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Dr. B. A. Technological University, Lonere
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Hemant N. Warhatkar

EXPERIENCE

2006-till now	Dr. B. A. Technological University	Lonere
	Associate Professor, Department of Mechanical Engineering	
2003-2006	Dr. B. A. Technological University	Lonere
	Lecturer (Selection grade), Department of Mechanical Engineering	
1998-2003	Dr. B. A. Technological University	Lonere
	Lecturer (Senior Scale), Department of Mechanical Engineering	
1993-1998	Dr. B. A. Technological University	Lonere
	Lecturer, Department of Mechanical Engineering	
1992-1993	B. N. College of Engineering	Pusad
	Lecturer, Department of Mechanical Engineering	
1991-1992	Government Polytechnic	Khamgaon
	Lecturer, Department of Mechanical Engineering	

SUBJECTS

TAUGHT

Graduate Level: Engineering Drawing I and II, Machine Design I, II and III, Theory of Machines and Mechanisms I, II and III, Machine Drawing and Computer Graphics, Process Equipment Design (Elective), Industrial Engineering and Management II.

Post-graduate level: Finite element methods

EDUCATION

▪ Ph.D.

2012 Indian Institute of Technology New Delhi

Title of thesis “**Development of experimental set-ups for quasi-static and dynamic testing of ligament properties and some preliminary results**”

Supervisors - Prof. A. Chawla and Prof. S. Mukherjee, Department of Mechanical Engineering, IIT, Delhi

▪ M. Tech (Design of Mechanical Equipment), CGPA: 7.74/10

1998 Indian Institute of Technology New Delhi

▪ B.E (Mechanical Engineering), First Class with 67.6%

1991 Nagpur University Nagpur

AWARDS/APRECIATION

- NSS coordinator, Appreciation certificate award, Govt. of Maharashtra (2017)

AREAS OF INTEREST

- Biomechanics, Dynamics, Mechanical system Design

PROJECTS UNDERTAKEN

B. E. Project - Evaluation of Stress Concentration Factor by Finite Element Method

- **M. Tech Project** - Design of Screw Extruder for Food Products

PROJECT GUIDED

- Ph. D : 05 (ongoing), M. Tech: 05 (Completed), B. Tech: 27 (Completed)

MEMBERSHIP OF PROFESSIONAL BODIES

- Member, Institution of Engineers, India
- Life Member, Indian Society for Technical Education

ADMINISTRATIVE RESPONSIBILITIES AND ACCOMPLISHMENTS

- In-charge Head, Department of Mechanical Engineering, Dr. Babasaheb Ambedkar Technological University, Lonere (19/7/95 to 29/9/95)
- Additional charge of Workshop Superintendent during 15/6/94 to 10/7/ 94, 27/12/99 to 08/01/2000, 27/4/2001 to 19/5/2001 etc.
- Senior Supervisor, University Examination, Dr. Babasaheb Ambedkar Technological

University, Lonere (2002-2003) (2007-2016)

- Developed Theory of Machines and Mechanisms Laboratory to meet requirements of under-graduate level (1993-1996)
- Infrastructural development of Drawing Halls (1995 & 1998)
- Development of Computational Laboratory to meet requirements of under-graduate level (1998-2003)
- Contributed in the development of curriculum of the subjects in the area of Design Engineering specialization (1993-1996)
- Contributed in the development of curriculum of the subjects Engineering Drawing I and II (2002)
- Member, Internal Quality Assurance Cell, Dr. Babasaheb Ambedkar Technological University, Lonere (2011-2016)
- Member Secretary, Annual Quality Assurance report, Dr. Babasaheb Ambedkar Technological University, Lonere (2011-2016)
- Member, Examination reform Cell, Dr. Babasaheb Ambedkar Technological University, Lonere (2011-2014)
- Member, Organizing Committee, Indradhanushya 2013, State level inter University Youth Festival hosted at Dr. Babasaheb Ambedkar Technological University, Lonere
- Coordinator, Discipline Committee, Indradhanushya 2013, State level inter University Youth Festival hosted at Dr. Babasaheb Ambedkar Technological University, Lonere
- Member, Grievance Committee, Indradhanushya 2013, State level inter University Youth Festival hosted at Dr. Babasaheb Ambedkar Technological University, Lonere
- Member, Steering Committee, National Assessment and Accreditation Council (NAAC), Dr. Babasaheb Ambedkar Technological University, Lonere, Dec. 2013
- Organising secretary, 1st International conference on Manufacturing, Materials and Design (iCMMD), Dr. Babasaheb Ambedkar Technological University, Lonere, Dec. 2016
- Coordinator, University canteens, Dr. Babasaheb Ambedkar Technological University, Lonere (2013-till now)
- Member, Examination Malpractices Committee, Dr. Babasaheb Ambedkar Technological University, Lonere (2013-till now)
- Coordinator, National service scheme, Dr. Babasaheb Ambedkar Technological

