Curriculum Vitae

Dr. Dattaji K. Shinde Associate Professor and Head of Production Engineering Department Veermata Jijabai Technological Institute-VJTI Matunga, Mumbai 40019 India Mob: +91 7045809458 Email: <u>dkshinde@pe.vjti.ac.in</u> Google Scholar: <u>https://scholar.google.com/citations?user=BnHRaz0AAAAJ&hl=en&authuser=1</u> ResearchGate: <u>https://www.researchgate.net/profile/Dattaji-Shinde/stats</u> ORCID ID: <u>https://orcid.org/0000-0001-9688-8697</u> Semantic Scholar: <u>https://www.semanticscholar.org/author/Dattaji-K.-Shinde/30578410</u>

Education:

Degree	School /College /University Month an		CGPA/Marks		
Postdoc	JSNN, North Carolina A and T State	1 st Jan 2015 to 30	NA		
	University USA	June 2015			
Ph.D.	North Carolina A and T State	December 2014	4.0/4.0		
Nanoengineering	University USA				
M. Tech. Design Engineering	Indian Institute of Technology IIT Delhi	January 2002	7.4/10		
B.E. Mechanical Engineering	Government College of Engineering,	June 2000	64%		
	Dr. B. A. M. University Aurangabad,				
	India				
M. Tech. Thesis:	Design and fabrication of flapping wing mechanism for Micro Air Vehicle (Prof. Sanjiv Sanghi)				
Ph. D. Thesis : Effect of Electrospun Nanofibers on the Short Beam Strength of Laminated		f Laminated Fiberglass			
	Composite (Advisor-Prof. Ajit Kelkar)				

Principal Fields of Interest:

- Advanced manufacturing-smart/digital manufacturing including system-level modeling and analysis,
- Automation and process control,
- 3D Printing-Additive, nano and bio manufacturing,
- Industry 4.0
- Internet of Things
- Manufacturing Process engineering
- Process Modelling in composites
- Industrial and Project Management
- MCDM theory and techniques

- Product Design and Development
- Dynamic of system and analysis
- Functional and Smart Material synthesis
- Nano Engineered Materials and nanotechnology
- Electrospinning
- Molecular Dynamic Simulations for polymeric composite materials
- Multifunctional Materials
- Low-Cost Composite Manufacturing (VARTM Processing) and Mechanical Characterization of Materials
- Computer Aided Design and Modelling,
- Finite Element Modeling and analysis,
- Fatigue, Impact Modeling and Testing of Polymeric Composites, Ceramic Composites, and Textile Composites,
- Micromechanics Modeling and Testing, Single Fibre Modeling and Testing,
- Design of Mechanical system

Experience: Total 20 Years (till date)

Position	Employer	Beginning	Ending
Associate Professor and Head of Production Engineering	Veermata Jijabai Technological Institute (VJTI) Matunga Mumbai, India	01.09.2022	Continuing
Visiting Professor	University of North Carolina Charlotte NC USA	21.05.2019	31.05.2019
Technical Advisor	S V Gas Pvt. Ltd. Mumbai	01.06.2018	continuing
Associate Professor Production Engineering	Veermata Jijabai Technological Institute (VJTI) Matunga Mumbai, India	18.01.2011	Continuing
Head of Production Engineering	Veermata Jijabai Technological Institute (VJTI) Matunga Mumbai, India	30.06.2016	05.09.2018
Post-doctoral Scholar	Gateway Research Park, Joint School of Nanoscience and Nanoengineering North Carolina A and T State University Greensboro NC USA	02.01.2015	30.06.2015
Graduate Research Assistant	Joint School of Nanoscience and Nanoengineering North Carolina A and T State University Greensboro NC USA	09.08.2011	31.12.2014

Assistant Professor Production Engineering	Veermata Jijabai Technological Institute (VJTI) Matunga Mumbai, India	18.01.2008	09.08.2010
Lecturer Mechanical Engineering	Rajiv Gandhi Institute of Technology, Andheri (west) Mumbai 400069	21.07.2003	17.01.2008
TPI Engineer	Mahanagar Gas Limited Mumbai deputed Through DAT Engineering Mumbai India	13.08.2002	20.07.2003
Lecturer Mechanical Engineering	Saroj Institute of technology and Management Lucknow (UP) India	17.01.2002	31.07.2002

Current Professional Organization Membership

Lifetime Member of ASME (USA), Lifetime Member SAMPE (USA), Lifetime Member WASET, Lifetime Member SAE India, Lifetime Member ISTE (India), and Lifetime Member AMSI. Lifetime Member SAVE International USA

Honors and Awards:

- Reviewer of International Journal on Interactive Design and Manufacturing -Springer
 Nature
- Reviewer of Journal of Engineering Research (JER) Kuwait Univeristy Publication 2020
- Reviewer of Elsevier's the European Polymer Journal from May 2019
- Reviewer of Elsevier's the Journal of the Optics and Laser technology from May 2019
- Reviewer of WASET international Journals for Nanocomposite and nanomaterials
- Reviewer of Sage's the Journal of Composite Materials from May 2019
- The Best Start-up Award by World Trade Centre Mumbai and Chamber of Commerce and Industry on March 2nd, 2019 in the International Conference on Business and Start-up at D Y Patil University Mumbai
- The Best Dronacharya Award for Mentoring Innovation Product for Smart Navigation Band at National level Entrepreneur Competition Organized by Jaro Education Mumbai on 29th of Jan 2019.
- Head of Department of Production Engineering from 30 June2016 to 27 August 2018
- Recipient of Dr. Wadaran L. Kennedy Scholar Award, North Carolina A and T State University, 2012-13

- Recipient of Scholarly Accomplishments and Excellence in Academic Performance Award, Division of Student Affair and International Student and Scholar's office, North Carolina A and T State University, NC 2012
- Assistant Controller of Examination, VJT Mumbai April 20 2009-July 2011.
- Academic Supervisor for M. Sc. (Engineering Business Management), International Manufacturing Centre, University of Warwick, Coventry CV4 7AL, United Kingdom from 2009-2011.
- **Recipient** of Indian Oil Scholarship Award for 1998-2000 for Best Undergraduate Student of Mechanical Engineering at Government college of Engineering Aurangabad.

