Dr. Pravin Potdukhe

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Objective: to bring smile on face of common man by building & making technologies reach them to earn their livelihood.

Academic Performance: High School to Highest Qualifications

Diploma / Degree	Name of Institute	Board / University	Year of passing	Percentage/Division
SSC	Lokmanya Tilak Vidyalaya, Chandrapur.	Nagpur Board	1983	86/Distinction
HSC	Janata Mahavidyalaya, Chandrapur.	Nagpur Board	1985	89/Distinction
B.E. (Mech)	Walchand College of Engg., Sangli	Shivaji University	1989	68.05/First with Distinction
M.E. (Thermal Power Engineering)	Govt. College of Engg. Amravati	Amravati University	1995	73/First
M.B.A	Sardar Patel Mahavidyalaya, Chandrapur	R.T. M. Nagpur University	1997	Second
Phd	Vishveshvaraya National institute of Technology, Nagpur	R.T. M. Nagpur University	2007	

Short term training programme attended

- 1. Cryogenic Technology", organised at I.I.S.C., Bangalore from 27th Sept. 1999 to 8th Oct. 1999
- 2. Research Methods in Design", organised at I.I.T. Delhi from 7th Dec. to 18th Dec. 1999.
- 3. Advances in Solar Energy Technology "at Mech. Engg. Deptt., S.V.R., College of Engineering & Technology, Surat from 3rd July to 14th July 2000
- 4. Computer Aided Drafting & "C" Programming" at RCERT, Chandrapur from 19th Nov. to 30th Nov. 2001.

Positions held

- 1. Lecturer : 21^{st} August 1989 to 26^{th} August 1997 in RCERT, Chandrapur .
- 2. Assistant Professor: 26th August 1997 to 27th August 2007 in RCERT, Chandrapur.
- 3.Professor: 28th August 2007 in RCERT, Chandrapur.
- 4. Head of the Department: 3rd May 2008-27th Oct.2010 in RCERT, Chandrapur.
- 5. Principal: Namdeorao Poreddiwar College of Engg. & Tech., Gadchiroli;28th Oct.2010 to 16th March 2016
- 6. Professor, Department of Mechanical Engg, in RCERT, Chandrapur from 17th March 2016 uptil
- 7. Professor, Head, & Dean (IQAC), RCERT, Chandrapur from 2021-2023
- 8. Officiating Principal, RCERT, Chandrapur from 2023-2024

R&D:

Design & Development of Solar Dryers, Energy auditing and management

Subjects taught

Fluid mechanics, Mechatronics, Power plant Engineering, Energy Conversion, Advanced IC Engines, Fluid Power, Industrial management, Industrial Engineering, Industrial Economics, Engineering Drawing

Projects guided

- 1. Vehicular Pollution
- 2. Design, fabrication & experimentation of heat pipe
- 3. Energy conservation in industries
- 4. Study & design of cold storage plant for Chandrapur market
- 5. Study & design, & fabrication of electromechanical valve
- 6. Integrated maintenance management software: Case study of charging system in M.E.L.
- 7. Study & design, & fabrication of system to run I. C. engine on Gobar gas
- 8. Design, thermal analysis & fabrication of solar dryer for agricultural products
- 9. Development ,modification & experimentation of solar dryer
- 10. Design, fabrication & testing of battery operated bicycle
- 11. Natural convection heat transfer from heated cone
- 12. Development, simulation & experimentation of solar dryer for agricultural products
- 13. Development of pneumatic trainer & lifting platform
- 14. Energy auditing of small scale industries
- 15. Experimental evaluation of heat pipe & thermosyphon
- 16. Development of low cost solar dryer
- 17. Design & fabrication of solar candle making machine
- 18. Design & fabrication of leaf cup making machine
- 19. Design & fabrication of compressed air vehicle
- 20. Design & fabrication of Hydraulic assisted leaf plate making system
- 21. Design & fabrication of Solar slurry dryer
- 22. Design & fabrication of Solar tracking System
- 23. Design & fabrication of Bio digester for ecchornia
- 24. Design & fabrication of Broom making machine

Areas of interest

- 1. Energy conservation & management
- 2. Solar dryers
- 3. Solar energy systems
- 4. Thermal management systems
- 5. Design for heat transfer

