

Name:

Dr. Hari Vasudevan
Principal, DJSCE

Professor in Mechanical Engineering

Ph.D. (Indian Institute of Technology Bombay)

M.E. Production Engg. (VJTI)

Post-Graduate Diploma in Industrial Engg. (VJTI)

B.E. Industrial Production (GIT)



Vidwan Link:

<https://vidwan.inflibnet.ac.in/profile/336363>

Google Scholar Link:

<https://scholar.google.co.in/citations?user=5VLWivUAAAAJ&hl=en>

Researchgate Link:

<https://www.researchgate.net/profile/Hari-Vasudevan>

ORCID:

<https://orcid.org/0000-0003-2425-7532>

Publons

Researcher ID:

<https://publons.com/researcher/4914477/hari-vasudevan/>

Other Responsibilities / Assignments:

1. Nominee of the Hon'ble Chairman, University Grants Commission (UGC) in the Executive Council of Krishna Vishwa Vidyapeeth (Deemed to be University), Karad, Maharashtra.
2. Nominee of the Vice-Chancellor of the University of Mumbai on the **Governing Body** of Lokmanya Tilak College of Engineering, Navi Mumbai from October 2024.
3. Nominee of the Vice-Chancellor of the University of Mumbai on the **Governing Body** of St. John College of Engineering and Management, Palghar from May 2024.
4. Member (Internal Expert of the University appointed by the Vice Chancellor), **Research & Recognition Committee (RRC)** in Mechanical Engineering, University of Mumbai.
5. Former **Chairman, Board of Studies** in Production Engineering, University of Mumbai.
6. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of Saraswati Education Society's Saraswati College of Engineering, Kharghar, Navi Mumbai from January 2026.
7. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of K.J. Somaiya Institute of Engineering and Information Technology, Sion, Mumbai from August 2024.
8. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of Mahatma Education Society's Pillai HOC College of Engineering & Technology, Rasayani, Raigad from June 2025.
9. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of Vivekanand Education Society's Institute of Technology, Chembur, Mumbai from July 2023.
10. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of Bhartiya Vidya Bhavan's Sardar Patel College of Engineering, Andheri (West), Mumbai from June 2022.
11. Nominee of the Vice-Chancellor of the University of Mumbai on the **Academic Council** of Mahatma Education Society's Pillai College of Engineering, New Panvel, Raigad from December 2021.
12. Member of **Board of Studies in Mechanical Engineering** and **Thesis Advisory Committee** in Mechanical Engineering of Mukesh Patel School of Technology Management and Engineering (MPSTME) of NMIMS (Deemed to be University).

Other Responsibilities / Assignments:

13. Former Member, **Academic Advisory Body**, K. J. Somaiya College of Engineering, Somaiya Vidyavihar University, Mumbai.
14. Nominee of the President - SVKM on the **Internal Quality Assurance Cell (IQAC)** of SVKM's Mithibai College of Arts, Chauhan Institute of Science & Amrutben Jivanlal College of Commerce and Economics (Autonomous) from June 2021.
15. Nominee of the Chancellor, NMIMS (Deemed to be University) on the "**Board of Examinations**" of the University as well as member (external expert) of the **University's Unfair Means Committee**.
16. Member of the "**External Peer Team**" for Academic Performance Audit of IQAC of Thakur College of Engineering & Technology, Kandivali, Mumbai.
17. Member, the **Internal Quality Assurance Cell (IQAC)** of Bhartiya Vidya Bhavan's Sardar Patel College of Engineering, Andheri (West), Mumbai.

Date of Birth:

29-5-1969

Qualifications:

- FIE: Fellow of The Institution of Engineers (India).
- FISME: Fellow of The Indian Society of Manufacturing Engineers, Mumbai.
- Ph.D., Indian Institute of Technology Bombay.
- M.E. (Production Engg), 1st class with Distinction, VJTI, University of Mumbai.
- Post-Graduate Diploma in Industrial Engg., 1st class, VJTI, University of Mumbai.
- B.E. (Industrial Production), 1st class, GIT, Karnatak University.
- ERP (BaaN): 3 months Full Time Certificate Programme, S.P. Jain Institute of Management & Research, Mumbai under the University Synergy Programme of BaaN Institute, Netherlands.

Area of Specialization:

Manufacturing Engineering, Manufacturing Systems & Strategy, Market Orientation of Manufacturing Firms and World Class Manufacturing.

Subjects taught- Under Graduate Level:

Manufacturing Engineering, Production & Operations Management, Engineering Drawing.

Post Graduate Level:

World Class Manufacturing, Manufacturing Strategy, Research Methodology.

Patents Granted:

1. "A System for Detection and Classification of Tomato Disease Using Deep Learning", Application No. 202221024242 A, Publication Date: 11/11/2022, Patent No.: 573386, Granted: 06/11/2025.
2. "Reconfigurable Sectoral Microstrip Antennas for Wideband and Circularly Polarized Response", Application no. 202321080257 A, Publication Date: 12/01/2024, Patent No.: 568194, Granted: 30/06/2025.
3. "Compact Wideband GAP-Coupled Variations of Flexagonal Microstrip Antennas on Thinner Substrate", Application no. 202421022000 A, Publication Date: 19/04/2024 Patent No.: 554702, Granted: 21/11/2024.
4. "A Medical Emergency System for a Vehicle", Application No. 202321041386 A, Publication Date: 04/08/2023, Patent No.: 538278, Granted: 16/05/2024.
5. "A System and Method for Evaluating the Freshness of Fruits Using Machine Learning Techniques", Application no. 2023/04889, Lodging Date: 02/05/2023, International Classification: A23L, Republic of South Africa, Granted: 20/12/2023.

Patents Published:

1. "A Smart Wardrobe", Application no. 202521077917, Publication Date: 29/08/2025.
2. "A Medicine Dispenser", Application no. 202521037792, Publication Date: 15/08/2025.
3. "Gesture to Speech Convertor", Application no. 202521073771, Publication Date: 15/08/2025.
4. "An Apparatus for Filament Revival", Application no. 202521037793, Publication Date: 09/05/2025.
5. "IoT Enabled Robot for Detecting Gas Pipe Leakage", Application no. 202421078054, Publication Date: 15/11/2024.
6. "Tree Resembled Fire Combat System", Application no. 202221045849, Publication Date: 15/03/2024.
7. "6-Bar Linkage Mechanism for Rover Suspension on Uneven Inclines", Application no. 202321049933 A, Publication Date: 06/10/2023.

