

Curriculum Vitae



Name: Dr Pankaj Zine

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Date of Birth: 17-12-1978

Academic Credentials

Class/ Degree	Specialization	Institution	Univer sity	Year	%/CGPA	Class
Ph. D.	Mech.	IIT Delhi	IIT Delhi	2017	--	--
M.E.	Production	COEP, Pune	Pune Univers ity	2003	63.78	First
B.E.	Production	MIT Aurangabad	Dr BAMU A'bad	2001	67.67	First class with Distinction

M. Tech. Project: ‘ Analysis and optimization of cycle time for diesel engine driven welding set.’
Work done at Advani Oerlikon Limited, Pimpri, Pune (MH).

Key Research Areas:

- Product Service Systems

- Service System Design
- Value Co-creation
- Smart Manufacturing

Experience

Sr. No.	Organization	Post	From	To	Years	Months
1	Marathwada Institute of Technology, Aurangabad	Lecturer in Mech. Engineering	13-12-2003	29-01-2005	1 Y	1 M
2	Government College of Engineering, Aurangabad	Lecturer in Mech. Engineering	29-01-2005	22-10-2005	0 Y	8 M
3	Government College of Engineering, Aurangabad	Lecturer in Mech. Engineering	27-10-2005	30-05-2007	1 Y	7 M
4	Marathwada Institute of Technology, Aurangabad	Assistant Prof. in Mech. Engineering	03-08-2007	31-12-2010	3 Y	5 M
5	Marathwada Institute of Technology, Aurangabad	Associate Prof. in Mech. Engineering	01-01-2011	Till date	11 Y	6 M

List of Courses Taught/Teaching at UG level

- Industrial Engineering
- Production Management
- Flexible Manufacturing Systems
- Costing and Financial management
- Machine Tool Design
- Automatic Control Systems

List of Courses Taught/Teaching at PG level

- Reliability Engineering
- Metal Forming Processes
- Quality and Reliability Engineering
- Adv. Machine Tool Design

Additional Assignments/Duties

- ♦ Worked as **NBA coordinator** of Mechanical Engineering Department, Marathwada Institute of Technology, Aurangabad.
 - ♦ Worked as **Coordinator, Internal Quality Assurance Cell (IQAC)** at Marathwada Institute of Technology, Aurangabad.
 - ♦ Worked as **Central PG Coordinator** at Marathwada Institute of Technology, Aurangabad.
 - ♦ Worked as Member of '**Seating Squad**' appointed by Director, Board of Examination & Assessment, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for May-June 2018 examination at M.B.E. Society's College of Engineering, Ambajogai, during 31st May-1st June 2018.
 - ♦ Worked as Member of '**Seating Squad**' appointed by Director, Board of Examination & Assessment, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad for Nov-Dec. 2017 examination at STBT College of Engineering, Tuljapur, Dist. Osmanabad.
 - ♦ Worked as Member of **External Vigilance Squad (ESV)** of Government College of Engineering, Aurangabad for End Semester Examination (ESE) April 2017.
 - ♦ Worked as **Faculty Adviser Students Council**, Marathwada Institute of Technology, Aurangabad for the academic year 2010-11.
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Membership of Professional Bodies

- Indian Society for Technical Education (ISTE) Life Member (LM 41083)
- Indian Institute of Industrial Engineering (IIIE) Life Member (M9693)
- Indian Institute of Production Engineers (IIPE) Annual Member (Reg.No.W/M/1329)

Research Projects/Projects Guided

NIL

Computer/Software Proficiency

- ♦ BlockSim
- ♦ Netica
- ♦ I-DEAS
- ♦ Pro Engineer (Wild Fire 2)
- ♦ All Basic Operating Systems