Service: Holding Additional Portfolio at VJTI Mumbai from Jan. 2016 till date

MHRD's Institutions Innovation Council President,

Start-up and E-Cell Coordinator,

AISHE Convener,

ARIIA Nodal officer,

SAMPE International Student VJTI Mumbai Chapter

SAMPE International Professional Chapter President

Consulting Record:

Industry/Firms	Beginning	Ending
Godrej Boyce Corporation Limited, Mumbai, India	May2008	Continuing
Mukand Steel Limited, Mumbai, India	May 2008	June 2011
Voltas Limited, Mumbai, India	May 2008	June 2011
Siemens Limited, Mumbai, India	May 2008	Continuing
Larsen and Toubro Limited, Mumbai, India	May 2008	Continuing
Mahindra and Mahindra Limited Mumbai, India	May 2008	Continuing
Tata Autocomp System Limited, Pune, India	June 2016	Continuing
Baba Atomic Research Center, Mumbai, India	June 2008	June 2011
Arihant Industrial Corporation limited, Mumbai, India	June 2008	July 2011

Muncipal corporation Greater Mumbai	July 20019	Continuing
Everlast Composites LLP Mumbai	July 20019	Continuing
Seera Composite Pvt LTD Mumbai	July 2018	continuing
Trailer design Checking for Transport commissioner	June 2017	Feb 2019
Mumbai		
EPP Composite Rajkot Gujarat	October 2019	Continuing
Technical Advisor, S V Gas Pvt Ltd. Mumbai	June 1 st 2018	Continuing
Indian Navy Hospital -ASVINI Mumbai	1 st March 2022	Continuing
Deco Metals Pvt. Ltd Vasai	20th March 2021	Continuing

Teaching Experience: Courses Taught from 2002 to 2022 academic years for even and odd semester of

Undergraduate and Graduate Student class of 60 students

- Engineering Mechanics,
- Strength of Materials,
- Dynamics of Machinery,
- Strength of Material Lab,
- Engineering Design,
- Data Structure,
- Graphical User Interface and Data base Management
- Programming languages C, C++,
- Finite Element Analysis,
- Computer Aided Design and Computer Aided Manufacturing,
- Information Technology for Management,
- Management Information System,
- Manufacturing process,
- Tool Design,
- Project management,
- Material Management, Value Engineering,
- Computer Aided Design laboratory,
- Engineering Machine Drawing,
- Engineering Design for Machine Elements,
- Machine Workshop,
- Composite Material Processing and Technology,
- Machine Design

- Theory of Machines
- Nanomaterial and Nanocomposites,

Universities Visited:

- University of North Carolina Charlotte NC from 21-31 May 2019 for research collaboration
- Columbia University New York USA from 1-7 June 2019 for research Collaboration.
- University of Texas A and M University Texas, USA for Research Collaboration from 1st Nov. 2018.
- USA: Through TEQIP –I Attended International Training Programme on Lean Manufacturing at Michigan State University Ann Arbor MI USA (Nov. 2008)
- Visited for Collaborative research to Duke University, North Carolina A and T state University NC USA, Georgia State University Atalanta GA, North Carolina State University NC, South Carolina State University SC, USA (Nov. 2008-2014)

Completed Ph D in Nanoengineering from North Carolina A and T state University NC USA in December 2014.

Research and Publications: Total Publications: 72

Patents	04
Research Projects	16
Papers Published in International Journals	44
Papers Published in International Conferences	26
Papers Published in National Conferences	02
Book Chapter	03
Sessions Conducted in FDP/STTP	23
Short Term Courses Attended (1-2 week)	14

Publication List of Dr Dattaji K. Shinde till June 2021

Peer reviewed Journal and Conference publications

- Divyanka M Sontakke, Dattaji K Shinde, "Development and Characterization of Electrode using PAN/TiO2 Nanofibers to improve the Battery Capacity" Springer International Conference on Recent Evolutions in Energy, Drives and e-Vehicles -REEDeV-2022, Nagpur, September 16-17, 2022 paper Id-34.
- 2. Shradha Chavan, **D. K. Shinde**, "Development of Scheduling Optimization Tool using Excel VBA and Solver for Productivity Improvement of Slitting Machines for PVC/PVDC film", *The Second Indian International Conference on Industrial Engineering and Operations Management, NITW Warangal, Telangana, India, August 16-18, 2022. ID-35.*
- 3. Rohit Agrawal, **D. K. Shinde**, "Vehicle allotment and route optimization for transportation services using logistic techniques in supply chain management", *The Second Indian International*

Conference on Industrial Engineering and Operations Management, NITW Warangal, Telangana, India, August 16-18, 2022. ID-34.

