

Name **Dr. Milind Shrikant Kirkire**

Designation Dean Academics and Associate Professor

Department Mechanical Engineering

Date of Joining the Institute 02/08/2010

Education

DME
(Government Polytechnic Ratnagiri, Maharashtra)

B. E. Mechanical
(Shivaji University, Kolhapur)

M. Tech (Mechanical Engineering) with specialization in CAD/CAM and Automation
(VJTI, Mumbai)

PhD in Mechanical Engineering
University of Mumbai (Research Centre Sardar Patel College of Engineering, Mumbai)

Branch / Specialization **Mechanical Engineering**

Areas of Interest

- Advanced Manufacturing Systems
- Sustainable Manufacturing
- Multi-Criteria Decision Making
- Product Design and Development
- Six Sigma
- Reliability

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Academic Appointments

Name of the University / Institute/ Industry	Duration	Designation
Finolex Academy of Management and Technology, Ratnagiri	From 9 th Oct. 2017 till date	Dean Academics and Associate Professor

Finolex Academy of Management and Technology, Ratnagiri	From 3 rd Nov. 2016 to 26 th June 2018	Head, Mechanical Engineering Department and Associate Professor
Finolex Academy of Management and Technology, Ratnagiri	From 1 st Sept. 2016 till date	Associate Professor in Mechanical Engineering Department
Finolex Academy of Management and Technology, Ratnagiri	From 1 st Dec. 2011 to 31 st August 2016	Assistant Professor in Mechanical Engineering Department
Finolex Academy of Management and Technology, Ratnagiri	From 2 nd August 2010 to 30 th Nov. 2011	Sr. Lecturer in Mechanical Engineering Department
Rajendra Mane College of Engineering and Technology (RMCET), Ambav, Devrukh, Maharashtra. (University of Mumbai)	From 17 th January 2010 to 31 st July 2010	Sr. Lecturer in Mechanical Engineering Department
Rajendra Mane College of Engineering and Technology (RMCET), Ambav, Devrukh, Maharashtra. (University of Mumbai)	From 18 th January 2005 to 16 th January 2010.	Lecturer in Mechanical Engineering Department

**Total Experience – 17.5 Years
(Academic :14 Years and Industry: 3.5 Years)**

Students projects Guided at Masters Level (Completed: 07, On-going: 03)

1. Finite Element Analysis of Femur Prosthesis during Daily Activity.
2. Condition Monitoring for Fault Detection and Diagnosis of Rolling Element Bearing.
3. Investigation of Mechanical Behavior of Corrugated Wire mesh Laminates.
4. Investigation of Effect of Lubricated Joint Clearance on Vibration of Four bar Mechanism.
5. Analysis and Optimization of Single Plate Friction Clutch using Finite Element Method.
6. Design and Analysis of High Pressure Extractor with Supercritical Fluid.
7. Analysis and Optimization of Single Plate Friction Clutch using Finite Element Method.

Seminars/Lecture/Invited Talks Conducted

- ✓ An invited expert session on **Introduction to Computer Aided Engineering** in **AICTE-ISTE sponsored one week STTP** on **Recent advances in Computer Aided Engineering (CAE)** at RM CET, Ambav on 25th June 2018.
- ✓ An invited expert session on **Medical Product Development and Risks** in **AICTE sponsored two weeks FDP** on **Emerging trends and Approaches in Product Design and Development** at PVPIT, Budhgaon on 28th Nov. 2017.
- ✓ An invited expert session on **Corrugated Wire Mesh Laminated Composite Material** in **AICTE sponsored two weeks FDP** on **Recent Trends and Challenges in Materials and Manufacturing Processes** at RIT, Islampur, on 15th Nov, 2017.
- ✓ An invited expert session on **Career opportunities in Engineering** organized by **University of Mumbai** at DBJ College, Chiplun.