Seminar/Workshop/Industrial Training/STTP//FDP/CEP/Conference Attended

- ♦ Attended ONE week online Faculty Development Program (FDP) on 'A New Era of Manufacturing-Challenges and Opportunities' organised by Department of Mechanical Engineering, DY Patil College of Engineering and Technology (An Autonomous Institute), Kolhapur in association with ISTE (New Delhi) during 25th - 30th July, 2022.
- ♦ ONE week online Faculty Development Program (FDP) on 'Industry 4.0 with Emphasis on Robotics and Automation' organised by Robotics and Automation Department, DY Patil College of Engineering Akurdi, Pune in association with ISTE and IQAC Cell DYPCOE Akurdi, Pune during 21st - 25th February, 2022.
- ♦ Participated in ONE week Short Term Training Program (STTP) through ICT mode on 'NBA Accreditation' organized by National Institute of Technical Teachers' Training & Research (NITTTR) Kolkata during 22nd - 26th April, 2019 hosted at Marathwada Institute of Technology Aurangabad.
- ♦ Participated in ONE day workshop on 'New Education Policy: Role of DBATU' organized by Dr. Babasaheb Ambedkar Technological University, Lonere hosted at Marathwada Institute of Technology Aurangabad on 23rd June, 2019.
- ♦ Participated in AICTE sponsored ONE week QIP Short Term Course on 'E-Mobility and Innovations in Sheet Metal Forming' conducted by Continuing Education & Quality Improvement Programmes (CE & QIP) IIT Bombay during 16th - 20th July, 2018.
- ♦ Attended ONE week Faculty Development Program (FDP) on 'Use of ICT for Innovative Teaching Learning & Effective Classroom Interaction' organised by Deogiri Institute of

Engineering and Management Studies, Aurangabad in association with Dr. Babasaheb Ambedkar Technological University, Lonere, Raigad during 15th – 19th June, 2018.

- ♦ Attended ONE week Faculty Development Program (FDP) on 'Outcome Based Education and NBA Process' organised by Maharashtra Institute of Technology, Aurangabad during 9th – 14th June, 2018.
- ♦ Attended a Three days Faculty Symposium on 'Engineering Curriculum Innovation: An Outcome Based Education (OBE) Approach' held at PES College of Engineering, Aurangabad during 29th June, 2017 to 1st July, 2017.
- ♦ Participated in a Three days seminar '1st National Teachers' Congress' held in Pune, India organized at Maharashtra Institute of Technology, Pune during 23th – 25th September, 2016.
- ♦ Attended a One day workshop on 'Intellectual Property rights (IPR)' organized jointly by Rashtriya Uchchar Shiksha Abhiyan Maharashtra (RUSA), Rajiv Gandhi National Institute of Intellectual Property Management Nagpur (RGNIIPM) and Dr. Babasaheb Ambedkar Marathwada University, Aurangabad held on 16th August, 2016 at Babasaheb Ambedkar Marathwada University, Aurangabad.
- ♦ Attended a Two-week STTP on 'Modeling and Simulations' at Goa College of Engineering, Ponda, Goa held between 7th to 18th December, 2015.
- ♦ Undergone Eight weeks Summer Faculty Research Fellowship Programme (SFRF) at Department of Mechanical Engineering, Indian Institute of Technology (IIT), Delhi under the supervision of Dr. M.S. Kulkarni during 13th May to 9th July, 2010.
- ♦ Attended One-day seminar on 'CAD / CAM / CAE Applications' at Indo German Tool Room (IGTR) Aurangabad, on 24th February, 2009.
- ♦ Attended XIIth ISTE Staff Convention & National Seminar (MH & GOA Section) organized at JSPM Group of Institutes, Wagholi, Pune during 12th – 13th January, 2008.
- ♦ Attended a One week STTP on 'Modeling and Simulation of Mechanical Systems in Multi Energy Domains: a Bond Graph Approach' at Government College of Engineering Aurangabad, during 9th – 15th January, 2006.
- ♦ Attended a Two day workshop on 'Research Methodologies and Report Writing (RMRW)' organized at Government College of Engineering Aurangabad, during 18th – 19th February, 2006.
- ♦ Attended a One day seminar on 'Supervisory Development and Stress Management' organized at Government College of Engineering Aurangabad, on 1st April, 2006.
- ♦ Attended a Two-week STTP on 'Mechatronics' at VNIT Nagpur, during 2nd – 14th January, 2005.
- ♦ Attended an Industrial Training on 'Six Sigma & TPM' at Merico Industries Ltd. Jalgaon during 23rd – 25th February, 2006.