**Patents
Published:**

8. "A Device to Convert Atmospheric Moisture Into Water", Application No.: 202321038201 A, Publication Date: 04/08/2023.
9. "Contactless Breathing Rate Detector for Smart Cradle", Application No. 202221004780 A, Publication Date: 18/03/2022.
10. "A Method for Securing Low Constrained Devices of the IoT Network", Application No. 202121042499 A, Publication Date: 26/11/2021.
11. "An improved method for Sentiment Analysis Using a Novel Approach for Cross Domain Adaption", Application No. 20212101910 A, Publication Date: 28/05/2021.

**Design Patent
Registrations
Granted:**

1. "Aerodynamic Fairing for EV Bike", No. 219127, Design No: 471280-001, Class: 12-11, Date of Registration: 26/08/2025, Date of Issue: 08/01/2026.
2. "Electric Race Car Chassis", No. 218346, Design No: 471277-001, Class: 12-08, Date of Registration: 26/08/2025, Date of Issue: 01/01/2026.
3. "Go-Kart Chassis", No. 218426, Design No: 471754-001, Class: 12-08, Date of Registration: 29/08/2025, Date of Issue: 01/01/2026.
4. "Go-Kart - Brake Rotor", No. 216891, Design No: 471809-001, Class: 12-16, Date of Registration: 30/08/2025, Date of Issue: 22/12/2025.
5. "Compact Solar EV Chassis", No. 215906, Design No: 471117-001, Class: 12-08, Date of Registration: 26/08/2025, Date of Issue: 11/12/2025.
6. "Chassis With Three Wheel Space for a Solar Electric Vehicle", No. 166167, Design No: 379352-001, Class: 12-16, Date of Registration: 15/02/2023, Date of Issue: 26/04/2024.
7. "Waste Segregation Machine", No. 149573, Design No: 318180-001, Class: 09-09, Date of Registration: 28/05/2019, Date of Issue: 01/12/2023.
8. "Smart Pest Control and Irrigation System", No. 196614, Design No: 431426-001, Class: 22-06, Date of Registration: 24/09/2024, Date of Issue: 09/04/2025.
9. "Chassis for Electric Motorcycle", No. 176031, Design No: 379458-001, Class: 12-11, Date of Registration: 16/02/2023, Date of Issue: 25/07/2024.
10. "Wing Mounted Landing Gears Set", No. 116730, Design No: 381903-001, Class: 12-07, Date of Registration: 20/03/2023, Date of Issue: 29/04/2024.
11. "Remote Controlled Miniature Aircraft", No. 161222, Design No. 318350-001, Class: 12-07, Date of Registration: 31/05/2019, Date of Issue: 22/03/2024.
12. "Composite Anti Intrusion Plate", No. 160345, Design No. 379355-001, Class: 12-16, Date of Registration: 15/02/2023, Date of Issue: 15/03/2024.
13. "Electronic Continuous Variable Transmission Device", No. 160541, Design No. 378765-001, Class: 12-16, Date of Registration: 06/02/2023, Date of Issue: 15/03/2024.
14. "Electric Go Kart", No. 158954, Design No. 380658-001, Class: 12-08, Date of Registration: 02/03/2023, Date of Issue: 01/03/2024.
15. "Steering Stub Axle", No. 157966, Design No. 381685-001, Class: 12-16, Date of Registration: 17/03/2023, Date of Issue: 21/02/2024.
16. "Windmill Blades", No. 157790, Design No. 318579-001, Class: 13-01, Date of Registration: 07/06/2019, Date of Issue: 21/02/2024.
17. "Smart Backpack for Trekking", No. 154919, Design No. 381618-001, Class: 03-01, Date of Registration: 15/02/2023, Date of Issue: 25/01/2024.
18. "Duct for Wind turbine", No. 154491, Design No. 379354-001, Class: 25-03, Date of Registration: 15/02/2023, Date of Issue: 19/01/2024.
19. "Single Stage Open Differential (Set)", No. 153446, Design No. 378831-001, Class: 12-16, Date of Registration: 07/02/2023, Date of Issue: 12/01/2024.
20. "Carbon Fiber Suspension Arms for FSAE Car", No. 152177, Design No. 318124-001, Class: 12-16, Date of Registration: 27/05/2019, Date of Issue: 05/01/2024.
21. "Upright for Electric Vehicle", No. 151696, Design No. 379459-001, Class: 12-16, Date of Registration: 16/02/2023, Date of Issue: 04/01/2024.
22. "Variable Gear Transmission Device", No. 151728, Design No. 381472-001, Class: 15-99, Date of Registration: 14/03/2023, Date of Issue: 04/01/2024.
23. "Rear Pin Locking For Aircraft Control", No. 141649, Design No. 381129-001, Class: 08-08, Date of Registration: 09/03/2023, Date of Issue: 03/08/2023.
24. "Adjustable Prosthetic Adapter", No. 139272, Design No. 381642-001, Class: 12-16, Date of Registration: 16/03/2023, Date of Issue: 13/06/2023.
25. "Square Frustrum Impact Attenuator", No. 139272, Design No. 381642-001, Class: 12-16, Date of Registration: 16/03/2023, Date of Issue: 13/06/2023.

Design Patent Registrations Granted:

26. "Tree Shaped Forest Fire Combat system", No. 138702, Design No. 380794-001, Class: 29-01, Date of Registration: 03/03/2023, Date of Issue: 06/06/2023.
27. "Semi-Autonomous Fire Fighting Vehicle", No. 137539, Design No. 378830-001, Class: 29-01, Date of Registration: 07/02/2023, Date of Issue: 24/05/2023.
28. "Ergonomic Wheel Hub Assembly", No. 137229, Design No. 380554-001, Class: 12-16, Date of Registration: 01/03/2023, Date of Issue: 23/05/2023.
29. "Monocoque Chassis of an Electric Vehicle", No. 136868, Design No. 381128-001, Class: 12-16, Date of Registration: 09/03/2023, Date of Issue: 23/05/2023.
30. "Chassis for Electric Vehicle Go-kart", No. 137926, Design No. 380892-001, Class: 12-08, Date of Registration: 06/03/2023, Date of Issue: 24/05/2023.
31. "Aerodynamic Go-kart", No. 134848, Design No. 318183-001, Class: 12-08, Date of Registration: 28/05/2019, Date of Issue: 11/05/2023.
32. "Steering wheel joint", No. 134363, Design No. 378832-001, Class: 12-16, Date of Registration: 07/02/2023, Date of Issue: 03/05/2023.
33. "Swingarm with Linkages for Electric Motorcycle", No. 133538, Design No. 379353-001, Class: 12-11, Date of Registration: 15/02/2023, Date of Issue: 21/04/2023.
34. "Automated Solar Powered Grass Cutter", No. 116175, Design No. 318128-001, Class: 15-03, Date of Registration: 27/05/2019, Date of Issue: 02/08/2022.
35. "Standard Cycle", No. 116378, Design No. 318123-001, Class: 12-11, Date of Registration: 27/05/2019, Date of Issue: 17/08/2022.
36. "Torque Enhancer", No. 113557, Design No. 318181-001, Class: 12-16, Date of Registration: 28/05/2019, Date of Issue: 12/05/2022.
37. Solar Assisted Hybrid Go-Kart, No. 107190, Design No.: 318129-001, Class: 12-08, Date of Registration: 27/05/2019, Date of issue: 11/01/2022.
38. "Electric Sports Bike", No. 98315, Design No: 334743-001, Class: 12-11, Date of Registration: 29/10/2020, Date of Issue: 11/05/2021.
39. "Stabilizer Spindle for Four-wheelers", No. 89351, Design No: 324650-001, Class: 12-16, Date of Registration: 13/12/2019, Date of Issue: 15/07/2020.
40. "Frame of a Motorbike", No. 89355, Design No: 318352-001, Class: 12-11, Date of Registration: 31/05/2019, Date of Issue: 15/07/2020.
41. "Spindle for Vehicles", No. 87649, Design No: 318351-001, Class: 12-16, Date of Registration: 31/05/2019, Date of Issue: 06/05/2020.
42. "Intake Manifold For Two-Wheeler Engines", No. 87646, Design No.: 318182-001, Class: 15-01, Date of Registration: 28/05/2019, Date of Issue: 06/05/2020.
43. "Fire Extinguishing Equipped Life-Saving Drone", No. 91074, Design No: 318122-001, Class: 12-07, Date of Registration: 27/05/2019, Date of Issue: 15/09/2020.

24 other design patents are filed and the review & evaluation are currently going on.

Copyrights:

1. "Forensic Face Sketch Construction and Recognition", Application No.: LD-32086/2025-CO, Certificate No.: LD- 20260180612, Date of Filing: 09/08/2025, Date of issue: 15/01/2026.
2. "Resource-Aware Scheduling Algorithms for Distributed Machine Learning in Heterogeneous Environments", Application No.: LD-32828/2025-CO, Certificate No.: LD- 20250177798, Date of Filing: 15/08/2025, Date of issue: 28/11/2025.
3. "V.A.S.U. (Visual Augmentation in Scholastic Use)", Application No.: LD-34465/2025-CO, Certificate No.: 20250176814, Date of Filing: 26/08/2025, Date of issue: 10/11/2025.
4. "Campus Quest 3D", Application No.: LD-32085/2025-CO, Certificate No.: LD-20250174609, Date of Filing: 09/08/2025, Date of issue: 26/09/2025.
5. "Truly Random Number Generation for Cryptographic Algorithms", Application No.: LD-34071/2025-CO, Certificate No.: LD-20250174699, Date of Filing: 24/08/2025, Date of issue: 29/09/2025.
6. "Artist Aurmi and Her Intellectual Property Rights", Registration Number: L-159239/2025, (Diary No: 31848/2024-CO/L), Date of Application: 11/10/2024, Date of issue: 02/01/2025.
7. "A Step Without Gravity-A Story Of Spacewalking Experience", Registration Number: L-159567/2025, (Diary No: 31854/2024-CO/L), Date of Application: 11/10/2024, Date of issue: 09/01/2025.
8. "How Little Bhavi Became A Property Owner Of A Design, Intellectual Property?", Registration Number: L-159358/2025, (Diary No: 32072/2024-CO/L), Date of Application: 14/10/2024, Date of issue: 03/01/2025.

Copyrights:

9. "Analysis of a Lightweight Brake Master Cylinder for Formula Student Vehicle", Registration Number: L-157890/2024, (Diary No: 26678/2024-CO/L), Date of Application: 24/08/2024, Date of issue: 05/12/2024.
10. "A Story of Dreams and Guardians: The History of Indian Patent Act", Registration Number: L-157120/2024, (Diary No: 31938/2024-CO/L), Date of Application: 13/10/2024, Date of issue: 22/11/2024.
11. "Idea to Impact: A Plastic Recycling Patent", Registration Number: L-157268/2024, (Diary No: 31858/2024-CO/L), Date of Application: 11/10/2024, Date of issue: 25/11/2024.
12. "IP: Respect Others, Protect Yours", Registration Number: L-157088/2024, (Diary No: 31853/2024-CO/L), Date of Application: 11/10/2024, Date of issue: 21/11/2024.
13. "Design & Development of a Passive Overhead Exoskeleton", Registration Number: L-155321/2024, (Diary No: 27400/2024-CO/L), Date of Application: 31/08/2024, Date of issue: 17/10/2024.
14. "Analysis of Two-Stage Helical Gearbox for All Terrain Vehicle", Registration Number: L-153277/2024, (Diary No: 19727/2024-CO/L), Date of Application: 16/06/2024, Date of issue: 16/06/2024.
15. "Thermal and Stress Analysis of Piston and Connecting Rod for Engine Seizure Condition" Registration Number: L-151976/2024, (Diary No: 19770/2024-CO/L), Date of Application: 16/06/2024, Date of issue: 29/07/2024.
16. "Design and Analysis of Differential Bar of a Rover" Registration Number: L-151729/2024, (Diary No: 19722/2024-CO/L), Date of Application: 16/06/2024, Date of issue: 24/07/2024.
17. "Structural Analysis of an Ornithopter Wing" Registration Number: L-151933/2024 (Diary No: 16807/2024-CO/L), Date of Application: 25/05/2024, Date of issue: 26/07/2024.
18. "Applications of Microsoft Forms, Teams, and Power Automate for Online Admissions". (Diary No: 9768/2022-CO/L), Date of Application: 10/05/2022, Date of issue: 29/09/2022.

Approved Ph.D. Guide:

Field: Mechanical Engineering: University:- University of Mumbai.
Field: Mechanical Engineering: University:- NMIMS (Deemed to be University).