University, Lonere (2011-till now)

- Member, Board of studies, Mechanical engineering (2011-till now)

STTP ORGANISED

- Organized AICTE-ISTE short term training programme on 'Creep, Fatigue and Fracture-State of the art' during 15-27 March 2004.

COMPUTER SKILLS SUMMARY

- Programming Languages - C, Fortran77
- Platforms – Windows
- Softwares – Pro E, Lab View, ANSYS™, Image Express motion plus, Cambridge Selector, Microsoft Office.

PUBLICATIONS

- H. N. Warhatkar and S. S. Naik," Concurrent Engineering Design: A Strategy to Compete in the Global Market", Proceedings of National conference on World Class Manufacturing Systems, WCMS-2000, BIT, Jhansi, 2000, pp. 204-208
- R. S. Pawade and H. N. Warhatkar, "Octahedral Hexapod Machine Tool- Revolutionary Machine Tool for the Flexible Manufacturing System", Proceedings of National Workshop on Industrial Problems in Machines and Mechanisms, Priyadarshini College of Engineering and Architecture, Nagpur, 2001, pp. 277-283
- R. S. Pawade, H. N. Warhatkar and V. R. Dhayagude, "Heterarchical FMS: An Alternative Approach", Proceedings of XV National convention of Production Engineers and National Seminar on Emerging Convergence in System, The Institution of Engineers (India), M. P. State Centre, Bhopal, 2001, pp. IFA-5FA
- N. Agrawal and H. N. Warhatkar, "Some Observations on Energy Conservation in Buildings" Proceedings of International conference on Non Conventional Energy Resources, The Institution of Engineers (India), Pune Local Centre, 2001, pp. 41-44
- R. S. Pawade, H. N. Warhatkar and B. F. Jogi, "Factories of Future: IT based Manufacturing", Presented paper in 20th AMTDR Conference, BIT, Mesra, Ranchi, 2002
- D. G. Thakur and H. N. Warhatkar, "Computer Aided Process Planning (CAPP): State of the Art", Proceedings of XVI National Convention of Production Engineers, BHU Varanasi, 2002, pp. 244-248
- S. C. Mandape, J. B. Waghmode, H. N. Warhatkar, S. R. Bate, "Stress Intensity Factor for Surface Cracked Pipes and Elbows", Proceedings of XIII National Conference of

