RESUME

Dr. Adik Mahadev Takale		
Qualification	Ph.D. (Mechanical Engineering)	
Date of Birth	16/02/1983	
Experience	Teaching – 13 Years	
	Industrial – 6.5 Years	
Area of Interest	Design, manufacturing and process automation	
E-mail ID	adik1617@rediffmail.com	
Mobile number	08805044217	

Educational Qualification

Sr. No.	Degree	University		Year	Percentage	Class
1	Ph.D.	Savitribai Phule Pune University, Pune	Supervisor – Dr. Nagesh K. Chougule (Associate Professor College of Engineering Pune)	May 2019	--	Awarded
2	M.E. (Mech.)	Shivaji University, Kolhapur		Sept. 2012	75.00	First class with Distinction
3	B.E. (Mech.)	Shivaji University, Kolhapur ***(Walchand College of Engineering Sangli)***		May 2004	70.13	First class with Distinction

Project Work

Sr. No.	Course	Title	Brief Outline	Year
1	Ph.D.	Experimental investigations on machining characteristics in Wire-EDM of Ti-Ni shape memory alloy.	Machinability investigation of Ti-Ni shape memory alloy (SMA) has turned into an essential part of the machining area. The effect of variation of process parameters in the macro-WEDM and micro-WEDM of Ti-Ni SMA has been investigated. The mass of Ti-Ni SMA based dynamic compression plate (DCP) is 12.804 gm which is too much less than the SS316L having 24.332 gm. New biomedical material as Ti-Ni is recommended for DCP.	2015-2019

2	M.E. (Mech-PDD	Design and manufacturing of multispindle drilling head for its cycle time optimization.	Reduce the cycle time drastically and induct a method of fool-proof machining because time for one hole drilling is the time for six hole of drilling and these six holes drilled at a time so there is possibility of hole missing is eliminated.	2011-2012
3	B.E.	Auto winding machine.	Winding the wire (steel wire) having the width 2mm and depth 1mm on the bobbin which is used for packing)	2003-2004

Awards

Sr. No.	Name / Type of Award	Reason
1	The Best Teacher Award	Academic performance
2	Letter of Appreciation	Excellent Subject Result
3	Letter of Appreciation	Project Guided

Achievements in Project Competitions

Sr. No.	Achievement
1	Team "VARCHAS" being selected as **"BEST FUTURE CAR AWARD"** for 6th Electric Solar Vehicle Championship (ESVC), organized by Imperial Society of Innovative Engineers (ISIEINDIA). Year – 2019-20.
2	Team "SITCOE" being selected as "**ONE AMONGST THE TOP 35 TEAMS FROM INDIA"** for 5th Edition of Mitsubishi Electric Cup competition. Theme 2020 is "Visualizing IoT solutions for smart automation". Year – 2019-20. **Project Title – "Process control and tool life monitoring using machine learning and IoT".**
3	Team "SITCOE' secured **7th RANK IN INDIA** in 5th Edition of Mitsubishi Electric Cup competition. Theme 2020 is "Visualizing IoT solutions for smart automation". Year – 2019-20. **Project Title – "Process control and tool life monitoring using machine learning and IoT".**