Ph.D. Guided:

- 10: Titles of the Research Work are:
- 1) "Process Experimentation and Modelling for Surface integrity Aspects in Turning of Duplex Stainless Steel" by Dr. Naresh Deshpande.
 - 2) "Investigating Reliability Approach in Optimization of Casting Process Parameters" by Dr. Amit Abhimanyu Choudhari.
 - 3) "Investigation of Surface Integrity Aspects in Milling Operation on Nickel Based Super Alloy" by Dr. Ramesh Rajguru.
 - 4) "Exploring the Relationship between Technological Innovativeness and Firm Performance in Indian Manufacturing SMEs" by Dr. Anup Chavan.
 - 5) "Investigation of Issues in Implementation of Knowledge Management Practices in Indian Automotive Industries" by Dr. Shaikh Ibrahim.
 - 6) "Green Supply Chain Management Practices in Indian Manufacturing Firms and their Impact on Business Performance" by Dr. Meeta Gandhi.
 - 7) "A Comparative Analysis of Shainin DoE and Traditional DoE Tools for Deploying Six Sigma in Select Indian Manufacturing Companies" by Dr. Rajendra Khavekar.
 - 8) "Thermal Modelling of Orthogonal Machining Process" by Dr. Rajesh Patil.
 - 9) "Supplier Selection and Performance Evaluation Issues in Supply Chain Management" by Dr. Ashish Deshmukh.
 - 10) "Exploring Product Cannibalisation and Benefits of Remanufacturing in the Context of a Remanufactured and its counterpart new product" by Dr. Ravi Terkar.

Approved PG Guide:

Presently guiding 6 students at the DJSCE Research Centre, University of Mumbai.
Field: Mechanical Engineering: University: - University of Mumbai.

PG Projects Guided:

17: M. E. (Mechanical Engineering) Projects of University of Mumbai.

Online Courses Completed:

1. "Industrial Internet Things (IIoT)", "University of Michigan, USA (December 2021 – January 2022).
2. "Advanced Manufacturing Enterprise", University of Buffalo, USA (October-November 2020).
3. "Business Analytics for Decision Making", University of Colorado Boulder, USA (October-November 2020).
4. "Strategic Innovation: Building and Sustaining Innovative Organizations", University of Illinois at Urbana-Champaign, USA (October-November 2020).
5. "Software Processes and Agile Practices", University of ALBERTA, Canada (August-September 2020).
6. "Digital Manufacturing & Design", University of Buffalo, USA (July-August 2020).
7. "Cyber Security in Manufacturing", University of Buffalo, USA (July-August 2020).
8. "Digital Transformation", Boston Consulting Group (BCG) & University of Virginia, USA (July-August 2020).
9. "Assessment in Higher Education: Professional Development for Teachers", Erasmus University Rotterdam (University of Rotterdam), Netherlands (July-August 2020).
10. "Learning to Teach Online", UNSW Sydney (The University of New South Wales), Australia (June-July 2020).
11. "Design Thinking for Innovation", University of Virginia, USA (June-July 2020).
12. "Introduction to Big Data", University of California San Diego, USA (June-July 2020).
13. "IT Infrastructure and Emerging Trends", University of Minnesota, USA (May-June 2020).
14. "AI For Everyone", deeplearning.ai, conducted by Prof. Andrew N G, Adjunct Professor at Stanford University, USA (May 2020).
15. "Leadership and Emotional Intelligence", Indian School of Business (ISB), Hyderabad (April-May 2020).

Professional Memberships

Life Member of ISTE, New Delhi,
Senior Member: International Economics Development and Research Centre (IEDRC).

Interaction with Professional Institutions

President of the Indian Society of Manufacturing Engineers (ISME);
Member of Alumni Associations of GIT, NITIE, VJTI & IIT Bombay.

Work Experience: Teaching

1. Principal, Dwarkadas J. Sanghvi College of Engineering from 9-2-2009 till date.
2. Vice-Principal, Dwarkadas J. Sanghvi College of Engineering from 17-7-2007 to 08-02-2009 and Convener, Training & Placement Cell from 1-6-2007 to 17-7-2008.
3. Professor in Mechanical Engineering from 22-12-2023 & Former Professor in Production Engineering, from 16-7-2007 to 21-12-2023 and Head of the Department of Production Engineering from 01-07-2008 to 21-12-2023, Dwarkadas J. Sanghvi College of Engineering.
4. Assistant Professor in Production Engineering, Dwarkadas J. Sanghvi College of Engineering from 31-7-2003 to 15-7-2007 and Lecturer in Production Engineering from 17-8-1994 to 30-7-2003.
5. Lecturer, Dept. of Mechanical Engineering, S.B.M. Polytechnic from July 1993 to August 94.
6. Lecturer, Dept. of Mechanical Engineering, Fr. Agnel Polytechnic from June 1992 to July 1993.

Research and Industry:

1. Production Engineer, Crompton Greaves Limited, Kanjur Marg, Mumbai from August, 1997 to November, 1998.
2. Trainee Engineer, PAM Pharmaceuticals and Allied Machinery Co. Ltd., Kandivali, Mumbai from June, 1997 to July, 1997.
3. Production Planning Engineer, Hercules Hoists Ltd., Mulund, Mumbai from January, 1995 to November, 1995.
4. Production Planning Engineer, Plastic Art /Shalimar Plastic Industries, Mumbai from July 1990 to June 1992.

Research Grant Received:

1. Received a travel grant of Rs. 1,18,750/- from the AICTE for presenting the research work, titled "Process Experimentation and Modelling for Surface Integrity Aspects in Turning of Duplex Stainless Steel", in an International Conference held in Japan during March' 2020.

Research grant received under the "Minor Research Grant" scheme of the University of Mumbai:

Research Grant Received:

2. Research grant of Rs. 50,000/- for the work titled "Predictive Modelling of Surface Roughness in the Machining of Inconel 625 using Artificial Neural Network", (Ref. No. 195) for the A.Y. 2018-19 (with Rajguru Ramesh).
3. Research grant of Rs. 45,000/- for the work titled "Grey Relational Analysis for Minimising Surface Roughness of Milled NEMA GII GFRP Plates", (Ref. No. 388) for the A.Y. 2015-16 (with Rajguru Ramesh).
4. Research grant of Rs. 30,000/- for the work titled "Multi-Objective Optimisation of Roughness Parameters during turning of GFRP/Epoxy Composite material.", (Ref. No. 389) for the A.Y. 2015-16 (with Deshpande Naresh).
5. Research grant of Rs. 25,000/- for the work titled "BEST_R: Buses for Enhanced State Transport Roadmap to Urban Transport Modelling", (Ref. No. 400) for the A.Y. 2016-17 (with Vulavala Ramesh & Parulekar Mayur).
6. Research grant of Rs. 45,000/- for the work titled "Grey Fuzzy Optimization of Process Parameters for CNC Turning of Inconel 825 Nickel Based Super Alloy", (Ref. No. 393) for the A.Y. 2017-18 (with Rajguru Ramesh).