Journal publications

	Research Paper	Publication Details
01.	P.A. Potdukhe, Thombre. S.B "Development of new type of solar dryer: Its mathematical modeling and experimental evaluation"	Journal of Energy Research, John Wiley and sons. Vol 32, pp -765-782, 2008
02.	P.A. Potdukhe, Dr. D.V. Bhope, Miss. S.P.Parelwar, "Stress Analysis of Compressed Air Vehicle Chassis by FEM"	International Journal of Engineering, Science and Technology (IJEST), (ISSN: 0975-5462Vol. 4 No.2, February, 2012
03.	Pravin Potdukhe, & others "Solar Assisted Vegetable Cart"	International Research Journal of Engineering and Technology (IRJET), Volume 5, Issue 6, e-ISSN:2395-0056 P-ISSN:2395-0072, June-18
04.	Pravin Potdukhe, "Design, Construction and Testing of Two Wheel Drive Forklift"	International Journal of Research in Advent Technology Vol. 7, Issue-4, April 2019, E-ISSN-

	T	2321-9637, pp 53-55, MG Aricent Educational
		Foundation Foundation
05.	Pravin Potdukhe, Vijay Talodhikar, "Methodology and Design Consideration for Experimental Model to formulate Analytical Equations for Manually Operated Potato Peeling Machine"	JASC – Journal of Applied Science and Computations, Vol-VI, Issue-IV, April-2019, ISSN No 1076-5131, pp. 2860-2869.
06.	Pravin Potdukhe, Vijay Talodhikar, "Design, Experimentation and Performance Testing of Innovative Potato Processor"	International Journal of Research in Advent Technology, Vol. 7, No. 4S, April 2019, E-ISSN:2321-9637
07	Vijay. P Talodhikar ¹ ,P A Potdukhe ² Akash Duldule ³ , Amit Walde ⁴ Sidhant Chahande ⁵ , "A Performance Evaluation of MOPPM by Simulating ANN based model. A Mathematical Approach"	International Journal of Mechanical Engineering, ISSN:0974-5843, Vol.7(Special Issue 5, April-May 2022, 428-437, Kalahari Journals
08	Pravin Potdukhe, Abhijeet Raut "Development of Manually & Solar power driven vehicle for Mobile vegetable & fruit vendors"	Journal of Emerging Technologies and Innovative Research (JETIR),Vol.No. 6, Issue 5., May 2019, ISSN No 2349-5162) ,pp 198-203
09	Pravin Potdukhe,"Design & fabrication of Spices Powdering Machine"	Journal of Harbin Engineering University, ISSN No 1006-7043Vol.42, No.1,pp 46-50,2021
10	Pravin Potdukhe, Vijay Talodhikar, Mahesh Buradkar, Design, Fabrication Testing of solar slurry dryer	Indian Journal of Technical Education (IJTE),ISSN No. 0971-3034 Vol.47, No.1,pp 193-196, May 2024
11	Pravin Potdukhe, Vijay Talodhikar, "Design & Experimental Evaluation of Solar Assisted Candle Making Machine (SACMM)"	Indian Journal of Technical Education (IJTE),ISSN No. 0971-3034 Vol.47, No.1,pp 168-171, May 2024
12	Pravin Potdukhe, Vijay Talodhikar, "Design & Testing of Hydraulic Assisted Hand Operated Leaf Plate Making Machine (HALPMM)	Indian Journal of Technical Education (IJTE),ISSN No. 0971-3034 Vol.47, No.1,pp 197-200, May 2024

National Conferences:

Sr.	Year	Papers presented in conferences : Author(s), Title, Name of conference
No.		
01.	1995	P.A. Potdukhe, "Heat pipe as an efficient heat recovery device", at All India Seminar on Energy Management. "Eco Energy –95" held by Institute of Engineers Nagpur Local Center, Jan. 1995.
02.	2001	P. A. Potdukhe & Prof. V. S. Gorantiwar, "Design & Fabrication of Solar Parabolic concentrator steam generator" at National Renewable energy convention 2001 held at Hyderabad during 26 th , 27 th & 28 th Dec. 2001.
03.	2003	P.A. Potdukhe & Dr. S.B. Thombre," Experimental studies on Portable Agro Solar Dryer", at National Seminar on Energy Management and Optimization in Chemical, Mechanical & Electrical industries, held at Institution of Engineers, Nagpur during 11,12 February 2003.
04.	2006	P.A. Potdukhe, Dr. S.B. Thombre, "Experimental Studies on Inbuilt Thermal Storage Agro Solar Dryer" presented & published at 18th National & 7th ISHMT-ASME Heat and Mass Transfer Conference, IIT, Guwahati, India from January 4-6, 2006.
06.	2010	.P.A. Potdukhe, A.S. Nilawar, "Design, Fabrication and Performance Studies on Leaf Plate Making Machine", published in National Conference on Advances in Mechanical Engineering (AIM-2010), 18 th – 19 th Nov. 2010 at Vasavi College of Engineering, Ibrahimbagh, Hyderabad.
07	2020	P.A. Potdukhe, A.S. Nilawar, "Employment Generation Through Cluster Of Leaf Cup /Plate Machine

published in National Conference on Technology for tribal and rural development (TTRD-2020), 29 th –
30 th Jan. 2020 at Government Polytechnic, Sakoli, Dist. Bhandara