4	One of Team selected in **"AVISHKAR"** the Maharashtra state inter-university research convention in the category medicine pharmacy for zonal level. Year – 2022-23. **Project Title – "Design and development of orthopedic implant by using TiNi shape memory alloy and non-traditional machining process".**
5	One of Team selected in **"AVISHKAR"** the Maharashtra state inter-university research convention in the category Engineering Technology for zonal level. Year – 2022-23. **Project Title – "IoT based Automatic Tool pocket gluing and numbering on drum type automatic tool changer used in vertical machining center".**
6	One of Team selected in **"TECHNO TARANG"** Gujrat, National level project competition in the category healthcare. Year – 2022-23. **Project Title – "Design and development of orthopedic implant by using TiNi shape memory alloy and non-traditional machining process".**
7	Team "SITCOE" being selected as "**ONE AMONGST THE TOP 38 TEAMS FROM INDIA"** from round I for India Automation Challenge 2023. Year – 2023-24. **Project Title – "Design and development of Auto Turret, Auto Focus using AI for Micro Vickers Hardness Tester".**
8	Team "SITCOE" being selected as "**ONE AMONGST THE TOP 20 TEAMS FROM INDIA"** from round II for India Automation Challenge 2023. Year – 2023-24. **Project Title – "Design and development of Auto Turret, Auto Focus using AI for Micro Vickers Hardness Tester".**
9	Team "SITCOE" being selected as "**ONE AMONGST THE TOP 10 TEAMS FROM INDIA"** from round III for India Automation Challenge 2023. Year – 2023-24. **Project Title – "Design and development of Auto Turret, Auto Focus using AI for Micro Vickers Hardness Tester".**
10	Team "SITCOE" secured **2nd RANK IN INDIA** from round IV for India Automation Challenge 2023. Year – 2023-24. **Project Title – "Design and development of Auto Turret, Auto Focus using AI for Micro Vickers Hardness Tester".**

Work Experience

A) Industrial

1) **Four years** experience in **M/s Sanmati CNC engineering works Hatkanangle.** Dist.-Kolhapur, as a development incharge. It includes costing of components, development of castings, process design, jigs & fixtures design and tool design etc. for various automobile & non automobile components (customers are Mahindra Hinoday Ltd., Kirloskar Oil Engines Ltd., JCB Manufacturing Ltd., DANA India (P) Ltd., Aerostar Cummins USA etc. General awareness about T.S.16949 documents.

2) **Two & half years** experience in **M/s Pragati Automation (P) Ltd. Yadrav**. Dist.-Kolhapur, as a Production Engineer. It includes costing of component, development of castings, development of forging components, development of pressure die casting components, development of jigs & fixtures, process design, tool design. Vendor development for production of various components of computerized numerical control (CNC) machines like automatic tool changers (ATC), tool turrets etc. (Customers ACE Manufacturing Systems Ltd., DMG Machine Tools Germany, Makino Machine Tools). General awareness about ISO9000 documents.

Machines handled during industrial work

Center Lathe, Drilling Machine, Milling Machine, Capstan Lathe, Turret Lathe, CNC Turning Center, Vertical Machining Center (VMC), Verical Turret Lathe (VTL), Gear Hobbing Machine, Single Spindle Automat, Spline Rolling Machine, Induction Hardening Machine, Surface Grinding Machine, Cylindrical Grinding Machine, Centerless Grinding Machine, Special Purpose Machines (SPM).

B) Teaching

Designation	From	To	Institution
Associate Professor	01/07/2019	Till date	Sharad Institute of Technology, College of Engineering, Yadrav
Assistant Professor	01/06/2013	31/06/2019	Sharad Institute of Technology, College of Engineering, Yadrav

Lecturer (Workshop superintendent)	05/08/2010	31/05/2013	Sharad Institute of Technology, Polytechnic, Yadrav

Subject Taught

Sr. No.	Postgraduate	Undergraduate	Sr. No.	Polytechnic
1	Fluid Power System and Factory Automation.	Mechatronics	1	Design of Machine Elements
2	Robot Dynamics and Control	Manufacturing Engineering	2	Production Processes
3		Machine Tools	3	Workshop Practices
4		Industrial Fluid Power	4	Manufacturing Technology
5		Machine Design–I	5	Engineering Graphics
6		Machine Design-II		
7		Computer Aided Drafting (CAD)		
8		Machine Drawing and Computer Aided Drafting		
9		Manufacturing Processes-II		
10		Manufacturing Processes-III		

Professional membership

Life Member of Indian Society for Technical Education (LMISTE) – LM94946.