International Publications: Journal

1. "Strategic Prioritisation of Industry 4.0 Technologies in the Foundries for Achieving Sustainability" in the International Journal of Industrial and Systems Engineering, Inderscience Publishers, (DoI : 10.1504/IJISE.2025.10074765) (with Chaudhari Amit & Deshmukh Ashish).
2. "Reliability Analysis of Heating Ventilation and Air-Conditioning (HVAC) System of Passenger Cars using Field Failure Data" in "Results in Engineering", Elsevier, Online (18/12/2025), <https://doi.org/10.1016/j.rineng.2025.108819> (with Gokhale Arya et al).
3. "Structural Analysis of an Ornithopter Wing", published in Recent Advances in Composite Materials and Structures, Volume 2, Springer, Singapore. https://doi.org/10.1007/978-981-96-5707-0_31, January 2026, PP: 341-350 (with Khatawate Vinayak, Ronak Limbachiya, Yash Shah, Nihar Parmar and Juhi Kothari).
4. "Analysis of Two-stage Helical Gearbox for All Terrain Vehicle", published in Recent Advances in Composite Materials and Structures, Volume 2, Springer, Singapore. https://doi.org/10.1007/978-981-96-5707-0_33, January 2026, PP: 359-374 (with Khatawate Vinayak, Nishant Pandit, Advik Gupte, Kirtan Vandra, Vinay Mistry).
5. "Design and Analysis of an Epicyclic Gear Train for Formula Student Electric Drivetrain", published in Recent Advances in Composite Materials and Structures, Volume 2, Springer, Singapore. https://doi.org/10.1007/978-981-96-5707-0_38, January 2026, PP: 425-443 (with Khatawate Vinayak, Glenn Lewis, Sanskar Salian, Dhaval Ravat, Harsh Vijekar).
6. "Thermal and Stress Analysis of Piston and Connecting Rod for Engine Seizure Condition", published in Recent Advances in Composite Materials and Structures, Volume 2, Springer, Singapore. https://doi.org/10.1007/978-981-96-5707-0_39, January 2026, PP: 445-458 (with Khatawate Vinayak, Reuben Manjaly, Jasmin Jamariya, Krish Desai, Nishit Parmar).
7. "Improving ATV Stability and Control Through Suspension Geometry Turning" in Industrial Engineering Journal, Volume XVIII & Issue No.09, PP: 33-38, Issue: September, 2025 (with Khatawate Vinayak et al).
8. "Analysis of a Lightweight Brake Master Cylinder for Formula Student Vehicle", in the Journal of Mines, Metals and Fuels, Vol. 73, Issue: 8, PP: 2649-2656 (2025) (with Rathod Darshit et al).
9. "Analysis of Rear Suspension Geometry of an ATV", in the Journal of Polymer and Composites, 2321-2810, Vol. 13, Issue: 5, PP: 275-286, 2025 (with Gupta Mayank et al).
10. "Stress and Strain Distribution Patterns Around Centrally Elongated Notch in Flat Plate", is accepted for publication in the Journal of Mines, Metals and Fuels, Vol. 73, Issue: 6, <https://doi.org/10.18311/jmmf/2025/48768>, PP: 1637-1650, June 2025 (with Khatawate Vinayak et al).

11. "Carbon Fiber Impact Attenuator: A Comprehensive Design and Analysis Approach", in the Journal of Polymer and Composites, 2321-2810, Vol. 13, Issue: 5, 2025 (with Khatawate Vinayak et al).
12. "Geometrical, Numerical and Materialistic Parameters used for studying and reducing Tube-Side Flow Inconsistency in Tube and Shell Heat Exchangers: An Overview", in the Journal of Polymer and Composites, 2321-2810, Vol. 13, Issue: 5, 2025 (with Ajugia Kartik et al).
13. "Analysis of a Battery Pack Module for a Formula Student Car", in the Journal of Polymer and Composites, 2321-2810, Vol. 13, Issue: 5, 2025 (with Jadhav Advait et al).
14. "An Overview of Rocket Engine Power Cycles", in the Journal of Mines, Metals and Fuels, Vol. 73, Issue: 8, PP: 2415-2425 (2025) (with Shah Ayush et al).
15. "Design and Analysis of Differential Bar of a Rover", in the Journal of Mines, Metals and Fuels, Vol. 73, Issue: 8, PP: 2405-2413 (2025) (with Pillai Adithya et al).
16. "Numerical Investigation of Chassis Torsional Stiffness for Formula Student Vehicles", is accepted for publication in the Journal of Mines, Metals and Fuels, Vol. 73, Issue: 6, <https://doi.org/10.18311/jmmf/2025/48770>, PP: 1651-1662, June 2025 (with Gala Bhumini et al).
17. "Improving Occupational Health Outcomes and Enhancing Job Satisfaction by the Design and Development of a Passive Overhead Exoskeleton in Industries", in the Industrial Engineering Journal, Vol. XVIII, Issue No. 03, pp.11-15, 2025 (with Khatawate Vinayak and Ranka Dharam). **Received the Best Paper award during the 67th National Convention held on August, 09th 2025, at Thiruvananthapuram, Kerala.**
18. "A Study of Micro hardness in the Machining of Inconel 625 using TiAlSiN coated tools under Dry Cutting Conditions", in the International Journal "Journal of Advances in Materials and Processing Technologies", Taylor and Francis Publications, July 2022, Ref. Ms. No. TMPT-2022-0079R1, 229245391 (with Rajguru Ramesh).
19. "Investigating the Effect of TiAlSiN Ultra Hard Coated Solid Carbide Tool on Surface Roughness in Dry End Milling of Inconel 625", in the International Journal "Journal of Advances in Materials and Processing Technologies", Taylor and Francis Publications, December 2020, DOI.org/10.1080/2374068X.2020.1855964, PP: 1-10 (with Ramesh Rajguru).
20. "Optimization of Process Parameters in the Case of a Corrugation Operation by Using Taguchi Method", in the International Journal of Mechanical and Production Engineering Research and Development, Trans Stellar Publications, Vol. 10, Special Issue: June 2020, PP 31-38 (with Dr. Rajendra Khavekar and Hardikkumar Patel).
21. "Multi Regression Model for Cutting Force During Dry Turning of Duplex Stainless Steels Using Definitive Screening Design", in IOP: Earth and Environmental Science, 1100 (2022) 012026, doi: 10.1088/1755-1315/1100/1/012026, PP: 1-9 (with Deshpande N. C.).
22. "Reliability based design optimization of casting process parameters using Markov chain model", in Materials Today, Vol. 63, 2022, ISSN: 2214-7853, <https://doi.org/10.1016/j.matpr.2022.04.189>, PP: 602-606 (with Chaudhari Amit).
23. "A Model for Residual Stress in the Dry Turning of Duplex Stainless Steels" in Key Engineering Materials, ISSN: 1662-9795, Vol. 933, PP: 25-31, doi: 10.4028/p-cqj696, 2022, Trans Tech Publications Ltd., Switzerland (with Deshpande Naresh).
24. "Gap-Coupled Designs of Hexagonal Microstrip Antennas on Thinner Substrate Using Cavity-Backed Structure", in "Progress in Electromagnetics Research C", Vol. 145, PP: 107-117, 2024 (with Chavali Venkata A. P., Deshmukh Amit, Ambekar Aarti and Sawant Tushar).
25. "An Empirical Investigation of knowledge Management Issues in the context of Automotive SMEs in India", in the International Journal of IT & Knowledge Management (ISSN: 0973-4414), Vol: 13, Issue: 2, PP: 29-40, January-June 2020 (with Shaikh Ibrahim).
26. "Reconfigurable Designs of Sectoral Microstrip Antennas for Wideband and Circularly Polarized Response", in "Progress in Electromagnetics Research C", Vol. 143, PP: 23-33, 2024 (with Chavali Venkata A. P., Deshmukh Amit, Ambekar Aarti and Sawant Tushar).