- 4. Dattaji K. Shinde Atul V. Karanjkar (2022), *Design Simulation of Cam Dynamic Test Rig to Facilitate the Study of Modified Four-Dwell Profile Using Minimum Rubbing Velocity*, Journal of Xi'an University of Architecture & Technology Volume XIV, Issue 3, pg. 106-118.
- Suhas A.Uthale, Dattaji K. Shinde, Nadir Ayrilmis (2021), Experimental Study for Flexural Rigidity and Cost Optimization of the Woven Fabric Glass/Carbon/Basalt and Hybrid Epoxy Composites, Journal of Xi'an University of Architecture & Technology, Volume XIII, Issue 7, pg. 683-695.
- 6. Suhas A. Uthale, Nitin Dhamal, **Dattaji K. Shinde**, Ajit D Kelkar (2021), *Polymeric hybrid* nanocomposites processing and finite element modeling: An overview, Science, Progress 2021, Vol.104(3) 1–44 DOI: 10.1177/00368504211029471.
- Divyanka Sontakke, Amit D. Kamble, Dattaji K Shinde, Nadir, Ayrilmis (2021), Synthesis and Characterization of PAN/TiO₂ Based Carbon Nanofibers for Energy Application, *Journal of Xi'an University of Architecture & Technology* Volume XIII, Issue 7, Page. 213-225. https://doi.org/10.37896/JXAT13.7/31321
- 8. Akshay Bogil, **D. K. Shinde**. (2021). Study and Implementation of Project Management Principles in New Product Development in the Automobile Manufacturing Industry. *GRD Journals- Global Research and Development Journal for Engineering*, 6(6), 43-53.
- 9. Aliasgar Bohara1, **D. K. Shinde.** (2018). Synthesis and Characterization of Graphene based Acrylonitrile Butadiene Styrene Nanocomposite Using Fused Deposition Method. Processing of 4th International Conference on Nanotechnology- Applications, Advances and Innovations NANOCON 2018.
- Chandak, M., Naik P. A., Shinde D. K., & Raut, D. (2020). Process Parameter Optimization for Laser 2D Barcode Engraving using Taguchi Design of Experiment Technique. *International Research Journal of Engineering and Technology*, 9(11), 263-267.
- 11. **Dattaji. K. Shinde**, S. C. K. (2019). A review on study of polymers and recent development and future challenges in materials for additive manufacturing-3D printing. *Additive Manufacturing Journal*, 1(3), 53-62.
- 12. Dipesh Patil, Naik P. N., **D. K. Shinde**., D N. Raut. (2021). Framework for Implementing Quality Management System for Heavy Construction Equipment Manufacturing Industry. *International Journal of Engineering Research & Technology (IJERT)*, 10(5), 416-421.
- Divyanka Sontakke, A. T., D. K Shinde, Sujata Parmeshwaran. (2019). Morphological and Electrical Characterization of Polyacrylonitrile Nanofibers Synthesized Using Electrospinning Method for Electrical Application. *International Journal of Electrical and Computer Engineering*, 13(06), 421-426.
- Emmanwori, L., Shinde, D. K., & Kelkar, A. D. (2013). Mechanical properties assessment of electrospun TEOS nanofibers with epon 862/w resin system in a fiber glass composite. 45th ISTC -Wichita KS - Oct 21-24 / 2013,
- 15. Ghorpade, K., Naik, P. A., **Shinde, D. K.,** & Raut, D. (2021). Experimental Investigation of Grit Blasting Parameters on Alpha Case Removal of Forged Alloy Part Ti-6Al-4V used in Aviation Industry. *International Research Journal of Engineering and Technology*, *10*(5), 311-314.
- 16. Gokhare, V. G., Raut, D., & Shinde, D. K. (2017). A review paper on 3D-Printing aspects and various processes used in the 3D-Printing. *Int. J. Eng. Res. Technol*, 6, 953-958.
- 17. Harsh Gyamalani, **D. K. Shinde**. (2020). Application of Project Management Processes for Construction of Gas Pipeline Projects. *International Journal of Innovative Research in Science, Engineering and Technology*, 9(11), 10384-10388.
- 18. Joshi, A. D., Raut, D., & Shinde, D. K. (2017). Study of Simulation Behaviour of Tire and Effect

of Working Conditions on Slipping Behaviour. International Journal of Engineering Science, 14389.

- Kambli, P. V., & Shinde, D. K. (2020). Project Planning for Installation and Commissioning of Odorization Unit for CGD Projects. *International Research Journal of Engineering and Technology*, 9(11), 10384-10388.
- Kausalkumar Patwa, D. K. Shinde, D N Raut. (2018). Comparative study of traditional and agile methodology of Project risk management and application of agile risk tool. The Proceeding of 34th Value Engineering International Conference. - SAVE international 2018 Mumbai,
- Ketan Ghorpade, Naik P. A., D. K. Shinde., D N. Raut. (2021). Experimental Investigation of Grit Blasting Parameters on Alpha Case Removal of Forged Alloy Part Ti-6Al-4V used in Aviation Industry. *International Journal of Engineering Research & Technology (IJERT)*, 10(5), 311-314.
- 22. Kothawade, A., **D K Shinde.** (2019). Improvement of Bottleneck Operations using Facility Planning Techniques in a Major Electric Overhead Travelling Crane Manufacturing Organization. 5th International Conference on Industrial Engineering, Proceeding of ICIE 2019,
- Kulkarni, S. C., J. S., & Shinde D. K. (2019). Mechanical and Electrical Properties of Carbon Nanotubes Based Acrylonitrile Butadiene Styrene Nanocomposite Fabricated Using Fused Deposition Method. SAMPE 2019,
- 24. MASAB USMANI, **D. K. Shinde.**, D N Raut. (2018). Design and fabrication Process of Chemical Storage tank of Fiberglass polymeric composite and its failure analysis. The Proceeding of 34th Value Engineering International Conference. -SAVE international 2018 Mumbai,
- 25. Nagve Vikas, **Shinde. D. K**., Kulkarni V. (2018). Effective Use of A-GPS for Generating Geographical Coordinates to Locate Natural Gas Utilities in Suburban Area. *International Journal of Engineering Research*, 7(5), 82-85.
- 26. Nilesh B. Shahapure, A. D. K., Dattaji. K. Shinde. (2021). Molecular Dynamic Simulation and Experimental Investigation of Short Glass Fiber Reinforced Polymeric Nanocomposites for Mechanical Properties. SAMPE Virtual Conference Proceedings. Long Beach, CA, June 29-July 1, 2021. Society for the Advancement of Material and Process Engineering – North America.,
- Nishad Nahatkar, J. T., Balaji Paikrao, D. K. Shinde, D N Raut. (2018). Development and Implementation of Project Planning Process to Mitigate the Key Factors Responsible for the Project Failure. The Proceeding of 34th Value Engineering International Conference. -SAVE international 2018 Mumbai,
- 28. P. V. Gharat and **D. K. Shinde**, D. N. R. (2019). Design and development of fissure detection and imaging techniques for brown rice kernels to improve quality of rice miller. *Journal of Emerging Technologies and Innovative Research (JETIR)*, 6(2), 40-45.
- Pillewan, V., Raut, D., Patil, K., & Shinde, D. K. (2017). Carbon Nanotubes Based Porous Framework for Filtration Applications Using Industrial Grinding Waste. *International Journal of Materials and Metallurgical Engineering*, 11(2), 202-208.
- 30. Pillewan, V., Raut, D., Patil, K., & Shinde, D. K. (2018). Carbon to Carbon Nanotubes Synthesis Process: An Experimental and Numerical Study. *Materials Today: Proceedings*, 5(2), 6444-6452.
- 31. Poonam Tapare, **D. K. Shinde.** (2017). Zero Base Budgeting in Automotive Part Cost. *International Journal of Engineering Science and Computing*, 7(7), 13795-13801.
- Pramod Nehe, D. K. Shinde. (2018). Inventory Accuracy for Switchboard Manufacturing Plant using Cyclic Counting method. *International Research Journal of Engineering and Technology*, 5(9), 688-695.
- Pritesh V. Kambli, D. K. Shinde. (2020). Project Planning for Installation and Commissioning of Odorization Unit for CGD Projects. *International Journal of Innovative Research in Science*, *Engineering and Technology*, 9(11), 10334-10391.
- R V Kharampure, R. P. H., Arun Sharma, D K Shinde, B E Narkhede, K P Karunakaran. (2017).
 3D Printing of Patternless Sand Molds. Proceeding International Conference on Manufacturing Excellence (ICMAX-2017),
- Ranjan, S. K., & Shinde, D. K. (2018). Implementing Lean Manufacturing Technique in Fabrication Process Planning–A Case Study. *International Research Journal of Engineering and Technology*, 5(7), 2600-2606.

