RESUME

Personal Details

Vilas karbhari Matsagar		
July 11, 1976		
Bhausahebnagar (Pimpri Road), Taluka: Niphad, Dist: Nashik,		
422301,Maharastra, India.		
Mechanical Engineering Department, K. K. Wagh Institute of		
Engineering Education and Research, Hirabai Haridas		
Vidyanagari, Amrutdham, Panchavati, Nashik, Maharastra, India		
422003		
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Educational Qualifications

Degree / Certificate	Board/ University	Institution	Year
Ph.D (Mechanical Engineering)	Savitribai Phule Pune University	Amrutvahini college of Engineering, Sangamner	January 2022
Master in Design	Indian Institute of Technology, Guwahati	Indian Institute of Technology, Guwahati	May2011
B. E. (Mechanical Engineering)	Pune University	K.K.Wagh College of Engineering, Nashik	June 2006
Diploma (Mechanical Engineering)	Mumbai Board	K.K.Wagh Polytechnic, Nashik	June 1997
H.S.C. (Electronics)	Nashik	K.K.Wagh Jr. College, Bhausahebnagar	March 1994
S.S.C. (Technical- Mechanical)	Pune Board	K.K.Wagh Vidyabhawan , Bhausahebnagar	March 1992

Experience

K.K.Wagh College of Engineering, Amrutdham, Nashik.

K. K. Wagh Institute of Enginering Education & Research , Amrutdham, Panchavati, Nashik Worked as Technical Assistant During 03 Sep, 1998 to 01 Jan 2007.

Working as Assistant Professor in Department of Mechanical Engineering since 02 Jan , 2007

Post Graduate Teacher approved since 17/03/2015 from SPPU Pune.

Papers Presented

- Published a paper entitled "Design And Development Of Conveyor For Agricultural Application" in International Research Journal Of Modernization In Engineering Technology And Science (IRJMETS), e-ISSN: 2582-5208 Volume 4, Issue 05, May 2022
- Presented paper at International Conference on Science, Technology and Sustainability (ICSTS - 2022), 05-06 November 2022, en titled "Carbide Coatings effect and Cutting Parameters on Cryogenic Turning of Ti-Al6-4V"
- Presented paper at International Conference on Science, Technology and Sustainability (ICSTS – 2022), 05-06 November 2022, en titled "Design and Analysis of Carbon Fiber Composite Gears"
- Presented paper at International Conference on Science, Technology and Sustainability (ICSTS – 2022), 05-06 November 2022, en titled "Design and Analysis of Carbon Fiber Composite Gears"
- Presented and 1st award paper at International Level conference, en titled "Centrifugal Pumps (Agriculture) unbalance and shaft Dynamic analysis from the experimental data in a rotor system" in International Journal of Current Engineering and Technology E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Feb.2014.
- Presented paper at International Level conference, en titled "Engine Based Trigeneration with Thermal Storage" in International Journal of Current Engineering and Technology E-ISSN 2277 – 4106, P-ISSN 2347 – 5161, Feb.2014.

- Presented paper at International Conference on Tribology,TRIBOINDIA-2018, entitled "Failure Analysis of Agriculture Turbochargers High Speed Shaft and Bearing" 13th -15th December 2018, VJTI, Mumbai, India
- Presented paper at International Conference on Tribology,TRIBOINDIA-2019, entitled "Effect of Die Surface Roughness on the Properties of Metal Composite Material" 1st -4th December 2019, IISc Bangalore
- "Influence of Die Surface Roughness(Ra) on Manufacturing Ni-Cr composite material", Journal of SeyBold Reprot, ISSN No:1533-9211, Volume 15 Issue7 2020
- Sintering Temperature and Applied Pressure Effect on Manufacturing Ni-Cr Based Composite Material", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Volume-9 Issue-3, February, 2020
- "Multiple Attribute Decision-Making (MADM) Method for Material Selection in High Speed Engineering Application" International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2207-6360, Volume 29, No, 9s (2020)
- "Influence of Compressing pressure and Sintering Temperature on Microstructure and Mechanical Properties of Ni-Cr based Composites", Journal Tribologi, ISSN: 2289-7232
- Presented in International Tribology Symposium "Wear analysis of Ni-Cr based self lubricating composite against EN-32 for high speed engineering application", 5th Oct. 2020
- Presented paper at International Level conference, en titled "Net energy Analysis of ethanol, Does sugar cane as a feed stock make sense in India" published in advances in energy research First International Conference at IIT, Bombay.
- Presented paper at State level project competition en titled "Foldable Domestic Solar Dryer" held at Petroleum Conservation Research Association, Mumbai.
- Presented a Paper on entitled "Water Harvesting and Development" held at Ahemednagar