Papers Published

Papers Presented/Published in National / International Journals - 16

International Journals – 15

1. Kirkire MS, Rane SB and Abhyankar GJ “**Structural Equation modelling– FTOPSIS approach for modelling barriers to product development in Medical Device manufacturing industries**” submitted to Journal of Modelling in management. (Emerald Publications) Scopus indexed.
2. Kirkire MS, Rane SB and Singh SP (2018) “**Integrated SEM - FTOPSIS Framework for Modelling and Prioritization of Risk Sources in Medical Device Development Process**” Benchmarking: an International Journal, Vol. 25 Issue: 1, pp.178-200, (Emerald Publications) Scopus indexed.
3. N A Barve, M S Kirkire (2017), **Analysis of Single Plate Friction Clutch Using Finite Element Method**, International Journal Of Advance Scientific Research And Engineering Trends, Vol 2, Issue 11, pp.273-276.
4. A V Javir and M S Kirkire, (2017), **Finite Element Analysis of Femur Prosthesis Using ASYS in Static and Dynamic Condition**. IEEE Explore, DOI: [10.1109/ICNTE.2017.7947900](https://doi.org/10.1109/ICNTE.2017.7947900)

5. Kirkire MS and Rane SB (2017). **Evaluation of success factors for medical device development using grey based DEMATEL approach.** Journal of Modelling in management. Vol. 12, Issue 2. **(Emerald Publications) Scopus indexed.**
6. Rane SB and Kirkire MS (2016). **Analysis of barriers to medical device development in India: an interpretive structural modelling approach.** International Journal Systems Assurance Engineering and Management. Vol. 7, Issue 3, pp. 356-369. **(Springer Publications) Scopus indexed.**
7. Rane SB and Kirkire MS (2015). **Interpretive structural modelling of risk sources in medical device development process.** International Journal of System Assurance Engineering and Management. Vol. 8, Supplement 1, pp.451-464. **(Springer Publications) Scopus indexed.**
8. Kirkire MS, Rane SB and Jadhav JR (2015). **Risk management in medical product development process using traditional FMEA and fuzzy linguistic approach: a case study.** Journal of Industrial Engineering International. Vol. 11, Issue 4, pp. 595-611. **(Springer Publications) Scopus indexed.**
9. KD Joshi and Kirkire MS (2017) **Design and Analysis of High Pressure Extractor with Supercritical Fluid.** IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) e-ISSN: 2278-1684,p-ISSN: 2320-334X PP. 33-41.
10. Kasale BB and Kirkire MS (2016). **Investigation of Effect of Joint Clearance on Vibration of Planar Mechanism.** International Journal of Modern Trends in Engineering and Research, Vol. 3 Issue 7, pp. 139-144.
11. Kavatkar TV, Kirkire MS and Salvi HR (2016). **Wear Analysis of Hip Joint Prosthesis: A Review** International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 4 Issue 2, pp.114-126.
12. Abhyankar GJ, Yadav MS and Kirkire MS (2015). **Investigation of Springback design process parameters and effect of unloading Elastic Modulus in V bending of Aluminium HE9.** International Journal of Modern Trends in Engineering and Research (IJMTER) Volume 2, Issue 7, Special Issue of ICRTET'2015.

13. Kavatkar TV and Kirkire MS (2014) **Experimental parametric study of corrugated wire mesh laminates using Taguchi Design of Experiments** International Journal of Engineering Development and Research, Vol. 2, No 2 ISSN: 2321-9939.
14. Nagle VV and Kirkire MS (2014) **A mathematical model to determine sensitivity of vibration signals for localized defects and to find effective number of balls in ball bearing.** International Journal of Engineering Development and Research, Vol. 2, No 3 ISSN:2321-9939.
15. Abhyankar GJ and Kirkire MS (2012) **Optimization of the facilities utilization and Improvement in certain parameters of manufacturing System using simulation,** published in International Journal of Design and Manufacturing Technology (IJDMT), Volume 2 Issue 1.(ISSN Print- 0976 6995, ISSN Online- 0976 7002).

National Journals – 01

1. Knowledge management in supply chain: A case study, Indian Institution of Industrial Engineering Journal.

Papers Presented/Published in National/ International Conferences - 14

International Conferences – 14

1. Medical Product development process: an exploration of sources of risks (2017), 4th International conference on Industrial Engineering, S V National Institute of Technology, Surat, Gujarat, India.(Dec. 21-23). Presented and published in proceedings of ICIE17.pp 750.
2. Implementation of integrated FMEA and TPM in SME: A case study (2017), 4th International conference on Industrial Engineering, S V National Institute of Technology, Surat, Gujarat, India.(Dec. 21-23). Presented and published in proceedings of ICIE17. pp 976.
3. Finite Element Analysis of Femur Prosthesis Using ASYS in Static and Dynamic Condition (2017). 2nd Biennial International Conference on Nascent Technologies in Engineering (ICNTE 2017) (January 27-28). An IEEE Technically Co-Sponsored Conference. Fr. C. Rodrigues Institute of Technology, Vashi, Navi Mumbai, India.