- 36. Ruturaj Bhaskare, **D. K. Shinde.** (2017). Development of Cold Supply Chain for a Controlled Atmosphere Cold Store for Storage of Apple. *International Journal of Engineering Science and Computing*, 7(7), 14207-14210.
- 37. Sachin C. Kulkarni, D. K. Shinde. (2021). Effect of In Fill Patterns on 3D Printed Multi-Wall Carbon Nanotube Based Acrylonitrile Butadiene Styrene Nanocomposite on Mechanical Properties. SAMPE Virtual Conference Proceedings. Long Beach, CA, June 29-July 1, 2021. Society for the Advancement of Material and Process Engineering – North America.,
- Sachin C. Kulkarni, J. S., Dattaji. K. Shinde. (2019). Mechanical and electrical properties of carbon nanotubes based acrylonitrile butadiene styrene nanocomposite fabricated using fused deposition method. SAMPE Conference Proceedings. Charlotte, NC, May 20-23, 2019. Society for the Advancement of Material and Process Engineering – North America. DOI: https://doi.org/10.33599/nasampe/s.19.1406,
- Sachin P Ghongade, D. K. Shinde. (2017). Manufacturing Execution System Approach to Achieve Operational Excellence for Pipes and Fitting Manufacturing Industry. Proceeding International Conference on Manufacturing Excellence (ICMAX-2017) Savitribai Phule Pune University during 3-4 March 2017. Nashik India,
- 40. Sahasrabudhe, O. S., Raut, D., & **Shinde, D. K.** (2017a). Effect of parameter interactions on hybrid TIG MAG arc welding process. *Int J Mech Eng Technol*, 8(10), 332-341.
- 41. Sahasrabudhe, O. S., Raut, D., & **Shinde, D. K.**(2017b). Particle tracing for metal transfer in hybrid TIG MAG arc welding process of interacting heat sources. International Conference on Advances in Thermal Systems, Materials and Design Engineering (ATSMDE2017),
- 42. Sahu, S., & Shinde, D. K. (2017). Multiproject Scheduling By Prioritizing Projects of Domestic Piped Natural Gas Using Analytic Hierarchy Process. *International Journal & Magazine of Engineering, Technology, Management and Research*, 4(6), 588-594.
- 43. Sarambale, D. S., and **D. K. Shinde**. (2017). Electro-fusion joint failure polyethylene pipes analysis and its simulation using finite element analysis. *International Journal of Mechanical and Production Engineering*, 5(11), 51-55.
- 44. Sawant, P., & Shinde, D. K. (2020). Experimental Study of Process Parameters Influencing Powder Coating of EN8 Steel Shaft used for Manual Squeezer off Tool using Taguchi Approach. *International Research Journal of Engineering and Technology*, 9(11), 182-186.
- Sayali Parab, D. K. Shinde., D N Raut. (2018). Standardization of triple constraint in construction industry. The Proceeding of 34th Value Engineering International Conference. -SAVE international 2018 Mumbai,
- 46. Shaikh, A., Pendam, D., & Shinde, D. (2017). Improving Logistics System by using Lean Manufacturing. *International Journal of Engineering Science and Computing*, 7(7), 13959-13962.
- 47. **Shinde, D.,** Kimbro, E., Mohan, R., & Kelkar, A. (2013). Mechanical properties of woven fiberglass Composite interleaved with glass nanofibers. ICCM19,
- 48. Shinde, D. K. (2014). *Effect of Electrospun Nanofibers on the Short Beam Strength of Laminated Fiberglass Composite* North Carolina Agricultural and Technical State University.
- Shinde, D. K., Emmanwori, L., & Kelkar, A. D. (2013). Mechanical Properties Assessment of Electrospun TEOS Nanofibers with EPON 862/W Resin System in a Fiber Glass Composite. 45th ISTC - Wichita KS - Oct 21-24 / 2013,
- 50. **Shinde, D. K.,** Emmanwori, L., & Kelkar, A. D. (2014). Comparison of mechanical properties of EPON 862/W with and without TEOS electrospun nanofibers in nanocomposite. SAMPE 2014, Seattle WA USA, June 2, 2014,
- Shinde, D. K., & Kelkar, A. D. (2014). Effect of TEOS electrospun nanofiber modified resin on interlaminar shear strength of glass fiber/epoxy composite. *World Acad. Sci. Eng. Technol. Int. J. Mater. Metall. Eng*, 8, 54-60.
- Shinde, D. K., & Kelkar, A. D. (2016). Short Beam Strength of Laminated Fiberglass Composite with and Without Electospun TEOS Nanofibers. SAMPE 2016 - Long Beach CA USA, May 23-26 / 2016,
- 53. Shinde, D. K., White, F. T., & Kelkar, A. D. (2014). Flexural behavior of fiberglass polymer composite with and without TEOS electrospun nanofibers. ASME International Mechanical