Workshops and Trainings attended

- Participated and attended five days International workshop on "Industrial Tribology" organised by Det. Of Mech. Engg. Amrutvahini College of Engineering, Sangamner sponsored by Savitribai Phule Pune University, Pune from January 15-19, 2019
- Participated in A six day Faculty Develpment Programme (FDP) on " Smart Manufacturing" from 12th -17th September 2022 at AICTE-IDEA Lab. K.K.Wagh Institute of Engineering Education and Research, Nashik
- Participated & completed successfully AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Internet of Things: Product Design, Development and Implementation" from 02/08/2021 to 06/08/2021 at Shri Sant Gajanan Maharaj College of Engineering, Shegaon.
- Participated 5 days virtual international short term course on "Tribology and Sustainability" from 24th to 28th August 2020 organised by SRM Institute of technology, Tamilnadu
- Participated AICTE approved Short Term Training Program on "Composite: Fracture Toughness, NDE and Failure Analysis" online from 18th to 23rd January 2021 organised by Pillai HOC college of Engineering and technology, Rasayani
- Participated TEQIP III sponsored Short Term Training Program on "Electrical Vehicles" jointly organised by Sardar Patel College of Engineering Mumbai and Rewa Engineering College M.O in collaboration with IIIE and SAEINDIA from 20th Jan. To 25th Jan. 2021
- Participated one week AICTE sponsored online Short Term Training Program on "Recent Advances in Tribology and Surface Engineering", organised by Saintgits College of Engineering, Kottayam from 17th to 22nd August 2020 (Series 1/4).
- Participated one week AICTE sponsored online Short Term Training Program on "Recent Advances in Tribology and Surface Engineering", organised by Saintgits College of Engineering, Kottayam from 14th to 19th September 2020(Series 2/4)..
- Work as a chair person for PG Con conducted by Amrutwahini College of Engineering Sangamner, SPPU Pune '5th MECHPGCON 2019' on 21st and 22nd June 2019

- Attended 15 days training workshop on "Condition monitoring and fault diagnosis" at Dahanu Thermal Power Station Dahanu, Palghar April 2019
- Participated a One Day workshop on Syllabus Implementation for the subject Design of Machine Elements-II T.E.(2015), SPPU on 8th January 2018 a MED of K.K.W.I.E.E.&R Nashik
- Attended a Two day workshop on "Interdisciplinary Workshop on Artificial Intelligence: Research and Applications" during 6th and 7th January 2018 at Department of Production Engineering, K.K.Wagh Institute of Engineering Education and Research Nashik.
- Attended a One Day workshop on Syllabus Implementation for the subject Design of Machine Elements-I T.E.(2015), SPPU on 19th June 2018 at R.H.Sapat college of Engineering Nashik
- Attended a one day workshop on "Syllabus Revision of Design of machine Elements-II (TE Mechanical) on 8th November2016 organised by SPPU in association with MED of JSPM's RSCOE, Tathawade, Pune
- Attended a workshop on "Syllabus Reframing of T.E. Mechanical 2015 Course, Subject-Design of Machine Element-I organised by SPPU in association with D.Y Patil Institute of Engineering and Technology, Pimpri Pune on 7th November 2016.
- Participated Two day National level workshop on "Design Paradigms and Research" during 23rd to 24th January 2016 at Late.G.N. Sapkal C.O.E, Nashik
- Participated AICTE sponsored Two week short term training programme on Hyderabad.
- Participated National level Seminar on "Recent Advances in Mechanical Engineering" (RAME-2004) held at K.K.Wagh Engineering College Nashik, during January 16-17, 2004.
- Participated AICTE sponsored One week short term training programme on "Recent Trends in CAE 2008" during 30th June to 4th July,2008 at SVNIT, Surat, Gujarat.
- Participated two days workshop on "Recent Trends in Automobiles" at K.K.W.I.E.E.R, Nashik during 2nd & 3rd February 2007.
- Attended short-term course on "Mechanical Engineering Laboratories Practices" in MACIT, Bhopal during July 19-29 2000.
- Participated in a state level Workshop on "Non-Conventional Energy Resources" at Pune, organized by SVMEC Nashik.
- Attended "Refresher course for Technical Assistant" organized by Continuing Education cell during March 7, 2005.
- Attended a workshop on "Electric Discharge Machine" organized by ISTE Nashik Chapter, during March 19-20,2005.