27. "Machining Induced Surface Integrity Aspects of Stainless Steels: A Review", in Elsevier Materials Today, 22 (2020), PP 1499-1506 (with Deshpande Naresh).
28. "An Empirical Investigation of the Cultural, Individual and Measurement Issues in the Context of the Implementation of Knowledge Management in Indian Automotive SMEs", in the International Journal of Knowledge Management and Practices, Vol. 8, ISS 1, 2020, <http://publishingindia.com/ijkmp/>, PP: 10-17 (with Shaikh Ibrahim).
29. "Machining Induced Surface Integrity Aspects of Stainless Steels: A Review", in Materials Today, Vol. 22, Part: 4; 2020, <https://dbi.org/10.1016/j.matpr.2020.02.067>, PP: 1499-1506 (with Deshpande N. C.).
30. "Modelling of Surface Roughness effect on the Dry Turning of Duplex Stainless Steels", in Materials Science and Engineering, IOP Publishing, 1258 (2022) 012020, doi: 10.1088/1757-899X/1258/1/012020 (with Deshpande Naresh).
31. "Investigation of the Impact of Cutting Parameters on Surface Integrity in the End Milling of Inconel 625" in "Materials Science Forum", ISSN: 1662-9752, Vol. 969, PP 762-767, Trans Tech Publications Ltd., Switzerland, 2019 (with Rajguru Ramesh).
32. "Optimization of Injection Moulding Process Parameters for Manufacturing Plastic Components (PBT) Using Taguchi Method (TM)", in "Materials Science Forum", ISSN: 1662-9752, Vol. 969, PP 775-780, Trans Tech Publications Ltd., Switzerland, 2019 (with Khavekar Rajendra and Gosar Vimal).
33. "Optimization of Process Parameters in the Turning Operation of Inconel 625", in "Materials Science Forum", ISSN: 1662-9752, Vol. 969, PP 756-761, Trans Tech Publications Ltd., Switzerland, 2019 (with Rajguru Ramesh, Shaikh Moeiz and Shaikh Arsalan).
34. "Analyzing the need for a comparative study of Shainin DoE and Traditional DoE tools for deploying Six Sigma in Indian manufacturing companies" in "Materials Science and Engineering", IOP Publications, 2018, DOI: 10.1088/1757-899X/376/1/012121 (with Khavekar Rajendra).
35. "A Combined approach for supplier selection using AHP and Fuzzy AHP in Indian Gear Manufacturing MSMEs" in "Materials Science and Engineering", IOP Publications, 2018, DOI: 10.1088/1757-899X/376/1/012122 (with Deshmukh Ashish).
36. "Review and Analysis of issues related to the Implementation of Knowledge Management Practices in Indian Automotive SMEs" in "Materials Science and Engineering" IOP Publications, 2018, DOI: 10.1088/1757-899X/376/1/012125 (with Shaikh Ibrahim).
37. Optimization of Multi-Performance Characteristics in the Turning of GFRP(E) Composites using Principal Component Analysis Combined with Grey Relational Analysis", in Materials Today, Elsevier, ISSN: 2214-7853, Vol. 5, Part 1, (2018), PP: 5955-5967 (with Rajguru Ramesh, Kalpesh Tank & Nishit Shetty).
38. "Application of Shainin Methodology to Reduce Rejections in Spur Gear Manufacturing", in "Materials Today", Elsevier, MATPR 5027, PII S2214-7853 (18) 30377-8 (with Khavekar Rajendra and Girish Deshpande).
39. "Application of Shainin DoE Tool to Explore Unknown Variables causing 'Ghost Noise' in 5th Gear Cycle of Transaxles during NVH Testing" in "Advances in Intelligent Systems Research", Vol. 137, PP: 271-276, Atlantis Press (Springer), AISR (ISSN 1951-6851), ISBN (online): 978-94-6252-305-0.
40. "A Comparative Study of Taguchi Methodology and Shainin System DoE in the Optimization of Injection Moulding Process Parameters", in "Materials Science and Engineering", IOP Publications, DOI: 10.1088/1757-899X/225/1/012183 (with Khavekar Rajendra and Modi Bhavik).
41. "Analysis of Supplier Selection Criteria in Traditional as well as Green Supply Chain Management in Indian MSMEs" in the International Journal of Business Quantitative Economics and Applied Management Research, Volume 3, Issue 3 (August 2016), pp.74-85, ISSN: 2349-5677 (with Ashish Deshmukh).