International Conference:

01.	2003	P.A. Potdukhe and Dr. S.B. Thombre, "Design, fabrication and performance of foldable agro solar dryer",		
		presented at international conference on new millenium-alternate energy solutions for sustainable		
		development held on 17-19' January 2003 at PSG College of Technology, Coimbatore, Tamilnadu, INDIA		
02.	2003	P.A. Potdukhe, S.B. Thombre, "Performance Evaluation of detachable Agro Solar Dryer", presented &		
		published at International Conference on Energy & Environmental Technologies for Sustainable		
		Development, M.N.I.T., Jaipur, 8-10 October 2003.		
03.	2003	P.A. Potdukhe, A.S. Nilawar, "Experimental studies on use of petrol kerosene blend as fuel for S.I. engine		
		", presented & published at International Conference on Energy & Environmental Technologies for		
		Sustainable Development, M.N.I.T., Jaipur, 8-10 October 2003.		
04.	2006	P.A. Potdukhe, G.D. Potdukhe, "Experiment With Different Absorber For Rural Friendly Solar Dryer" Ist		
		International Conference On Recent Development In Mechanical Engineering At S.V.S. College Of		
		Engineering & Technology, Tangori, Punjab, Jan. 23-25, 2006.		
05	2020	Pravin Potdukhe, A.S. Nilawar, Dr. D.V. Bhope, "Optimization of Thickness of Hollow Punch – Die for		
		Proposed Solar Assisted Leaf Plate and Cup Making Machine" presented at international conference on		
		Advances in Mechanical Engineering, held on 10,11 January 2020, at VNIT, Nagpur		

Attended STTP/ Conferences/ Workshops

Short term training programme attended

- 1. "Cryogenic Technology", organised at I.I.S.C., Bangalore from 27th Sept. 1999 to 8th Oct. 1999
- 2. Inter- disciplinary Refresher course in Computer applications organised by Chandrapur engineering College from 15th March -15th April 1999
- 3. "Research Methods in Design", organised at I.I.T. Delhi from 7th Dec. to 18th Dec. 1999
- 4. " Advances in Solar Energy Technology" at Mech. Engg. Deptt., S.V.R., College of Engineering & Technology, Surat from 3rd July to 14th July 2000
- 5. "Computer Aided Drafting & "C" Programming" at RCERT, Chandrapur from 19th Nov. to 30th Nov. 2001
- 6. "Industry 4.0- Opportunities & challenges" organised by Department of Mechanical Engineering, Government College Of Engineering, Chandrapur from 03-07 February 2020
- 7. "Managing Start-up Incubation & Ecosystem for the faculty members of DBATU associated Engineering Colleges" organised by I.I.M. Lucknow from 02-06 March 2020
- 8. "Startup incubation training programme, organised by MSFDA in collaboration with RIIDL, Somayya Vidyavihar, Mumbai, from 27^{th} May 2024 to 12^{th} June 2024

Online FDPS participated

- 1. AICTE Training And Learning (ATAL) Academy Online FDP on "Electric Vehicles" from 2020-11-2 to 2020-11-6 at Fr.C.Rodrigues Institute of Technology, Vashi.
- 2. One-Week Faculty Development Programme on "Trends in Energy Conservation Technologies" during July 6-11, 2020, organised by Department of Mechanical Engineering, Vidyavardhaka College of Engineering, Mysuru.
- 3. One Week FDP entitled "Online Teaching- Learning Using Using Ict Tools For Education 4.0" held from 08/06/20 to 13/06/2020 organised by St Vincent Palloti College of Engineering & Technology, Nagpur
- 4. AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Sustainable Development Through Bamboos" from 17/09/2021 to 21/09/2021 at AlamuriRatanmala Institute Of Engineering And Technology, Shahapur
- 5. One Week FDP entitled "Research & development to intellectual Rights A roadmap" held from 22/06/2023 to 26/06/2023 organised by BIT, Wardha