Engineering Congress and Exposition,

- 54. Suhas Uthale, D. K. Shinde. (2020). Mechanical characterization of neat epoxy resin and its failure analysis using FEM. International Conference on Functional Materials-2020 (ICFM-2020), Proceeding of the International Conference on Functional Materials-2020 (ICFM-2020) to be held during January 6-8, 2020, at Indian Institute of Technology Kharagpur West Bengal 721302.
- 55. Suhas Uthale, N. D., **Dattaji. K. Shinde**. (2021). Comparison of Mechanical Properties of Hybrid Woven Fabric Reinforced Epoxy Composites Fabricated Using of Glass Carbon and Basalt Fibers. SAMPE Virtual Conference Proceedings. Long Beach, CA, June 29-July 1, 2021. Society for the Advancement of Material and Process Engineering– North America.,
- 56. Tamgadge, V., & Shinde, D. K. (2018). Analysis of Critical Success Factors for Construction Projects. *International Research Journal of Engineering and Technology*, 5(9), 414-417.
- 57. Trishala Zende, **D. K. Shinde**. (2017). Causes of Delay and Cost Overruns in A Domestic and Commercial Natural Gas supplying Company and Its Analysis Using Research Methodology. *International Journal of Scientific and Research Publications*, 7(6), 173-177.
- 58. Vicky Pravin Poladia, **D. K. Shinde**. (2017). A Review on use of Mistake Proof (Poka Yoke) Locating Fixture on Ultra SD Cartridge Assembly Line. *International Journal of Advanced Engineering Research and Science*, 4(1), 164-167.
- 59. Viraj R. Ghodke, **D. K. Shinde.** (2018). Cost optimization in Pharmaceutical Industry through Time Study. *International Research Journal of Engineering and Technology*, 5(8) pp.62-69.
- 60. **D. K.Shinde**, Deshmane P.B. (**2009**). Identifying and setting safety stock levels. In the proceeding of *Ninth Global Conference on Flexible Systems Management* November 12-14, 2009, NITIE, Mumbai, India (OM165 pg.1-8).
- 61. **D. K. Shinde**, Deshmane P.B. (**2009**). Optimization of Internal Logistics by Using Different Parameters. In the Proceeding of N*inth Global Conference on Flexible Systems Management*, November 12-14, 2009, NITIE, Mumbai, India (OM166 pg. 1-9).
- 62. Dattaji K. Shinde, Amol Arun Sonawane. (2010)[,] Implementing Lean Manufacturing System on Small Fabrication Shop Using Value Stream Mapping (VSM). In the Proceeding of *International Conference on Frontiers in Mechanical Engineering (FIME-2010)*, 20-22nd May 2010 NIT Surthkal Karnataka, India (MMF-127).
- 63. Kunal B. Hole, **D. K. Shinde** (2017). Installation and Commissioning of New Assembly Line (EGR Valve)", 2nd National Conference on Recent Trends in Mechanical Engineering (NCRTME 2017), WCE, Sangli, NCRTME 2017.
- 64. Snehal Deshmukh, D. K Shinde (2017), Identifying and Analyzing Critical Factors in Laying MDPE Pipeline and GI work, *International Journal of Engineering Research & Technology(IJERT)* Vol.6 (6), 1047-1051.
- 65. Amol A. Sonawane, Dattaji K. Shinde, Kunal R Shinde (2010), Utilizing Lean Thinking for Obtaining Waste Reduction in Construction Supply Chain, *Proceeding of the National Conference on Recent Trends in Mechanical Engineering RTME2020* MET's Institute of Engineering Bhujbal Knowledge Park City Nasik 422003 M. S. India. pp.169-174.
- 66. Ranjeet Yadav, D.V. Pendam, D. K. Shinde(2017), Comparative Thermal and Structural Analysis of High Pressure Gas Turbine Blade using Finite Element Method, *International Journal of Innovative Research in Technology*, June 2017, IJIRT, Volume 4 Issue 1, ISSN: 2349-6002, page. 231-236.

Book Chapters

- 1. Bhosle, A., Sah, A., & Shinde, D. K. (2020). Application of Value Analysis and Value Engineering for Cost Reduction of Global Pumping Unit. In *Advances in Simulation, Product Design and Development* (pp. 663-674). Springer, Singapore.
- 2. P. V. Gharat, D. K. Shinde., D. N. Raut. (2019). Finite element analysis and three-point bend testing

of Indian rice grains with fissures effects. In Advances in Computational Methods in Manufacturing, Lecture Notes on Multidisciplinary Industrial Engineering. (Vol. 2019, pp. 1059-1072). Springer, Singapore.

