.
1. Short Term Training Programmes attended
2. Three-day workshop/orientation program on "computer aided machine drawing" organized by department of mechanical engineering, FCRIT, Vashi in association with VINSYS (Partner of Autodesk) from 11th to 13th July, 2013.
3. Six-day faculty development program on "communication skills" organized by FCRIT Vashi from October 03, 2013 to October 09, 2013
4. QIP, Short - term course on "The Must of Fluid Mechanics" from May 26 to May 30, 2014 organised by Department of Civil Engineering, Indian Institute Of Technology, Bombay.
5. Two days' national level workshop on "Vibration & Noise measurement using FFT analyser" on 30th & 31th January 2016 sponsored by BCUD, SPPU & organized by Mechanical Engineering Dept., R.H. Sapat college of engineering of engineering Nashik.
6. Three days' faculty development program on FUSION 360 Sponsored by Autodesk and organized by FCRIT, Vashi
7. One-day Faculty Orientation Program for CAD Modelling, Second Year - Semester III Revised Syllabus 2019 - 'C' Scheme organized by Department of Mechanical and Automobile Engineering, PCE in association with University of Mumbai on Friday 24th July, 2020.
8. One-week workshop/orientation program on ""Innovation, Entrepreneurship and its Relevance in Industry 4.0 Practices in the Post Covid-19 Situation" organized by department of mechanical engineering, Terna College of Engineering, from 25 to 29 May 2020
9. One-day webinar of Online teaching and learning using Google classroom and Google meet organized by department of mechanical engineering, Pillai College of Engineering held on 22nd May, 2020.
10. One-day webinar titled 'Distributed Temperature Sensing for Real-Time Power Line Monitoring using Raman Scattering in Optical Fibres' organized by SRM college of Engineering held on 16 May, 2020.
11. 5 Days FDP On Artificial Intelligence & Machine Learning Using Python from 11th - 15th May 2020 organised by Finland Labs (A Unit of Revert Technology Pvt. Ltd.) In Association with National Social Summit, IIT Roorkee
12. Online Workshop on "Creating and Editing Videos for Online Teaching". The event included demonstration and hands-on training through the interactive online platform "Zoom" organized by FCRIT, Vashi on 14/05/2020

13. Five days' Workshop on AI & Deep Learning organised by Bennett University from 04 -08 May 2020
14. Two days' online workshop on "Fuzzy Logic and Neural Network Approaches for Engineering Solutions" conducted on 01st & 02nd May 2020 Organised by JAEF and Hexacube.
15. 5-DAY AICTE Training and Learning Faculty Development Program (ATAL FDP) on "Sensor Technology" at Department of Electronics and Communication Engineering, K.S.R. College of Engineering from 04-10-2021 to 08-10-2021
16. 5-DAY AICTE Training and Learning Faculty Development Program (ATAL FDP) on "IoT Based Condition Monitoring" at Department of Mechanical Engineering, Veermata Jijabai Technological Institute, Mumbai from 6 to 10 December 2021.

15.   List of Journal Papers Published

1. Experimental study to identify the effect of type of coupling on unbalance using frequency spectrum analysis, IOSR Journal,2014

2. Experimental study to identify the vibration signature of bent shaft, IJERT journal, Vol.3 issue 10, october-14, ISSN:2278-0181

3. Simulation and Experimental Study to Investigate the Effect of Bent Shaft on Vibration Spectrum, International journal of Innovative Research and Technology(IJIRD), April 2015,Vol-4,Issue 4, ISSN 2278 – 0211

4. Automated bottle filling system (International Research Journal Of Engineering and Technology, Volume: 02 Issue: 07 | Oct-2015 2014, e-ISSN: 2395-0056   p-ISSN: 2395-0072)

5. Simulation and Experimental Study for Diagnosis of Misalignment Effect in Rotating System
 Journal of vibration measurement, analysis and control 01/2015; 3(2):165-173 DOI: 10.7726/jvamc.2015.1009

6. Simulation and Experimental study for selection of Gauge area cross section of S type load Cell, IRJET, Volume: 03, April 2016

7. Pallavi Khaire, Vikas Phalle, A smart fault identification system for ball bearing using simulation-driven vibration analysis, Archive of Mechanical Engineering, Vol. 70, No. 2 PP:247-270, DOI:10.24425/ame.2023.145583

8. Pallavi Khaire, Vikas Phalle, A Smart System for the Identification of Combination of Faults in Rotating Machines Using a Vibration-Based Data-Driven Approach, GIS Science Vol. 9, Issue 11, PP:1294-1305, 2022,DOI:20.18001.GSJ.2022.V9I11.22.40379

16.   List of Papers Published in National and International Conferences

1. Design and manufacturing of braking system of windmill and storage system, Mulshi institute of Technology, Pune,2009

2. Experimental and simulation study of flow induced vibration through straight pipes ICNTE 2017, Fr. C. Rodrigues Institute of Technology, Vashi

3. Effect of Crack on Natural Frequency in Rotor System, International Conference on Functional Materials, Characterization, Solid State Physics, Power, Thermal and Combustion Energy (FCSPTC) – 2017

4. Detection and location of depth of crack in a rotor system using various vibration based diagnosis techniques at NDE-2017

5. Experimental study to identify the effect of bent shaft on vibration spectrum using FFT

analyzer, International conference, NIT Hamirpur, 16-18 Dec. 2017

6. Condition Monitoring of centrifugal pumps using ANN, International conference, CPIE, NIT Jalandhar, 2018

7. Pallavi Khaire, V. M. Phalle, Vishadeep H. (2019) Condition Monitoring of Rotating Machinery Considering the Effect of Bent Shaft Using Artificial Neural Networks, National Conference on Infrastructure Development and Environmental Assessment (IDEA-2019), Bodh Gaya College of Engineering, Gaya, October 2019

8. Pallavi Khaire, Shamim Pathan, V. M. Phalle (2020) Condition Monitoring of Rolling Element Bearing Having Defect at Inner Race Using Artificial Neural Networks, 7th Mechanical Engineering Research Day (MERD'20, Malaysia, December 2020

9. Priyanka Patil, Pallavi Khaire, V. M. Phalle (2020) Fault Diagnosis of Rolling Element Bearing Using Artificial Intelligence Techniques, 7th Mechanical Engineering Research Day (MERD'20, Malaysia, December 2020

10. Khaire Pallavi, Phalle V. M. (2022), Fault Diagnosis of Journal Bearing,1st International Conference on Vibration Engineering Science and Technology, INVEST 2022, CVS India and FCRIT Vashi.

11. Pallavi Khaire, Vikas phalle, Fault Diagnosis of Rolling Element Bearing Having Defect at Inner Race Using Machine Learning,Indiatrib 2022, 12-14 December 2022, IITDelhi

12. Vikas Phalle, Pallavi Khaire, Ravi Desai , Web application to detect type of fault in anti-friction bearing, Indiatrib 2022, 12-14 December 2022, IIT Delhi

17.   Books/Reports/General articles etc.
18.   Invited Lectures in FDP/ STTP
1. Invited speaker at short term program on Hands on Training on Mechanical Engineering Labs organized by FCRIT Vashi
2. Invited speaker at short term program on Condition Monitoring and Fault Diagnosis organized by FCRIT Vashi

19.   International Conference Technical Program Committee Member / Reviewer
20.   Patents