Conferences

- 1. Attended All India Seminar on Energy Management. "Eco Energy –95" organised by Institute of Engineers Nagpur Local Centre, January 1995
- 2. Attended International Conference on "New Millennium-Alternate Energy Solutions for sustainable development" organised by PSG College of Technology, Coimbatore, Tamilnadu, INDIA. 17-19 January, 2003
- 3. Attended National Seminar on Energy Management and Optimization in Chemical, Mechanical & Electrical Industries organised by Institution of Engineers, Nagpur, 11-12 February 2003
- 4. Attended International Conference on "Energy & Environmental Technologies for Sustainable Development", organized by MNIT, Jaipur, 8-10 Oct., 2003
- 5. Attended 18th National & 7th ISHMT-ASME HEAT AND MASS TRANSFER CONFERENCE, organized by IIT, Guwahati, India, January 4-6, 2006
- 6. Attended National Conference on Technology for tribal and rural development organised by Government Polytechnic, Sakoli, during 29-30 january2020
- 7. Attended International Conference on Advances in Mechanical Engineering organised on 10-11 January 2020,organised by VNIT, Nagpur

Workshops attended

- 1. Attended one day workshop on Patent Awareness held at Nagpur University, Nagpur on 8th March 2003
- **2.** Attended "One day NBA Awareness Workshop" organized by YCCE, Nagpur in collaboration with AICTE, Delhi on 29th Ja**n.**, 2004
- 3. Attended "One day Machine condition Monitoring Workshop" organized by Department of Mechanical Engg, in RCERT, Chandrapur, on 20th March, 2004
- **4.** Attended "One day Workshop on Characterisation of materials" organized by Department of Mechanical Engg, in RCERT, Chandrapur, on 23^{rd} February, 2008
- 5. Attended "Workshop on Leadership beyond boundaries" organized by YCCE & NYSS Nagpur, on 12-13th December, 2008
- 6. Attended "Training Programme on Effective Role Execution for Institutional Development" organized by DTE & YCCE Nagpur, on 19-21st February, 2009
- 7. Attended "Workshop on Six Sigma" organized by Acharya Shriman Narayan Polytechnic, Wardha, on 28-30 January, 2010
- 8. Attended two days workshop on Outcome based education & Accreditation for NBA organised by RCERT, Chandrapur on 24-25 November 2018
- 9. Shaping of S& T resource centre (STRC) at Gondwana University, Gadchiroli, on 18 -19 January 2013
- **10.** Attended one day workshop on Maintenance Practises in Industries organised by Dept of Mechanical Engg,RCERT, Chandrapur on 6th March 2019

Extra Curricular Activities:

- 1. A talk on 'How to face interview' and written test for final year B.E. Mech. Engg. Students, 18th Dec., 1998.
- 2. Delivered a lecture on 'Time management' at CSTPS, Chandrapur, 30th July, 2001.
- 3. Provided technical assistance to Adv. Sunil Hastak in Bhagvati Constructions Vs Turbo Machines in Maratha cement Works at Gadchandur on 7th Feb. 2002.
- 4. Member for paper presentation committee 'X-pedition 2002', RCERT, Chandrapur.
- 5. Member III Cell, RCERT, Chandrapur 2003 onwards.
- Acted as judge for national level paper presentation & project model competition, ZEAL-2003 at BDCOE, Wardha on 11th & 12th March., 2003.

Administration:

- 1. Worked as MESA Incharge 1996-97.
- 2. Worked as department Incharge from 21^{st} Dec. to 26^{th} Dec., 1998.
- 3. Officer-In-Charge University exams for two times: Summer-1998, Summer 2006
- 4. Member of Training & placement committee 2000-01.
- 5. Secretary of ISTE, chapter 1999-2001.
- 6. Member of L.E.C., visited to Umrer College of Engg., Dec., 2002.
- 7. Co-ordinator for National Board of accreditation work from Jan. 2002 in the department.
- 8. Chairman, Registration Committee of ISTE-STTP on "Computer Aided Drafting & 'C' Programming" at RCERT, Chandrapur from 19th Nov. 30th November 2001.
- 9. Head of Department of Mechanical Engineering ,RCERT, Chandrapur from 3rd May 2008-27th Oct.2010.
- 10. Organised STTP ISTE sponsored on Solar Energy Technology for clean & sustainable environment from 23rd 28th March 2009, at RCERT, Chandrapur
- 11. Chairman, Board of studies, Mechanical Engineering ,Gondwana University, 2012-2115
- 12. Principal: Namdeorao Poreddiwar College of Engg. & Tech. , Gadchiroli;28th Oct.2010 to 16th March 2016

Memebership:

- 1. The Indian Society for Technical Education
- 2. The Institution of Engineers (India)