Indian Society of Mechanical Engineers, IIT Roorkee, 2003

- H. N. Warhatkar, A. Chawla, S. Mukherjee, R. Malhotra, "Experimental study of variation between Quasi-static and dynamic load deformation properties of medial collateral knee ligaments" SAE world congress, Detroit, Michigan, USA, 2009.
- A. Chawla, S. Mukherjee, H. N. Warhatkar, R. Malhotra, "Dynamic Characterization of bovine medial collateral ligaments" International research council of injury biomechanics, York, U. K., 2009.
- Sandeep Desai, Raju S. Pawade, Hemant Warhatkar, 'Experimental Investigation in face milling of Mg-Ca1 biodegradable alloy, Proceeding of international conference on Precision, Meso, Micro, and Nano Engineering, COPEN 9, Indian Institute of Technology, Powai, Mumbai, Dec. 9-12, 2015.
- Sandeep Desai, Raju S. Pawade, Hemant Warhatkar, 'Influence of Forging and Machining Parameters on biodegradability of Mg-Ca1 alloy, International conference on Productivity, efficiency and Competitiveness in design and manufacturing (PECDM), PSG college of Technology, Jan 7-9, 2016.
- Sandeep Desai, Raju S. Pawade, Hemant Warhatkar, 'Influence of manufacturing parameters on performance of biodegradable Mg-Ca1.0 implant, International conference on Manufacturing, Materials and Design (iCMMD), Dr. Babasaheb Ambedkar Technological University, Lonere, Dec. 20-21, 2016
- Sandeep Desai, Raju S. Pawade, Hemant Warhatkar, 'Experimental investigation of orthopaedic Mg-Ca1.0 alloy by dry face milling, 6th international and 27th All India manufacturing Technology, Design and Research Conference (AIMTDR 2016), College of Engineering, Pune, Dec 16-18, 2016.
- V. A. Mali, H. N. Warhatkar, R. S. Pawade, 'Assessment of Cutting forces and Temperature in bone drilling, 6th international and 27th All India manufacturing Technology, Design and Research Conference (AIMTDR 2016), College of Engineering, Pune, Dec 16-18, 2016.
- S. H. Kadhane, H. N. Warhatkar, 'Design and development of an integrated compressive-tensile split Hopkinson pressure bar set up, 11th International symposium on plasticity and Impact Mechanics (IMPLAST 2016), Indian institute of Technology, New Delhi.
- S. H. Kadhane, H. N. Warhatkar, 'Review of Experimental techniques used to study mechanical behavior soft biological tissues', International conference on Manufacturing, Materials and Design (iCMMD), Dr. Babasaheb Ambedkar Technological University, Lonere, Dec. 20-21, 2016

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ADEQUATE EXTENSION AND FIELD OUTREACH ACTIVITIES

- Delivered expert lecture on 'Design for Manufacturability' in STTP on 'Advanced materials and Near-net Shape Manufacturing' at Dr. Babasaheb Ambedkar Technological University, Lonere on 22nd August 2003.
- Delivered expert lecture on 'Design optimization' in Course organised for L&T Graduate Trainee Engineers, Baroda, at Dr. Babasaheb Ambedkar Technological University, Lonere during Aug 28 -Sept. 28, 2011.
- Delivered expert talk on 'Mechanical Design Process: Methodology and modeling case study' in ISTE-SRMU sponsored STTP on 'Design of Mechatronics System' at Tulsiram Gaikwad-Patil College of Engineering and Technology Nagpur on 10th June 2014 .
- Delivered a guest lecture on topic Finite element Methods at Vidya Pratishthan's college of Engineering, Baramati on 10th May. 2014.
- Delivered talk on topic 'Design Optimization' in one week FDP on Nature inspired Computations in Engineering (NICE) at Dr. Babasaheb Ambedkar Technological University, Lonere on 22nd May 2015.
- Delivered talk on 'Medical Robotics' in ISTE sponsored one week STTP on 'Robotics and Automation' at PES college of Engineering, Aurangabad on 15th June 2015.
- Delivered talk on 'Injury Biomechanics' in ISTE sponsored one week STTP on 'Robotics and Automation' at PES college of Engineering, Aurangabad on 15th June 2015.
- Session Chair in 6th international and 27th All India manufacturing Technology ,Design and Research Conference (AIMTDR 2016), College of Engineering, Pune, Dec 16-18, 2016.
- Worked as external examiner for examination of M. Tech dissertation (Design Engineering Specialization) at RIT Sakharale and WCE sangali.
- Worked as reviewer for 1st International conference on 'Advances in Thermal systems, Materials and Design Engineering' (AISMDE 2017), at VJTI Mumbai, Dec 2017.
- Session Chair in 1st International conference on 'Advances in Thermal systems, Materials and Design Engineering' (AISMDE 2017), at VJTI Mumbai, Dec 2017.
- Worked as examiner for evaluation of Ph. D thesis of Nagpur University , Nagpur (No. of thesis: 02)