42. "Suspecting Dominant Variable that causes Porosity Defect in a Cast Made up of Aluminum Alloy (Lm2) Using Shainin's DoE Approach" in the International Journal of Advances in Mechanical and Civil Engineering, Vol - 3, Issue 5, Oct 2016, ISSN : 2394-2827, PP : 124 -130 (with Rajendra Khavekar and Dharam Ranka).
43. Optimization of Turning Process Parameters in the Machining of an Accumulator (MDN250) using "TAGHUCHI'S DESIGN OF EXPERIMENTS" in the International Journal of Mechanical and Production Engineering, Vol-3, Iss - 5, May 2015 ISSN: 2320-2092, PP:75-78 (with Shreya Kadwadkar & Dharam Ranka)
44. "Grey Fuzzy Multiobjective Optimization of Process Parameters for CNC Turning of GFRP/Epoxy Composites" in the International Journal "Procedia Engineering", Volume 97, PP 85-94, ELSEVIER/ScienceDirect (2014) (with Naresh Deshpande and Ramesh Rajguru).
45. "Demystifying Knowledge Management in Indian Manufacturing SMEs" in the International Journal "Procedia Engineering", Vol-97, PP:1724-1734, ELSEVIER/ScienceDirect (2014) (with Chavan Anup).
46. "Multiobjective Optimization of Drilling Characteristics for NEMA G -11 GFRP/Epoxy Composite using Desirability Coupled with Taguchi Method" in the International Journal "Procedia Engineering", Volume 97, PP 522-530, ELSEVIER/ScienceDirect (2014) (with Naresh Deshpande and Ramesh Rajguru).
47. "Knowledge Management Practices in Indian Manufacturing MSMEs: Challenges and Opportunities" in the International Journal "Procedia Engineering", Volume 97, PP 1784-1787, ELSEVIER/ScienceDirect (2014) (with Chavan Anup).
48. "A study on Edge Milling Operation of NEMA G11 GFRP Composites based on Grey-Taguchi method" published in the International Journal Applied Mechanics and Materials, (Volumes 592-594), pp.18-22, July 2014 - ISBN: 13: 978-3-03835-163-4 (with Ramesh Rajguru and Naresh Deshpande).
49. "Emerging Supplier Selection Criteria in the Context of Traditional Vs. Green Supply Chain Management" in the International Journal of Managing Value and Supply Chains (IJMVSC), Vol.5, No.1, March 2014, pp.19-33, ISSN: 0976-979X (with Deshmukh Ashish).
50. "Investigation of the Machinability Characteristics of GFRP/Epoxy Composites using Taguchi Methodology", in the journal "Applied Mechanics and Materials" (Volume 612), pp.123-129, August 2014, ISSN 1662-7482 (with Deshpande Naresh and Rajguru Ramesh).
51. "Exploring the performance of a Single Cylinder Diesel Engine with alternative fuels such as CME and CME-Diesel Blends" in the International Journal of Current Engineering and Technology, ISSN 2277-4106, InPressco International Press Corporation, Vol. 3, Issue 3 (with Sandip Mane, Deshpande Naresh and Rajguru Ramesh).
52. "Desirability Fuzzy Multiple Criteria Optimization of Process Parameters in CNC Turning of GFRP/Vinyl ester Composites" in the International Journal "Procedia Materials Science" by Elsevier/ ScienceDirect, Volume: 5 (2014), pp.2458-2467 (with Deshpande Naresh and Rajguru Ramesh).
53. "Experimental Investigation and Optimization in Edge Milling of NEMA G-11 GFRP/Epoxy Composites" in the International Journal "Procedia Materials Science" by Elsevier/ ScienceDirect, Volume: 5 (2014), pp.2105-2114 (with Rajguru Ramesh and Deshpande Naresh).
54. "Exploring the Potential of Remanufacturing in Indian Industries for Sustainability and Economic Growth" in the International Journal of Business Management and Research (IJBMR)', ISSN(P):2249-6920; ISSN(E):2249-8036. Trans Stellar Publications. Vol.4, Issue 1, pp: 25-38, February 2014 (with Kalamkar Vilas, Sunnapwar Vivek & Terkar Ravi).
55. "Validation and Installation of a Narrow belt Conveyor to Cater to High Throughput in FMCG Industries in the Indian Context" in the International Journal of Engineering Research and Development (IJERD), Vol.8, Iss.2, ISSN:2278-067X, P-ISSN:2278-800X, (August 2013), pp.39-48 (with Jobalia Binoy & Majgaonkar Vineet).

56. "Modeling Knowledge Management Barriers in the Indian Manufacturing SMEs Using ISM Approach" in the IUP Journal of Knowledge Management, Vol XI, No.4, pp 36-52, IUP Publications, October 2013 (with Chavan Anup).
57. "Optimization of Injection Moulding Process Parameters in the Moulding of Low Density Polyethylene (LDPE)" in the International Journal of Engineering Research and Development (IJERD), Vol.7, Iss.5, e-ISSN: 2278-067X, p-ISSN:2278-800X, (June 2013), pp.35-39 (with Sajjankumar Lal).
58. "Enhancing Productivity through Cost and Lead Time Reduction in Remanufacturing" in the International Journal of Mechanical Engineering & Technology (IJMET), Vol.4, Iss.2, ISSN 0976-6340(P), ISSN 0976-6359(O), (March-April 2013), PP.286-297 (with Terkar Ravi and Kalamkar Vilas).
59. "Remanufacturing for Profitability and Green Growth sustainability: A Case Study of Printer Cartridge Sector in India" in the International Journal of Production Technology & Management (IJPTM), Vol.4, Iss.1, ISSN 0976-6383(P), ISSN 0976-6391(O), (January - April 2013), PP.17-30 (with Terkar Ravi and Kalamkar Vilas).
60. "Heat and Temperatures in Machining: Effects and Significance" in the International Journal: Advanced Materials Research, Vol. 622-623 (2012), pp 1550-1553 (with Patil Rajesh and Kalamkar Vilas).
61. "Importance of Closed Loop Supply Chain in the Product Recovery Processes such as Remanufacturing" in the International Journal of Engineering Research and Applications (IJERA). ISSN 2248-9622, Special Issue - March 2012, pp 121-127 (with Ravi Terkar and Vilas Kalamkar).
62. "Remanufacturing for Sustainable Development: Challenges, Elements and Benefits" in the International Journal of Innovation, Management and Technology (IJIMT), February 2012, Vol. 3(1): pp: 84- 89, ISSN: 2010-0248 (with Ravi Terkar and Vilas Kalamkar).
63. "Market Orientation and Manufacturing Performance of Indian SMEs: Moderating Role of Firm Resources and Environmental Factors" European Journal of Marketing (ISSN: 0309-0566), Emerald in sight publications, Vol.45, Iss: 7/8, PP: 1172-1193, 2011 (with S.S. Gaur and Ajai S. Gaur).
64. "Importance of Innovative Product Launching and Product Life Cycle Management in small Scale Consumer Industries" in the International Journal of Computer Applications (IJCA), Number. 3 (ISBN: 978-93-80746-62-5), 2011 (with Ravi Terkar and Vivek Sunnapwar).
65. "Effect of Customer Orientation and Competitor Orientation on Small and Medium Scale Manufacturing Firm's Performance in Turbulent Markets" in the International Journal of Entrepreneurship and Small Business (IJESB), Inderscience Publishers (with Gaur S. S.).
66. "Relational Switching Costs, Satisfaction and Commitment: A Study in the Indian Manufacturing Context" in the Asia Pacific Journal of Marketing and Logistics (APJML), Emeraldinsight Publications, 2006, Vol.18, No.04 (Oct.) (with Gaur S.S. and Shinde R. K).
67. "A Model for Integrating Industry 4.0 and Lean Tools Using Critical Success Factors in Indian Manufacturing Industries", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 215-222, DIO: 10.1007/978-981-19-7971-2_21 (with Birajdar Dhaval).
68. "Sustainability Benefits and Barriers in the Integration of Additive Manufacturing with Industry 4.0 Practices - A Conceptual Framework", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 233-242, DIO: 10.1007/978-981-19-7971-2_23 (with Markose Trupti).
69. Influence of Digitized Transforming Enablers on Manufacturing Performance in the Context of Social Dimension of Sustainability", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 69-76, DIO: 10.1007/978-981-19-7971-2_17 (with Ranka Dharam).
70. "Impact of Process Parameters on Machining-Induced Micro-Hardness in Dry End Milling of Inconel 625 Using Coated Tool", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 511-520, DIO: 10.1007/978-981-19-7971-2_49 (with Rajguru Ramesh).