- > Attended One day seminar on "**Recent Trends In Heat Transfer**" organized by Pravara Rural Engineering College, Loni on January 27,2006.
- Participated in various competition in MECHEAVEN, organized by SAE & K.K.Wagh Engg. College 1) 3D Modelling. 2) Makit 3) Junkyard 4)Poster competition etc.

Online Workshop

- Attended online workshop "ICT Tools For Collaboration" organised by KKWIEER, 1st and 2nd June 2020
- Attended online workshop on "Designing for Experience: Applying Design Thinking to Learning Organization" organised by KKWIEER, on 17th, 19th and 21st July 2020.
- Attended online workshop on "Novel ICT Tools for Teaching Learning" organised by KKW Pharmacy on 30th May 2020.

Online Webinar

- Attended webinar on Entrepreneurship program on E-Mobility , organised by ISIE India , 24th June 2020
- Attended webinar on Energy Management System and Electrical, organised by ISIE India ,17th May 2020
- Attended webinar on Data Science and Artificial Inelegance Application in E-Mobility , organised by ISIE India , 23rd June 2020
- Attended webinar on Latest Development in the Field of Electric Mobility in Association with Sharda University, organised by ISIE India , 23rd June 2020
- Attended webinar on Design, Manufacturing and Testing, organised by ISIE India, 17th May 2020.
- Attended webinar on Automotive and Transportation Design, organised by ISIE India , 16th May 2020
- Attended webinar on E-Mobility Roadmap Technologies, Opportunities and Challenges in Association with JSS Academy of Technical, Bengaluru, organised by ISIE India, 23rd June 2020
- Attended webinar on Project Management, organised by ISIE India , 16th May 2020.

Workshops and Trainings Conducted

Organised Workshop on "Condition Monitoring and Fault Diagnosis" during 28th Dec. To 29th Dec.2018 in association with MED of KKWIEER and IET(UK) Nashik Local Network.

- Organised Workshop for T.E. mechanical Students (Geometric Tolerances Competition)
- > Organised Workshop for T.E. mechanical Students (Design Competition)
- Elective Workshop on Engineering Mechanisms and its used for innovation's at L.S. Raheja School of Architecture, Mumbai on 27th January 2016.
- Conducted one Day Welding Technology workshop for A.B.B. Nasik plant with the Industry Partner Nasik Engineering Cluster on 09 December 2014.
- Conducted one Day Welding Technology workshop for A.B.B. Nasik plant with the Industry Partner 2015.
- Conducted one Day Welding Technology workshop for A.B.B. Nasik plant with the Industry Partner 2017.
- Conducted Auto CAD course for K.K.Wagh Women's Polytechnic, Nasik during January to March 2004.