SHORT TERM COURSES / SEMINARS / CONFERENCES ATTENDED

- One day Seminar on 'Total Quality Management' VIT, Pune, (1994)
- Two day National Workshop on 'Relevance of In plant Training in Engineering Curricula' KITS, Ramtek, (1995)
- Two Week Short Term Training Programme on, 'Advanced C', Walchand Institute of Technology, Solapur, (1998)
- SERC School on 'Advanced Manufacturing Technology' , IIT, Delhi, (1998)
- Training Programme on "SYNERGOGY" Organized by GRID and ION Exchange (India), (1999)
- Two Week Summer School on 'Education Technology', Dr. Babasaheb Ambedkar Technological University, Lonere, (1999)
- Two Week Short Term Training Programme on 'Industrial Engineering Challenges in the New Millennium', VIT, Pune, (2000)
- National Conference on 'World Class Manufacturing System' Bundelkhand Institute of Engineering and Technology, Jhansi, (2000)
- One Week QIP Short Term Course on 'Design Practices', IIT, Bombay, (2001)
- Two Month Summer Programme on 'Advanced Manufacturing', IIT, Kharagpur, (2001)
- Two Week Short Term Training Programme on 'Digital Image Processing and Pattern Recognition', Dr. Babasaheb Ambedkar Technological University, Lonere, (2001)
- Two Week Short Term Training Programme on 'Advances in CAD/CAM/CAE', G. S. Institute of Technology and Science, Indore, (2002)
- Two Week Short Term Training Programme on 'Opportunities and Challenges in High Precision Manufacturing', Dr. Babasaheb Ambedkar Technological University, Lonere,(2002)
- Two Week Short Term Training Programme on 'Advanced Materials and Near Net shape Manufacturing', Dr. Babasaheb Ambedkar Technological University, Lonere, (2003)
- Two Week Short Term Training Programme on 'Application of Integral Transform Technique in Science and Engineering', Dr. B. A. Tech. University, Lonere, (2003)
- Two day FEA Training event on 'Discover finite element analysis like never before' organized by finite to infinite, Pune, (2008)
- One Week International course on 'Transportation planning and safety', Indian Institute

of technology, New Delhi, (2010)

- One Week QIP training program on 'Design Innovations', Indian Institute of Technology, Delhi, (2010).
- One Week short term training program on 'Advances in materials and manufacturing processes ', Dr. Babasaheb Ambedkar Technological University, Lonere, (2011).
- One Week Mission 10X workshop Conducted by Wipro Technologies and ISTE at Dr. Babasaheb Ambedkar Technological University, Lonere, (2011).
- Two Week Short Term Training Programme on 'A graphical programming language LabVIEW and its industrial applications', College of Engineering, Pune, (2012).
- One Week short term training program under TEQIP on 'Research Methodology ', Dr. Babasaheb Ambedkar Technological University, Lonere, (2012).
- Two week CEP certificate course on 'Piping Engineering' IIT Bombay (2012)
- One Week CEP course on 'Institutional Building Through Appreciative Mindset' IIT Bombay (2013)
- Two week GIAN course on 'Orthopaedic Biomechanics: Implants and biomaterials' at IIT Kharagpur (Dec.2015)
- One Week Workshop on 'Outcome based education" at Dr. Babasaheb Ambedkar Technological University, Lonere, (June 2016).
- One Week Training on 'Automation Technology' at VTU-Bosch Rexroth Center of excellence, Mysore (October 2016)

OTHER ACTIVITIES

- Coordinator, Degree Classes Timetable (1995)
- Member, Editorial Board, for Marathi Section, First University Magazine, ' Abhyantriki' (1995)
- Member, Admission Committee for 15% First Year B. Tech admission (1995 & 2001)
- Member, Estate Development and Maintenance Committee (2001-2004)
- Member, Prasad Borase Memorial scholarship committee (2001-2003)
- Member, Programme cell, Institution Project Management Unit for TEQIP (2003)
- Member, Inspection Committee, Scrutiny of proposal to start New Engineering and Pharmacy College (2003)

- Faculty Advisor, Mechanical Engineering Students Association, Since its inception (2001- 2004)
- Member, Souvenir Committee, 6th Annual Convention, Maharashtra - Goa Section of ISTE, (2001)
- Convener of various events in Annual Social Gathering, 'Abhiyanta Vasant'(1993-2004)
- Organized educational visits to chemical industries for the students having subject Process Equipment Design (Elective) (2002-2003)
- Member, Board of Examiners, University of Poona
- Coordinator, Marshals Committee, Convocation, Dr. Babasaheb Ambedkar Technological University, Lonere, (2013 till date)
- Faculty Advisor, Society of Automotive Engineers (SAE) Chapter, Dr. Babasaheb Ambedkar Technological University, Lonere, (2015 till date)

Dr. Hemant Warhatkar

Associate Professor

Dept. of Mech. Engg