4. Exploring barriers to medical device development from Indian manufacturers' perspective (2015). 3rd International conference on Industrial Engineering, S V National Institute of Technology, Surat, Gujarat, India.(Nov. 26-28). Presented and published in proceedings of ICIE15.
5. Investigation of Springback design process parameters and effect of unloading Elastic Modulus in V bending of Aluminium HE9 (2015). 4th International Conference on Recent Trends in Engineering & Technology (ICRTET'2015) (2nd to 4th July) Organized by SNJB's Late. Sau. K. B. Jain College of Engineering, Chandwad, Dist-Nashik. Proceedings published by McGraw Hill Education.
6. Knowledge management in supply chain: A case study (2012), Indian Institution of Industrial Engineering Journal (22 & 23 November, 2012), International Conference - 'Best Practices in SCM', Bhubeshwar, Odisha".Proc. of 1st Intl. Conference on "BPSCM", pp. 547-554.
7. Knowledge based parametric approach for design of gearbox (2009), published in the proc. of International conference on advanced manufacturing & automation 09, Kalasalingam university, Krishnankoil, Tamilnadu, India.(March 26-28).
8. Artificial intelligence in design (2009), published in the proc. of International conference on Advances in mechanical engg 09, S V National Institute of Technology, Surat, Gujarat, India.(August 3-5)
9. Soft Technologies for Knowledge Management (2009), published in the proc. of International conference (APORS 09) organized by Association of Asia Pacific operational research society , Jaipur, India.(December 6-9).
10. Manufacturing System Simulation & Reengineering for Improved Throughput (2009), published in the proc. of International conference on Latest trends in Simulation modeling & analysis (COSMA 09), National Institute of Technology Calicut, India.(December 17-19).
11. Evaluation of manufacturing System by discrete event simulation (2009), published in the proc. of International conference (APORS 09) organized by Association of Asia Pacific operational research society, Jaipur, India. (December 6-9).

12. Discrete event simulation and re-engineering to improve performance of manufacturing system (2009), published in the proc. of 9th global conference on flexible systems management, GLOGIFT 09 at National Institute of Industrial Engineering (NITIE), Powai, Mumbai. (November 12-14).
13. Product design knowledge reuse (2010), published in the proc. of International conference on Advances in mechanical engg. 2010, S V National Institute of Technology, Surat, Gujarat, India.
14. Exploring the dimensions of lean Supply chains in Pharmaceutical Industry: A case study (2011), published in the proc. of International conference on Advances in Industrial engg. 2011, S V National Institute of Technology, Surat, Gujarat, India. (Nov. 17-19).

National Conferences – 03

1. Design and Analysis of High Pressure Extractor with Supercritical Fluid. 6th National Conference RDME 2017, 17th- 18th March. M.E.S. College of Engineering, Pune.
2. Design automation of gears, published in the proc. of National Conf. on Advances in Mech. Engg.09, RGIT, Mumbai. (January 15-16).
3. Finite element analysis of femur prosthesis using ANSYS in static condition, in the National conference on 30/07/2015 at TKIET, Warananagar, Kolhapur.

Number of Workshops, Seminars, STTPs, FDPs Attended – 31

STTPs and FDPs

1. Two days workshop on “Research Methodology” at RMCET, Ambav (Devrukh) (University of Mumbai), Ratnagiri, Maharashtra, India (5-6 June, 2014).
2. Two weeks ISTE -IITB workshop on “Engineering Thermodynamics” at Remote centre Finolex Academy of management & Technology (University of Mumbai), Ratnagiri, Maharashtra, India (10-21 Dec, 2012).
3. Two weeks ISTE -IITB workshop on “Introduction to Research Methodologies” at Remote centre Finolex Academy of management & Technology (University of Mumbai), Ratnagiri, Maharashtra, India (25 June - 4 July 2012).