Academic

- Work as a Admission Co-ordinator for 1st Shift Mechanical Engineering department w.e.f 11/02/2020
- > Worked as a Department NSS unit co-ordinator during 2005 to 2008.
- > Worked as a Non conventional energy system coordinator 2006-2012
- Worked as a faculty / student sport coordinator for academic inter department sport
- > Worked as a various committee head / member for Institute Maffick programme
- > Worked as coordinator for student's Seminar/ Project
- Worked as Faculty Advisor for Mecheven-14 National Event Programme, Conduct by Department of Mechanical Engineering, K.K.Wagh. Institute of Engineering Education & Research Nasik

Project and award

- Overall 2nd prize winner in the event " Dr. G. Padmanabhan Memorial Electric Two Wheeler Design Competition-2022" organised by SAE India at SRM Institute, Chennai during 17-18 Oct.2022
- 3rd Design prize in "Dr. G. Padmanabhan Memorial Electric Two Wheeler Design Competition-2022" organised by SAE India at SRM Institute , Chennai during 17-18 Oct.2022
- Best faculty advisor mentor award received for the event " Dr. G. Padmanabhan Memorial Electric Two Wheeler Design Competition-2022" organised by SAE India at SRM Institute, Chennai during 17-18 Oct.2022

- Ist Prize winner student project in Engineering Talent Search to celebrate Engineer's Day 2022 organised by Laghu Udyog Bharti, Nashik for the projet entitle "Design And Development Of Sieve Mechanism For Seed Sowing Machine Used In Agriculture"
- Ist and 2nd students project prize winner in Institute level organised by IQAC of K.K.W.I.E.E & R Nashik project title "Design And Development Of Sieve Mechanism For Seed Sowing Machine Used In Agriculture" and "Design and Development of Conveyor for Agricultural Application" respectively.
- Ist Prize winner in Project competition for "Foldable Domestic Solar Dryer: Karmaveer-1" held at Petroleum Conservation Research Association, Mumbai.
- Ist Prize winner in Product Development competition for "Heavy Duty Cranes" in MECHEAVEN-2005 held at Nasik, organized by K.K.Wagh Engg. College, Mahindra & Mahindra (Nasik plant) and SAE.
- Ist Prize winner in Product Development competition for "Multipurpose Vehicle for Rural Area" in MECHEAVEN-2006 held at Nasik, organized by K.K.Wagh Engg. College, Mahindra & Mahindra (Nasik plant) and SAE.

Consultancy

- Design and manufacturing "Working model of Breech and Firing Mechanisam of M777 ULH" for School of Artillery Deolali (21 September 2019)
- Consultancy services for "Product design and Production Drawing" for GANRAJ AGRO INDUSTRIES Gate No.174, Taharabad Road, Satana Tal. Satana Dist. Nashik (Maharastra) 423301 worth Rs.20060 date: April 2022
- Consultancy services for "Product design and Production Drawing" for S.S. Enterprises, MIDC, Ambad, Nashik.

Memberships of Scientific and professional Societies

Life Member of Indian Society of Mechanical Engineers (ISME), Chapter Membership No. 1018 SAEINDIA membership no: 7190510097

Academic Project Guidance

- > Design And Manufacturing of concrete Electrical Pole Erection Mechanism
- > Design and Development Internal ploughing unit for Agriculture
- Design and analysis of liquid pesticide spray mechanism and development with whirl technology
- > Design and development solid fertilizer distribution unit for agriculture purpose.

Academic Seminar Guidance

- > Elector Hydrodynamic Spraying system used in Agriculture
- Recent Innovations & Opportunities in Fuel Cell Technology
- > Comparative study of EN31 & Nitronic Steel
- Modes of Failure in Gear Boxes
- > Develop a Program for Selection of Gear pair based on Matlab Software
- Development of Matlab Program for Selection of V belt based on power & C.D
- > Design & Develop mathematical model for selection of V belt based on C.D

Date:

Place: Nashik

Vilas Karbhari Matsagar