National Programme on Technology Enhanced Learning (NPTEL) Courses

Sr. No.	**Course Name**	**Duration**	**Year**	**% of Marks**	**Class**
1	Metal Cutting and Machine Tools	08 Week	2019-20 (Semester-II)	70	Elite

2	Manufacturing Guidelines for Product Design	08 Week	2021-22 (Semester-II)	72	Elite
3	Automation in Manufacturing	12 Week	2022-23 (Semester-I)	79	Elite+Silver

Consultancy Projects

Sr. No.	Title of Project	Funding Agency	Year	Amount (Rs.)	Status
1	SPM and fixture design for outrigger (10205718)	Sanmati CNC Engineering Works		3,75,000	Completed
2	Air assists universal inspection fixture for CNC CMM	General Machine Tools		55,000	Completed
3	Fixture design for shaft (SK 2664)	Cygnet International Pvt. Ltd.		1,35,000	Completed
4	Fixture design for bearing R (ZNG 10354068)	Sanmati Precision Engineering Pvt. Ltd.		35,000	Completed
5	VMC fixture design for transmission lever (ZNG 10401659)	Sanmati CNC Engineering Works		35,000	Completed
6	Hydraulic fixture design for injector clamp	Shreeved Cad Solution	2022-23	35,000	Completed

Research Projects Sanctioned/Submitted/Executed

Sr. No.	Title	Funding Agency	Cost in Lakhs	Year	Role	Status
1	Design of hydraulic fixture using generative design	Autodesk India	0.57	2018-19	Principal Investigator	Completed

2	Effect of process parameters on machining characteristics in micro-WEDM of Ti-Ni shape memory alloy for orthopedic implant application	Dr. Babasaheb Ambedkar Technological University Lonere	4.5	2019	Principal Investigator	Submitted
3	IoT based Automatic Tool pocket gluing and numbering on drum type automatic tool changer used in vertical machining center	Tata Technology	0.15	2022-23	Principal Investigator	Completed

Technology Transfer

Sr. No.	Details	Client	Year
1	Air assists universal inspection fixture for computerized numerical control (CNC) Coordinate measuring machine (CMM)	New Polytech Engineers, Ichalkaranji.	
2	Process control and tool life monitoring using machine learning and IoT	New Polytech Engineers, Ichalkaranji.	
3	Process control and tool life monitoring using machine learning and IoT	Sonai Engineering Pvt. Ltd., Shiroli, Kolhapur.	

Journal Publications

1) **A. M. Takale**, N. K. Chougule (2018), "Effect of Wire Electro Discharge Machining Process Parameters on Surface Integrity of $Ti_{49.4}Ni_{50.6}$ shape memory alloy for Orthopedic Implant Application", Materials Science and Engineering C, Vol. 97 (2019), pp. 264-274. ***(Science Citation Index Expanded -Elsevier)***.

2) **A. M. Takale**, N. K. Chougule, P. H. Selmokar, M. G. Gawari (2018), "Multi-Response Optimization of Micro-WEDM Process Parameters of $Ti_{49.4}$-$Ni_{50.6}$ Shape Memory Alloy for orthopedic implant application", Advanced Materials Research, Vol. 1150, pp. 1-21. ***(Scopus Indexing- Scientific.Net)***

3) **A. M. Takale**, N. K. Chougule (2018), "Evaluation of Wire Electro-Discharge Machining Performance Characteristics of $Ti_{49.4}Ni_{50.6}$ Shape Memory Alloy and SS316L for Orthopedic Implant Application", Trends in Biomaterials and Artificial Organs, Vol. 32, Issue 2, pp.111-117. ***(Scopus Indexing- The Society for Biomaterials and Artificial Organs)***

4) **A. M. Takale**, N. K. Chougule (2018), "Multi-Objective Optimization of WEDM Process Parameters of $Ti_{49.4}$-$Ni_{50.6}$ Shape Memory Alloy for orthopedic implant application", Journal of Achievements in Materials and Manufacturing Engineering, Vol. 93, Issue 1, pp.12-31. ***(Scopus Indexing- Index Copernicus)***

5) **A. M. Takale**, N. K. Chougule (2018), "Optimization of process parameters of Wire Electro Discharge Machining for $Ti_{49.4}Ni_{50.6}$ Shape Memory Alloys using the Taguchi Technique", International Journal of Structural Integrity, Vol. 10, Issue 4, pp.548-568. ***(Scopus, Emerging Sources Citation Index- Emerald Insight)***