Seminar/Workshop/Industrial Training/STTP//FDP/CEP/Conference organized

- ♦ Worked as **Convener** in conducting a One Week STTP on 'Recent trends in Automotive Sector and Future Prospectives' organized by Mechanical Engineering Department, MIT, Aurangabad held during 30th August to 3rd September, 2021.
- ♦ Worked as **Organizing Secretary** in conducting a One Week STTP on 'Advances in Materials and Manufacturing Technology (AMMT)' jointly with Dr. Babasaheb Ambedkar Technological University DBATU), Lonere held during 1st- 6th March, 2019, hosted by Mechanical Engineering Department, MIT, Aurangabad.
- ♦ Worked as **Organizing Secretary** in organizing an International Conference on Materials, Manufacturing and Design (iCMMD2017) jointly with Dr. Babasaheb Ambedkar Technological University DBATU), Lonere held during 11-12th December, 2017 hosted by Mechanical Engineering Department, MIT, Aurangabad.
- ♦ Worked as **Institute Coordinator** for Industry Institute Interaction with GIZ-MASSIA sponsored industry projects for under graduate students resulting in completion of 11 industry projects by Final Year students during academic year 2016-17.
- ♦ Worked as **Institute Coordinator** for Industry Institute Interaction with GIZ-MASSIA sponsored industry projects for under graduate students resulting in completion of 8 industry projects by Final Year students during academic year 2017-18.
- ♦ Worked as **Organizing Secretary** for a One Day workshop 'VSSC ISRO's FEAST^{SMT} FEA Technology' held on 11th November, 2017 at Mechanical Engineering Department, MIT, Aurangabad.
- ♦ Worked as **Coordinator** for a five day training program on 'Elements of Structural, Thermal and Coupled Field Analysis in ANSYS', conducted at Mechanical Engineering Department, Marathwada Institute of Technology, Aurangabad, during 1st – 5th February, 2009.
- ♦ Worked as **Convener** for organizing 'Mech Fest – 07', A National Level Technical Symposium held on 4th & 5th April 2007 at Government College of Engineering, Aurangabad.
- ♦ Worked as **Member** of Organizing committee 'Mech Fest – 05', A National Level Technical Symposium, held on 3rd & 4th April 2005, at Government College of Engineering, Aurangabad.
- ♦ Worked as **Member** of Organizing committee Technomillennium 2004, A National level paper presentation competition for engineering students Faculty members & Industry persons held during 15th – 17th September, 2004 at MIT, Aurangabad.
- ♦ Worked as **Member** of organizing committee Technomillennium 2003, A National level paper presentation competition for engineering students held during 15th – 17th September, 2003 at MIT, Aurangabad.

Invited talks delivered

- Delivered an invited talk on 'Recent trends in Modern Manufacturing' at Mechanical Engineering Department at Government Polytechnic Ambad on 11th September 2018.

Projects, Research Grants and Consultancy

- ♦ Currently working on a research project titled 'IndAC-SM' jointly carried on by IIT Bombay, IIT Indore, MIT Aurangabad and local SMEs in the Marathwada region. The project is funded by Royal Academy of Engineering, UK and globally collaborated with Cambridge University and a few SMEs in UK. The project aims at assessment of the readiness of the SMEs for the Industry 4.0. A module on 'Service 4.0' has been taken up for exploration by our Institute team being coordinated by me.
- ♦ Worked as 'Research Associate' on a research project titled as 'Development of an integrated approach for reliability based optimal system design for minimizing life cycle cost with special focus on Indian machine tool industry' funded by Council for Scientific and Industrial Research (CSIR), Govt. of India during July 2011 to May 2014.

Intellectual Property Rights

NIL

List of Research Publications

Papers in National/ International Journal

- ♦ Zine P.U., Kulkarni M.S., Chawla R. and Ray A.K., *Designing Flexible Service Systems: Application to Machine Tools*, "Journal of Intelligent Manufacturing", 27(6): 1237-1259.
 - ♦ Zine P.U., Kulkarni M.S., Chawla R. and Ray A.K., *A Conceptual Framework for Product Service System Design for Machine Tools: Issues in Indian Context*, "Benchmarking: An International Journal", 23(5):1227-1248.
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Papers in International Conferences Proceedings