 Pillewan, V., Raut, D., Patil, K., & Shinde, D. K. (2019). Thermogravimetric/Differential Thermal Analysis (TG–DTA) of Binary Metal Catalyst for Multiwall Carbon Nanotube (MWCNT) Synthesis. *Mechanical Engineering for Sustainable Development: State-of-the-Art Research*, 105. , PART II: MATERIALS AND MANUFACTURING (MM) 12. TG-DTA Analysis of a Binary Metal Catalyst for Multi-Wall Carbon Nanotubes Synthesis (pp. 677). AAP CRC Press book chapters by Talyors & Francis.

• National/International Conference Organized:

- 1. 1st International Conference on Recent Advancements in Design and Manufacturing (ICRADM 2020) being jointly organized by VJTI and SVNIT Surat, India during 16th-17th July 2020.
- National Start-up Networking Conference 2020 organized for faculty student and entrepreneurs during the 14th, 15th and 16th February 2020 in association VJTI Start-up Cell of TEQIP-III, VJTI Alumni Association and MHRD IIC for VJTI at VJTI Mumbai Role as President.
- National Start-up Networking Conference 2019 organized for faculty student and entrepreneurs during the 2nd and 3rd February 2019 in association VJTI Start-up Cell of TEQIP-III, VJTI Alumni Association and MHRD IIC for VJTI at VJTI Mumbai Role as President.
- National Start-up Networking Conference 2018 organized for faculty student and entrepreneurs during the 17th and 18th February 2018 in association VJTI E -Cell at VJTI Mumbai Role as President.

Selected Keynote Lectures and workshop presentation: 23

- Delivered the keynote address at Online FDP & STTP on "NANOTECHNOLOGY: Synthesis, Characterization and Applications of Nanomaterials in Engineering & Science" organized by Department of Mechanical Engineering Under lead College activity Shivaji University, Kolhapur and in association with ISTE, New Delhi on 21 January 2022.
- Delivered the keynote Address on Industry 4.0 Future & Readiness of India for Manufacturing Growth for "Online Conference on Emerging Technology" DTE Government of Maharashtara Azadi ka Amruta Mohotsav at TCET Mumbai conducted on 26th November 2021.
- 3. Delivered talk on Role of Nanotechnology in Renewable Energy applications AICTE ATAL Academy FDP Programme on 'Renewable Energy source during 13-18 Dec. 2021 organized by

Department of Electrical Engineering of St. Vincent Pallotti College of Engineering & Technology, Nagpur-441108

- Delivered Talk on 3D printing of polymeric nanocomposites prospect and challenges in the FDP on 3D Printing and Design sponsored by AICTE's Training and Learning (ATAL) academy at SPCE Mumbai on 22 September 2021.
- Delivered Talk on Nanotechnolgy Impact on Development of functional Materials in the FDP on Recent trends in Nanotechnology sponsored by AICTE-ISTE Department of Engineering Sciences, Pravara Rural Engineering College, Loni Dist: Ahmednagar (MS)-413736 on 29 December 2021.
- 6. Delivered talk on "Effect of Electrospun Nanofibers and Carbon Nanotubes on Properties of Polymeric Composite Failure analysis" in AICTE ATAL Academy FDP Programme on 'Composite: Fracture toughness, NDE and failure Analysis' during17-22 Nov. 2020 organized by Department of Mechanical Engineering of PHCE Rasayani Panvel.
- Delivered talk on "Effect of Electrospun Nanofibers and Carbon Nanotubes on Properties of Polymeric Composite as Functional Material" in AICTE ATAL Academy Sponsored FDP Emerging Materials and Nanotechnology during 5-9 Oct. 2020 organized by Department of Automobile Engineering of PHCE Panvel.
- Delivered the keynote address "Effect of Electrospun Nanofibers and Carbon Nanotubes on the Properties of Polymeric Composite and its Failure Analysis" ICRADM-2020 International conference at SVNIT Surat on 17th July 2020
- 9. Delivered talk on "Effect of Electrospun Nanofibers and Carbon Nanotubes on Properties of Polymeric Composite as Functional Material" in One Week Faculty Development Programme on 'Future Materials: Nanocomposites' from 15th June, 2020 to 21st June, 2020 organized by Department of Mechanical Engineering of BV (DU), COE, Pune.
- Delivered Expert Talk on Research methodology and design of experimentation in the AICTE ISTE STTP at Government Polytechnic Thane during 25-29 June 2018.
- 11. Delivered Expert Talk on Nanofiber synthesis, characterization and its application for Composite Materials in the AICTE FDP at Department of Textile VJTI during 30-4 November 2019
- 12. Delivered Expert Talk on nanofiber synthesis, characterization and its application for Composite Materials in the AICTE FDP at production Engineering Department VJTI during 5-10 March 2018
- Delivered Expert talk on "Nanotechnology potential and Application" at Finishing School foe one day workshop at MGM's College of Engineering Kamothe Panvel Navi Mumbai on 20th December 2017
- 14. Delivered Expert talk on "Nanotechnology it potential and challenges" at FDP/STTP for one week on "at S B Patil College of Engineering, Savitribai Phule Pune University from Nov 6-10, 2017

- 15. Delivered Expert talk on "Recent trend in nanocomposite processing and its Application" at QIP FDP/STTP for one week on "at VJTI, Mumbai From October 30-Nov 4, 2017
- 16. Delivered the keynote address talk at National Workshop on "Recent trends on Processing of Nanocomposite and its application: at Amity University on 18th August 2017.
- 17. Delivered Expert talk on "Nanomaterials: processing Modeling and simulation" at QIP FDP/STTP for one week on "at VJTI, Mumbai from 19-24 March December 2017
- 18. Delivered Expert talk on innovative research at Student Research on 'Episteme-2016: Change, Challenge and Opportunities in emerging markets' Sinhgad Institute of Business management SIBM, Chandivali, Mumbai on 20th Feb 2016
- Delivered Expert talk on Advances in Nanoengineering and nanotechnology at RGIT on, October 4th 2015.
- 20. Delivered Expert talk on Value Engineering for Materials management at QIP FDP/STTP Three days symposium on "Value Engineering at competitive advantage "at VJTI, Mumbai From 29-31 December 2008
- 21. Delivered Expert talk on Lithography and Nanomaterials at QIP FDP/STTP on Advances in Manufacturing and technology at VJTI during 22-27 Feb. 2016.
- **22.** Delivered Expert talk on FEA in Dynamics and Fracture Mechanics" FDP/STTP on Optimization and FEM in Mechanical Engineering" in RGIT from 13 to 17 November 2006.
- 23. Organized and delivered talk on TEQIP sponsored Short Term Training Programme on 'Modern Trends in Machining and Materials' at VJTI Mumbai, 16th-20th February 2009.