6) S. D. Patil, Y. J. Bhalero, **A. M. Takale** (2020) "Optimization of Design Variables for Carbon/Glass Hybrid Composites Laminates using the Taguchi Technique." World Journal of Engineering, Vol 17, Issue 2, pp. 309-323. ***(Scopus, Emerging Sources Citation Index- Emerald Insight)***

7) S. V. Kumbhar, **A. M. Takale**, A. H. Badiwale, A. D. Gawali, B. S. Bhanase (2018),"Design and development of helical compression spring stiffness testing machine for I.C. Engine valves with stepper motor by using computer control", Asian Review of Mechanical Engineering, Vol. 07, Issue 02, pp. 42-45. ***(UGC Approved)***

8) Sandip Takale, Sutar, **Adik Takale** (2022), "Experimental analysis and investigation effect of DRA (Drag Reducing Agent) in liquid hydrocarbon pipelines", Journal of emerging technologies and innovative research (JETIR), Vol. 9, Issue 8, pp. 445-452. ***(UGC Approved)***

9) V. B. Jaware, **A. M. Takale** (2015), “Review on EDM and Wire-EDM machining of TiNi shape memory Alloys”, International Journal of Engineering Technology, Management and Applied Sciences, Vol. 3, Issue 1, pp. 99-108.

10) **A. M. Takale**, V. R. Naik (2012), “Design & manufacturing of multi spindle drilling head (MSDH) for its cycle time optimization”, International Journal of Mechanical Engineering Applications Research, Vol 03, Issue 01, pp. 133-139.

11) **A. M. Takale**, M. S. Kumbhar, T. D. Pawar, U. I. Bagawan, A. A. Momin, P. A. Naik (2015),“ Experimental investigation on machining characteristics in wire electrical dischrage machine (WEDM) of stainless steel304 (SS304)”, International Journal of Engineering Technology, Management and Applied Science, Vol. 3, Issue 4, pp 216-223.

12) S. V. Kumbhar, **A. M. Takale**, A. H. Badiwale, A. D. Gawali, B. S. Bhanase (2018),“Design and development of helical compression spring stiffness testing machine for I.C. Engine valves with stepper motor by using computer control”, Asian Review of Mechanical Engineering, Vol. 07, Issue 02, pp. 42-45.

Conference Publications

1) **A. M. Takale**, N. K. Chougule, R. L. Patil, A. S. Awate, “Analysis and optimization of wire electro discharge machining parameters of TiNi shape memory alloy using Taguchi technique”, International conference on advances in thermal systems, materials and design engineering (ATSMDE2017), VJTI, Mumbai, Maharashtra. December 21-22, 2017, pp.1-9.

2) **A. M. Takale**, V. R. Naik, “Design and manufacturing of multispindle drilling head (MSDH) for its cycle time optimization” National conference on innovations in mechanical engineering, Singhgad Institute of Technology, Lonavala, Pune, Maharashtra. April 19-20, 2012. pp. 673-679.

3) A. M. Takale, Omkar Chikorde, “Design and manufacturing of hydraulic fixture and water contamination control of hydraulic oil using machine learning for Gear housing on Vertical

Machining Center", International conference on Advancement in Materials Processing Technology (AMPT) 2023, National Institute of Technology, Jamshedpur. July 13-14, 2023.

4) V. S. Patil, A. M. Takale, "Design and Analysis of Cylinder Head Gasket Under Engine Cold Assembly And Cold Start Condition", International conference on Advancement in Materials Processing Technology (AMPT) 2023, National Institute of Technology, Jamshedpur. July 13-14, 2023.