- ♦ **Zine P.U.** and Joshi P.K., '*Inducing compressive residual stress to minimize effect of crack generation by using controlled shot peening process*', 2nd International Conference and exposition on Advances in Mechanical Engineering (ICAME-2022), held at College of Engineering Pune, India during June 23-25, 2022, in Materials Today Proceedings.
- ♦ Rathod R.R. and **Zine P.U.**, '*Experimental Investigation of Cutting Parameters in AL6061-T6 Turning Operation by MQL*', in the Proceedings of the International Conference on Precision, Meso, Micro & Nano Engineering (COPEN-11), held at Indian Institute of Technology, Indore (M.P.) India during December 12-14, 2019.
- ♦ Bangale N.N. and **Zine P.U.**, '*Productivity Improvement Through Novel Modifications of Tool Holder Manufacturing Process*', in the Proceedings of the 59th National convention of Indian Institute of Industrial Engineering (IIIE) and International Conference on Manufacturing and Industrial Engineering (ICMIE -2017) held at MGM'S Jawaharlal Nehru Engineering College, Aurangabad (M.S.) India during 14-16 September, 2017.
- ♦ **Zine P.U.**, Kulkarni M.S., Chawla R. and Ray A.K., '*A framework for value co-creation through customization and personalization in the context of machine tool PSS, Product Service Systems and Value Creation*'. The 6th CIRP Conference on Industrial Product-Service Systems, University of Windsor, Ontario, Canada, Procedia CIRP 16 (2014): 32-37.
- ♦ **Zine P.U.**, Kulkarni M.S., '*Product service system design and management: Issues relevant to Indian machine tools sector*', in Proceedings of the 16th Annual International Conference of Society of Operations Management, jointly organized by GVSU USA, IIM Lucknow and IIT Delhi, held at IIT Delhi, 21-23 December, 2012.

Papers in National Conferences Proceedings

- ♦ Zine P.U., Waghodekar P.H. and Bhalkikar N.S., '*On Some Aspects of Agile Manufacturing: A Review*', in proceedings of the National level Conference: Advances & Futuristic Trends in Mechanical Engineering (AFTME) 08, held at Atmiya Institute of Technology & Science, Rajkot, Gujrat, 09th December, 2008.
- ♦ Zine P.U. and Nikalje A. M., '*Six Sigma: a Tool for Quality Improvement*,' in proceedings of the National Conference: Enriching the Work Life – A Quality Engineering Perspective, held at Dr. D.Y. Patil College of Engineering Akurdi, Pune, 4 – 6 October, 2007.
- ♦ Nikalje A. M. and Zine P.U., '*Experimental Study and Analysis of Performance of Mineral And Synthetic Lubricants on Wear Characteristics of Bearing Steel AISI 52100*', in proceedings of the National Conference: TAME – 06, held at YCMA, Faridabad, Haryana, 9 – 10 December, 2006.
- ♦ Ambad P.M., Zine P.U., '*Mechatronics: An Application in Automotives*' in proceedings of the National Conference TsyGeca 2006, at Government College of Engineering Aurangabad held during 23rd – 24th January 2006.
- ♦ Ambad P.M., Zine P.U. and Andhale S.R., '*Hybrid Serial/Parallel Engineering*', in proceedings of the National Conference: Advances in Manufacturing Technology in the Era of Globalization (AMTEG) 2005, at Government College of Engineering Pune, 21 – 22 January 2005.

Books/ Book Chapter

- Edited proceedings of 2nd International Conference on 'Materials, Manufacturing and Design Engineering (iCMMMD2017)', Published by Procedia Manufacturing, Volume 20, 2018, pp.1-578.

NPTEL Certification

Start Date	End Date	Duration (in Weeks)	Course Name	Marks (Out of 100)	Performance
August 2019	October 2019	8	Accreditation and Outcome Based Learning	75	Elite-Silver

Awards, Achievements and Recognition

- Winner of research project competition in Institute Academia Pavilion with First cash prize of Fifty Thousand Rupees in National level Exhibition “IMEX- 2018” at Bangalore.
- Recognized Ph.D. guide in Mechanical Engineering under the faculty of Engineering & Technology by Dr. Babasaheb Ambedkar Technological University, Lonere (DBATU).
- Recognized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad as a Post Graduate (PG) Teacher in Production / Manufacturing Engineering under the faculty of Engineering & Technology.
- Recognized as a ‘Certified Mentor’ by Bharatiya Yuva Shakti Trust (BYST) for completing the Mentor Development Programme in April 2016 accredited by City & Guilds, London.
- Served as ‘Subject Expert’ for UG and PG syllabus preparation (curriculum development) at Dr. Babasaheb Ambedkar Technological University (BATU) Lonere, during 7-9 April, 2017.
- Served as ‘Member’ for UG Syllabus Revision Committee (curriculum development) at Dr. Babasaheb Ambedkar Marathwada University (BAMU) Aurangabad in academic year 2016-17.
- Served as a Member of Board of Studies (BoS) in Mechanical Engineering at Dr. Babasaheb Ambedkar Technological University (BATU) Lonere, for academic year 2018-19.

Date: 13 Sept. 2022

Place: Aurangabad