4. Two days workshop on "Akaash for Education" at Remote centre Finolex Academy of management & Technology (University of Mumbai), Ratnagiri, Maharashtra, India (10-11 Nov, 2012).
5. One week IUCEE training program on Advances in manufacturing Systems at SVNIT, Surat, Gujarat, India (20-24 June 2011).
6. One week AICTE sponsored STTP on Knowledge management: Issues & challenges at SVNIT, Surat, Gujarat, India (4-8 Jan, 2010).
7. One day national seminar on Institution building & NBA accreditation at TKIET, Warananagar, Kolhapur, Maharashtra, India (2010).
8. Two days seminar on Autodesk Inventor (2009) at Finolex Academy of management & Technology (University of Mumbai), Ratnagiri, Maharashtra, India.
9. One week AICTE-ISTE STTP on TQM in engineering education at VNR VJIET, Hyderabad, Andhra Pradesh, India (17-21 June, 2008).
10. Two days conference & seminar on CFD at I²IIT (International Institute of Information Technology), Pune, Maharashtra, India (14-15 Dec, 2007).
11. Two days AICTE sponsored national seminar on Application of soft technologies in higher education at RMCET, Devrukh, Ratnagiri, Maharashtra, India (25-26 July, 2008).
12. Two days training program on Mechatronics at SAE, Kondhava, Pune, Maharashtra, India (17-18 Jan, 2007).
13. Two weeks STTP on developing teaching competencies at NITTR, Bhopal, Extn. Centre, Pune, Maharashtra, India (9-20 May, 2005).

Professional Membership

1. Indian Society of Technical Education (I.S.T.E)

College Exam Duties

CAP: Worked as Assistant CAP coordinator during summer 2012 (University of Mumbai) examinations.

Sr. Supervisor: Worked as Joint Sr. supervisor during 2011 MCA (University of Mumbai) examinations.

Joint Chief Conductor (JCC): Worked as JCC appointed by University of Mumbai during 2013 examinations.

Carried exam related duties as – **Chairman (paper setting), paper setter, examiner for viva and practical, moderator** as appointed by University of Mumbai for BE and ME Machine design subjects.

Other Experience

College Level Committees

1. Chairman, Library advisory committee
2. Head, Attendance committee
3. Member, College Development Committee
4. Member, IPR Cell
5. Member, Department Advisory Board
6. Member, Anti Ragging Committee
7. Member, anti-ragging squad

Details of contribution as – BoS, session chair/reviewer for conferences/journals/judge

- ✓ **Member, Board of Studies in Fisheries Engineering** at **College of Fisheries, Shirgaon, Ratnagiri** (Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli).
- ✓ **Chaired a technical session on Product and Process Innovations** in **International conference on Industrial Engineering (ICIE 2017)** organised by **SV National Institute of Technology, Surat** on 21st to 23rd December 2017.
- ✓ Reviewer for **National Conference on Changing Technology for Rural Development (CTRD 2K16)** organized by **RM CET, Ambav, Devrukh (University of Mumbai)** during 16th -17th Dec 2016.
- ✓ **Chaired a Session for National Conference on Changing Technology for Rural Development (CTRD 2K16)** organized by **RM CET, Ambav, Devrukh (University of Mumbai)** during 16th -17th Dec 2016.
- ✓ Reviewer for **Springer Link and Inderscience Journals**

- ✓ Contributed as **judge in SHODHVEDH (2017)**, research convention on **Applications of Fuzzy Mathematics in research** organized by **Gogate Jogalekar College, Ratnagiri**.

Projects

Sr. No	Description
1	Improvement of Process capability of surgical screw
2	Improvement in BCT of FMCG products manufacturing
3	Identification and minimization of factors causing dimensional variation in UHMWPE
4	Process capability and sustenance study of surgical device
5	Process improvement for achieving target roughness value in bio materials

Subject Taught

Sr. No.	Name of the Subject	Year/Branch/Semester	Experience
1.	CAD/CAM/CAE	BE Mechanical (SEM VII)	08 Years
2.	Finite Element Analysis	TE Mechanical (SEM VI)	08 Years
3.	Design of Experiments	ME (Machine Design)	4 Years
4.	Robotics (Elective)	BE Mechanical (SEM VIII)	4 Years
5.	Engineering Mechanics	FE (SEM I)	5 Years
6.	Statistical Techniques and Design of Experiments	ME (Machine Design)	02 Years
7.	Production Process - II	SE Mechanical (SEM IV)	04 Years
8.	Industrial Engineering and ERP	BE Mechanical (SEM VIII)	03 Years