Reviewer for International Journals

1. MAPAN – Journal of Metrology Society of India (Springer)
2. Journal of Engineering, Design and Technology (JEDT) (Emerald)
3. Journal of Nanotechnology: Nanomedicine & Nanobiotechnology

Workshop, Seminar, STTP, Quiz Competition Attended

Sr. No.	Title	Hosted by	Duration
1	Part programming course of AMS vertical machining center (VMC) with FANUC-01-MC system	Micromatic Machine Tools (P) Ltd. Pune.	18 – 23 May, 2007
2	Research Methodology	D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.	30-1 October, 2010
3	Computational Fluid Dynamics	D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.	12-22 June, 2012
4	Advances in Manufacturing Technology	KIT College of Engineering, Kolhapur.	27-8 March, 2015
5	Recent Trends in Manufacturing Technology	Walchand College of Engineering, Sangli.	17-8 April, 2015
6	Advanced Techniques in Research Methodology	Sharad Institute of Technology, College of Engineering, Yadrav.	15-26 June, 2015

7	Technical Communication	IIT BOMBAY.	24-28 August, 2015
8	Train the Trainer Program Under Distance Ready Engineers	Tata Technologies	4-5 Febuary, 2016
9	Pedagogy to Synergogy	Sharad Institute of Technology, College of Engineering, Yadrav.	7-11 May, 2016
10	Geometric Dimensioning and Tolerancing	Accurate Gauging and Instruments (P) Ltd. Pune	16-20 May, 2016
11	Introduction To Hydraulics H 511	Festo India (P) Ltd.	26- 28 May, 2016
12	Advances in CAD / CAM / CAE	Sharad Institute of Technology, College of Engineering, Yadrav.	6-15 June, 2016
13	Technical Pedagogy	Sharad Institute of Technology, College Of Engineering, Yadrav.	7-13 December, 2016
14	Future of Making Things Using Fusion 360	AUDODESK	17-22 April, 2017
15	Recent Trends In Advanced Manufacturing And Quality Through Six Sigma, SQC, ISO and Tooling Structure	Sharad Institute of Technology, Polytechnic, Yadrav.	6-11 May, 2017
16	Factory Automation	Mitsubishi Electric	9-11 October,2019
17	Recent Advances in Modeling and Optimization Techniques	Sharad Institute of Technology, College of Engineerin, Yadrav.	1-5 June, 2020
18	Futuristic Technologies in Mechanical Industries	Dr. D Y Patil Institute of Engineering, Management & Research, Akurdi,Pune.	5-9 June, 2020
19	Importance of Research and How to Prepare for Accreditation	Krishna Chaitanya Institute of Technology and Sciences	18-19 June, 2020
20	Gas Turbine and Space Propulsion	Francis Xavier Engineering College, Tirunelveli.	23 June, 2020

21	Power System Earthing	St.Mother Theresa Engineering College, Tuticorin, Tamil Nadu.	25 June, 2020
22	Research Paper to Patent Filling – A Road Map	VELS Institute of Science, Technology and Advanced Studies, Chennai.	25 June, 2020
23	Energy management in Building	Francis Xavier Engineering College, Tirunelveli.	26 June, 2020
24	Common Tools and Their Applications in E-Teaching and Learning & How to Develop E-Contents	University college for Women, Hydrabad.	26 June, 2020
25	Employment trends post COVID-19	R.M.D. Engineering College, Tamilnadu	28 June, 2020
26	An Insight into Piping Construction in Petrochemical Industry	Francis Xavier Engineering College, Tirunelveli.	29 June, 2020
27	Space Astronomy	Francis Xavier Engineering College, Tirunelveli.	30 June, 2020
28	Recent Trends in Cutting Tool Technology and Force Measurement using Matlab	D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.	24-29 August, 2020
29	Advances in Manufacturing and Materials	D. Y. Patil College of Engineering and Technology	20-24 April, 2021
30	Computer Aided Manufacturing	Sharad Institute of Technology, College of Engineerin, Yadrav.	15 May, 2021
31	Simulation Tools for Research	Sharad Institute of Technology, College of Engineerin, Yadrav.	08-14 Feb., 2022
32	Research Methodology, Research Publication & Patent Filing	Sharad Institute of Technology Polytechnic, Yadrav	11-16 Feb., 2022
33	Eco Friendly Engineering: Concepts and Trends	Vidyavardhini Institute of Technology, Pal, Gargoti.	13-17 Feb., 2022