Short Term (1-2 Weeks) Programs Attended: 16

- Dr Dattaji Shinde of Veermata Jijabai Technological Institute Mumbai has participated in the IIC Online Sessions conducted by Institution's Innovation Council (IIC) of MHRD's Innovation Cell, New Delhi to promote Innovation, IPR, Entrepreneurship, and Start-ups among HEIs from 28th April to 22nd May 2020 during COVID-19 nationwide lockdown
- Dr. Dattaji K Shinde VEERMATA JIJABAI TECHNOLOGICAL INSTITUTE Successfully Completed Training on "Pre- Incubations & Incubation Management" conducted as part of IIC Innovation Ambassador Training Series Organized by Institution's Innovation Council of MHRD's Innovation Cell, AICTE held at ACS College of Engineering, Bangalore, Karnataka on 26-27 February 2020.
- 3. Orientation Program: Data Structures Using C/C++ Language
- Attended QIP short term program IIT BOMBAY: Innovative Tribo Design (One week) from 05 to 09 November 2004

- Attended ISTE Short term training program at GEC Aurangabad: 'Modeling and Simulation of Mechanical Systems in Multi Energy Domains: a Bond Graph Approach' during 9 to 15 January 2006.
- 6. Attended ISTE Short term training program at RGIT Mumbai: Project Management (One week)
- Attended Seminar Renewable Energy Community Development and Showcase Workshop 2006 IIT Powai, Mumbai(Two day)
- Attended STTP on "Optimization and FEM in Mechanical Engineering" in RGIT from 13 to 17 November 2006.
- Attended Seminar on "Nanotechnology and its applications" held in Mahatma Education Society's Pillai's Institute of Information Technology, Engineering, Media Studies and Research, New Panvel, Mumbai.
- Attended Faculty Development Programme "Larson & Turbo Imagineering Connect "2nd June 20th June, 2008 (Three weeks).
- 11. Worked as resource person in A Three Days Symposium on "Value Engineering at competitive advantage "at VJTI, Mumbai From 29-31 December 2008.
- Attended Short term training Programme on "Modern Trends in Machining and Materials" at VJTI Mumbai from 16-20 February, 2009(one Week)
- Attended two day workshop on "Effective role execution for institute development training module T. M. -6" under TEQIP Networking Activity at VJTI Mumbai from 4-5th of March 2009.
- 14. Attended Faculty Development Program under TEQIP, "Build People to Build the institute "Conducted by Lifeskill Education Academy at VJTI from Sept 1st to 3rd November 2008.
- 15. International Training programme on "Lean Manufacturing" by University Of Michigan college of Engineering held at Orlando Florida USA from 3 to 7 November 2008 (one week).
- International Training Certificate programme on "Nanotechnology in Energy application" By IIT Bombay, Mumbai India from 1 December to 12 December 2008 (two week).

Principal investigator, In-charge and founding member of Centre for Advanced Material Research and innovative Manufacturing (CAMRIM) as interdisciplinary Nanotechnology centre ate VJTI, Mumbai from June 2016 till date.

Research Project completed (Submitted/Sanctioned):16

Project Approved and completed: 1. Design and testing of Playground equipment for Arihant Industrial corporation, Vasai, Mumbai (Cost Rs 1.0 lakh): PI: Prof. Dattaji K. Shinde, Co-PI Prof. D N Raut

- Design and testing of Polymeric fibre glass composite rod and panels for building application with SHERA Mahaphant Fibre Cement (AS) Pvt. Ltd Mumabi (2.0 Lakh) ongoing: PI: Prof. Dattaji K. Shinde, Co-PI Prof. D N Raut.
- iii. Research Consultancy project completed for Municipal corporation of Greater Mumbai for composite material and stainless-steel material testing and analysis consultancy of Amount Rs. 20,24,000.00 for 2019-20 as PI-Dr Dattaji K Shinde.
- iv. Research Consultancy project completed for Municipal corporation of Greater Mumbai for composite material and stainless-steel material testing and analysis consultancy of Amount Rs. 400,000.00 for 2020-21 as PI-Dr Dattaji K Shinde.
- v. Research Grants:
 - Research Project applied to Velocity Technology for US Department of Defense *Title: Cartridge Design Using Nanoengineered Materials:* PI: Prof. Ajit D Kelkar, Co-PI: Ram V Mohan and **Dr. D K Shinde** during 2014-15
 - Research Project applied to Department of Higher technical Ministry Maharashtra state under institute infrastructure development Project: *Title: A Proposal On Research Centre For Postgraduate Studies in Production Engineering, PI*: Prof. D N Raut and Co-PI: **Prof.** D K Shinde, Project Duration: Three years and Project Cost: Rs. 3.44 Crore (received Grant in Setp.2018)
 - 3. RUSA proposal for Centre of Excellence for CAMRIM proposal submitted- 3.52 Crore, reference No 22160959 date 31.08.2017.
 - 4. MHRD's NPIU, TEQIP-II Additional Grant approved for interdisciplinary centre CAMRIM:
 1.19 Cr out of that 68.0 Lakhs are used for purchasing of equipment for research 2016-17.
 - MHRD's Global Initiative of Academic Networks (GIAN) Training program is approved for Nanotechnology Advances In Engineering Materials And Manufacturing Program is scheduled July 08 – 13, 2019 of Grant Rs. 8.0 Lakh (2017-18) as PI
 - MHRD's SPARC proposal is under review for Advances and Challenges in Engineering Materials and its Manufacturing using Nanotechnology with Texas A and M State University and North Carolina A and T State University for two years period of Grant: Rs. 93.00 Lakh (2018-19)
 - 7. MHRD's NPIU TEQIP-III Research Grant for Synthesis of CNTs and composite Material fabrication and characterization grant received of Rs.. 25.00 lakh (2017-18)
 - 8. MHRD's Global Initiative for Academic Network (GIAN) six-day Training Program on "Nanotechnology Advances and Challenges in Engineering Materials and Manufacturing "of Grant amount Rs. 5.55 lakh for 2018-19 as PI.
 - 9. AICTE QIP Faculty Development program Grant for 2015-16 one-week program grant of