34	Simulation Tools for Casting and Machining	Sharad Institute of Technology, College of Engineerin, Yadrav.	18-22 July,2022
35	A New Era of Manufacturing-Challenges and Opportunities	D. Y. Patil College of Engineering and Technology	25-30 July, 2022
36	Materials and Advanced Manufacturing	Yashoda Technical Campus, Satara.	22-26 August, 2022
36	Industrial Automation with PLC, SCADA	Sharad Institute of Technology, College of Engineering, Yadrav.	25-27 August, 2022
37	PLC programming and Industry 4.0	TATA Technologies	27 Sept. to 01 Oct.2022
38	Advanced manufacturing – 3D scanning and 3D printing	D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.	11 October, 2022
39	Smart tools and methodologies for academic research	D.K.T.E. Society's Textile and Engineering Institute, Ichalkaranji.	25-29 December 2022
40	Introduction to Industrial Robotics	Sharad Institute of Technology, Polytechnic, Yadrav.	2-6 January 2023
41	Additive Manufacturing – Knowledge and Skill Development towards Industry 4.0	National Institute of Technology, Rourkela	10-14 June, 2023

Resource Person for Workshop, Seminar, STTP

Sr. No.	Title	Topic	Hosted by	Date
1	Recent Advances in Modeling and Optimization Techniques	Taguchi and GRA	Sharad Institute of Technology, College of Engineering, Yadrav.	5th June, 2020

Syllabus Related Workshop Attended

Sr. No.	Title	Hosted by	Duration

1	Curriculum Development of SE Mechanical Engineering	Ashokrao Mane Group of Institutions, Vathat Tarf Vadgaon.	31st December, 2013
2	Teaching Methodology for S.E. Mechanical Engineering Revised Curriculum	Sharad Institute of Technology, College of Engineering, Yadrav.	12th September, 2014
3	Teaching Methodology of Manufacturing Related Subjects (for SE Mechanical Engineering)	KIT College of Engineering, Kolhapur	27th September, 2014

Contribution to co-curricular and extra-curricular activities

1) Working as a consultancy head.

2) Working as a sponsored research head.

3) Working as an AICTE IDEA lab head.

4) Working as a department academic advisory board (DAAB) secretary.

5) working as a NBA criterion coordinator.

6) Worked as a Dean Academics.

7) Worked as an International standardization of organization (ISO) head.

8) Worked as a Dean Industry institute interaction

9) Worked as a college Internal Quality Assurance Cell (IQAC) head.

10) Worked as a research and development coordinator.

11) Worked as a value aided program coordinator under project based learning.

12) Worked as a facilitation center (FC) officer.

Invitee

1) Worked as a judge for state level project competition **'Technocrat 2K14'** held on 11th March 2014 at Sharad Institute of Technology, Polytechnic, Yadrav.

Project Guided

Sr. No.	Academic Year	Project Name	Diploma/Degree

1	2010-11	Multi-Drive Switch Board Cutting Machine	Diploma
2	2010-11	Hydraulic Clamping Fixture on Punching Machine	Diploma
3	2011-12	Fixture Design for The Part of Suspension System of Auto-Rickshaw	Diploma
4	2011-12	Indexing Jig for Kirloskar Oil Engine Front Cover	Diploma
5	2012-13	Textile Beam Lifting Machine On Hydraulic System	Diploma
6	2012-13	Single Point Cutting Tool Sharpening Attachment	Diploma
7	2013-14	Bar Feeding Mechanism For Power Hack-Saw Machine	Degree
8	2013-14	Design and Development Of Special Purpose Honing Machine	Degree
9	2013-14	Design And Development Of Multi Spindle Drilling Head For Its Cycle Time Optimization	Degree
10	2014-15	Experimental Investigation on Performance Characteristics In WEDM of Ti-Ni Shape Memory Alloy	Degree
11	2014-15	Design and Manufacturing of Jig and Fixture for Component, 'Gauge Frame', Being Manufactured For Tata Motors	Degree
12	2014-15	CNC Retrofitting for Conventional Milling Machine For Two Axes	Degree
13	2015-16	Effect of Process Parameters on Machining Characteristics in WEDM of Ti-Ni Shape Memory Alloy	Degree
14	2015-16	Design and Manufacturing Fixture and Air Gauge For Turbine Housing	Degree
15	2015-16	Modeling And Optimization of Inconel-718 on Machining Of CNC WEDM Process	Degree
16	2015-16	Design And Manufacturing of Cam Shaft Angle Measuring System	Degree
17	2016-17	Design and Manufacturing of Fixture for Crankcase Web With POKA-YOKE (KOEL RV3)	Degree
18	2016-17	Investigation of Output Parameters of OHNS Material (T.W.R., M.R.R., Surface Roughness) by Using EDM Process	Degree

19	2016-17	Optimization of WEDM Process Parameters for NITINOL Shape Memory Alloy	Degree
20	2016-17	Process Parameter Optimization of CNC WEDM for Inconel 625	Degree
21	2016-17	Checking of Surface Integrity of Ti-Ni Shape Memory Alloy Machined By WEDM	Degree
22	2017-18	Multi Objective Optimization in Wire Electro Discharge Machining of Process Parameters of Ti-Ni (Nitinol) Shape Memory Alloy Using Integrated Approach of Taguchi Method and Grey Relational Analysis	Degree
23	2017-18	Investigation on Surface Integrity of Optimized Process Parameters on Ti-Ni Shape Memory Alloy	Degree
24	2017-18	Design, Analysis and Fabrication of Hydraulic Scrap Baling Machine	Degree
25	2017-18	Process Optimization and Surface Integrity of INCONEL 625 Machining on WEDM	Degree
26	2017-18	Design and Development of Helical Compressive Spring Testing Machine For IC Engine Valves With Stepper Motor	Degree
27	2017-18	Optimization of Cutting Tool Parameter for Turning of SS304 Using Carbide Tool	Degree
28	2018-19	Design and Development of Jig, Fixture and Special Purpose Machine For Outrigger (Part No. 10205718)	Degree
29	2018-19	Design and Development of Special Purpose Machine and Fixture for Throttle Shaft	Degree
30	2018-19	Design and Manufacturing of Hydraulic Fixture For Trip Cover Plate for VMC/ HMC	Degree
31	2018-19	Design And Development of Fixture and SPM for Wheel Cylinder	Degree
32	2019-20	Design, development and retrofitting of conventional milling machine by PLC operated special purpose machine for face milling operation	Degree
33	2019-20	Design and development of oil dipping machine used for oil coating of crank shaft	Degree
34	2019-20	"Design & Development of Universal Fixture for drilling Bamboo furniture "	Degree
35	2019-20	Design and manufacturing of “Precise Zero Point Clamping System” for the fixture used on VMC for	Degree

		milling operation	
36	2019-20	Study and analysis of behavior of AZ91D manufactured by HPDC using optimization technique	Degree
37	2019-20	Design and development of drilling fixture for bamboo crates	Degree
38	2020-21	Development of CNC router	Degree
39	2020-21	IoT based floor cleaning robot	Degree
40	2021-22	Study and development of software of foundry process for its tooling	Degree
41	2021-22	Pick and place robotic arm for impact testing machine using IoT for aerospacing	Degree
42	2022-23	IoT based Automatic Tool pocket gluing and numbering on drum type automatic tool changer used in vertical machining center	Degree
43	2022-23	Design and development of Hydraulic fixture for cover for vertical machining center	Degree
44	2023-24	Design and development of Auto Turret, Auto Focus using AI for Micro Vickers Hardness Tester	Degree

Project for Covid-19

“Design and Development of Auto Hand Sanitizer Dispenser”.

Software proficiency

Auto-CAD, Solidworks, Auto-CAST.

Hobbies

Doing technical projects, Industry Interaction, Doing yoga.

Declaration

I hereby declare that the particulars given above are true to the best of my knowledge and belief.

Date: ……. **Signature:** …….

(Dr. Adik Mahadev Takale)