amount Rs 540000 for 50 participants

- 10. AICTE QIP Faculty Development program Grant for 2016-17 one-week program grant of amount Rs 540000 for 50 participants
- 11. AICTE QIP Faculty Development program Grant for 2017-18 one-week program grant of amount Rs 540000 for 50 participants as PI
- 12. AICTE ATAL FDP Faculty Development program Grant for 2020-21one-week program grant of amount Rs 93000 online virtual training of 200 participants as PI

Doctoral Theses Supervised:

Registration	Student Name	Title of Thesis
Year		
2016	Mr. Nitin Dhamal	Effect of carbon nanofibers and CNTs on ILSS of laminated
		carbon fibers epoxy composite
2016	Mrs. Divyanka Sontakke	Nanocomposite analysis and experimental study for
		Aerospace
2016	Mr. Nilesh Shahapure	Molecular dynamic simulation of nanocomposite for satellite
		structural application
2016	Mr. Sachin Kulkarni	3 D printing of carbon fibers reinforcement polymer
		composite
2016	Mr. Suhas Uthale	Modelling and analysis of failure of hybrid composite for
		structural application
2017	Mr. Amit Kamble	Fracture toughness of the carbon fiber laminated epoxy
		nanocomposite with interleaving using carbon nanofibers

B. Tech and M. Tech. Thesis Supervised: (till date)

Degree	Student	Project Location
	Supervised	
M. Tech Dissertations	98	In-house and reputed industries like TATA,
		Volkswagen, SIEMENS, L&T, Godrej, HPCL, KSPG,
		Bharat Forge, Lumax, 3D PLM etc.
B. Tech In-plant training and Project	115	Godrej, L&T, Volkswagen, SIEMENS, HPCL,
work of 6 months duration		Thermax Industries, etc.
M Sc. Engineering Business	02	CII Mumbai office performed project at Godrej and
Management at University of		Bharat Forge Limited

Warwick, Warwick Manufacturing

group UK

Ph D in Production/Industrial 06 Engineering at VJTI Mumbai University, Mumbai India Nanotechnology and composite material and simulation and analysis of materials research is conducted.

Service: Committee Membership and Other Academic Activities:

- Course coordinator and PI for One week course of Global Initiative for Academic Networks, Ministry
 of Human Resource Development Government of India on "Nanotechnology advances and
 Challenges in Engineering Materials and Manufacturing" during July 8-13th, 2019 at VJTI Mumbai
 India.
- E-cell of VJTI faculty Advisor from August 2018 till date
- Board of Studies member for K K Wagh college of Engineering (Autonomous) Savitribai Phule Pune University from Dec. 2018
- Start-up Coordinator for VJTI from October 2017 till date
- MHRD's Institutions Innovation Council President for VJTI from Nov. 2018 till date
- ARIIA ranking VJTI Nodal Officer from Nov. 2018 till date
- Departmental NBA Coordinator for UG and PG programme from 2016
- SAMPE Student International Chapter Advisor for VJTI Mumbai.
- Coordinator for AISHE and RUSA activities at VJTI Mumbai from 2015-16 till date
- Founder Faculty Advisor for International SAMPE Student Chapter at VJTI Mumbai form 2017
- Expert committee member for Ph D student selection interview at SPCE Mumbai March 2017
- External Auditor for Academic Audit at K J Somaiya Vidhyavihar Mumbai March 2017
- Expert committee member for Ph D student selection interview at SPCE Mumbai July 2015.
- Worked as Controller of Examination for 2 years from April 2009 to July 2011
- Institute Level Co-coordinator for UGC autonomy extension report submission in 2010.
- Main coordinator for Institute level publicity on Awards and main function.
- Co-coordinator for achievement and recognition of Faculty and staff program on Birth anniversary of Veermata Jijabai celebration for every 12th of January
- Institute level Co-coordinator for NBA accreditation during 2009-10
- Worked as departmental coordinator for networking program 2008-2010.
- NBA Accreditation for B. Tech Production and M Tech production (2009)
- Worked as co-coordinator direct second year admission for Degree (2008-20010)
- TEQIP -1 Department coordinator 2008-2010.

- Working as Editorial member of World Academy of Science, Engineering and Technology (WASET) USA from 2014 till date.
- Worked as coordinator and Resource person for a three days symposium on "Value Engineering at competitive advantage "at VJTI, Mumbai from 29-31 December 2008.
- Designed and developed Value engineering Course curriculum for interdisciplinary Master and Ph D. level elective course and taught for 2008-2011.
- Coordinator for Value Engineering specialist Mumbai chapter from 2010.
- **Resource Person** and taught FEA in Dynamics and Fracture Mechanics" STTP on Optimization and FEM in Mechanical Engineering" in RGIT from 13 to 17 November 2006.
- Working as **APS Committee member** for Ph D Student in Production Engineering from July 2015 till date.