71. "Experimental Investigation, Modeling and Optimization of Cutting Forces in Fry Hand Turning", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 463-474, DIO: 10.1007/978-981-19-7971-2_46 (with Mane Sandip).
72. "Fabrication of Fibre-Reinforced Composites Using Vacuum Infusion Process and Testing", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 463-474, DIO: 10.1007/978-981-19-7971-2_44 (with Rajguru Ramesh and Merchant Nimit).
73. "Optimization of Machining Parameters for Surface Roughness in the End Milling of Hybrid Composite Using Response Surface Methodology", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 439-450, DIO: 10.1007/978-981-19-7971-2_2 (with Rajguru Ramesh, Sharma Shreejeet, More Shreyash and Mayekar Nimish).
74. "Predictive Modelling of Cutting Force in the Machining of Duplex Stainless Steels Using Artificial Neural Network", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 501-510, DIO: 10.1007/978-981-19-7971-2_48 (with Deshpande Naresh).
75. "A Conceptual Framework Involving Barriers in the Integration of Additive Manufacturing with Industry 4.0 practices", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore(2023), PP: 129-136, DIO: 10.1007/978-981-19-7971-2_13 (with Markose Trupti).
76. "Role of Drivers, Barriers and Critical Success Factors for Lean Readiness in Indian Manufacturing Industries", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 89-98, DIO: 10.1007/978-981-19-7971-2_9 (with Birajdar Dhaval).
77. "Influence of Digitized Transforming Enablers on Manufacturing Performance in the Context of Economic Dimension of Sustainability", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 303-314, DIO: 10.1007/978-981-19-7971-2_29 (with Ranka Dharam).
78. "Innovativeness in Indian Defence Sector: An Academic Strategy Perspective and the Way Ahead", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 15-24, DIO: 10.1007/978-981-19-7971-2_2 (with Chavan Anup).
79. "Design of an Electronic Continuously Variable Transmission Actuation Mechanism to Optimize Efficiency", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 569-578, DIO: 10.1007/978-981-19-7971-2_55 (with Rajguru Ramesh, Mehta Prathamesh, Gandhi Rishit, Selia Sadique and Thakkar Yash).
80. "Operational Logic for Electronic Continuously Variable Transmission Using PID Control", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 69-76, DIO: 10.1007/978-981-19-7971-2_33 (with Rajguru Ramesh, Mehta Prathamesh, Gandhi Rishit, Selia Sadique and Thakkar Yash).
81. "Enhancing Productivity of a Photometer Using Automation and Regression Analysis", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 323-328, DIO: 10.1007/978-981-19-7971-2_31 (with Khavekar Rajendra and Aayush Shah).
82. "Understanding the Drivers and Barriers in the Implementation of IoT in SMEs", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 267-280, DIO: 10.1007/978-981-19-7971-2_26 (with Deshmukh Ashish and Parab Sanket).
83. "Application of the Theory of Inventive Problem Solving in Value Engineering Methodologies and Its Phases", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 255-266, DIO: 10.1007/978-981-19-7971-2_25 (with Khavekar Rajendra and Deshpande Rajat).
84. "Improvement in Productivity of Assembly Line by Cycle Time Reduction: A Case Study", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 35-44, DIO: 10.1007/978-981-19-7971-2_4 (with Khavekar Rajendra and Vaghela Devanshi).
85. "Investigating Critical Process Parameters Using Fuzzy Analytical Hierarchical Process in Casting Process Failure", in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 195-204, DIO: 10.1007/978-981-19-7971-2_19 (with Chaudhari Amit).

86. Managerial Insights into the GSCM Practices in the Indian SME Manufacturing Firms”, in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 147-156, DIO: 10.1007/978-981-19-7971-2_15 (with Gandhi Meeta).
87. “Application of Work Measurement to Reduce the Cycle Time in Manufacturing Firm: A Case Study”, in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 69-76, DIO: 10.1007/978-981-19-7971-2_7 (with Khavekar Rajendra and Sapkal Tejaswini).
88. “Design of a Passive Assistive Exoskeleton for Improving Overall Worker Productivity in Industries”, in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 691-704, DIO: 10.1007/978-981-19-7971-2_67 (with Rajguru Ramesh, Amal Parth, Mayekar Nimish, Patil Atharva and Sooryavanshi Shreevardhan).
89. “Improvement of Quality in Adhesive Mass Coating Process Using Statistical Process Control”, in Lecture Notes in Mechanical Engineering, Published by Springer Singapore (2023), PP: 415-428, DIO: 10.1007/978-981-19-7971-2_40 (with Khavekar Rajendra and Gandhi Aanchal).
90. “Technological Innovativeness and Manufacturing Performance in Indian Manufacturing SMEs: Some Policy Implications”, in Lecture Notes on Multidisciplinary Industrial Engineering, Springer Nature, Anil Sachdeva et. al. (Eds): Operations Management and Systems Engineering, ISSN: 2522-5022, ISSN: 2522-5030 (e), 2021, Part F256, PP: 447-460 (with Chawan Anup).
91. “Exploring Ideal Process Parameters to Enhance the Surface Integrity Using Grey Fuzzy Integrated Technique”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 3-12 (with Ramesh Rajguru).
92. “Predictive Modeling of Surface Roughness in the Machining of Inconel 625 Using Artificial Neural Network” in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 23-30 (with Ramesh Rajguru).
93. “Role of Technological Innovativeness in the Manufacturing Performance of Indian SMEs”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 61-70 (with Anup Chawan).
94. “Evaluating GSCM Practice - Performance Relationship in Chemical, Textile and Rubber/Plastic SMEs in India”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 79-88 (with Meeta Gandhi).
95. “Supplier Selection in MSME Gear Manufacturing Industries Using MCDM Technique”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 117-126 (with Ashish Deshmukh).
96. “An Empirical Analysis of the Strategic, Organizational, Financial and Technological Issues in the Implementation of Knowledge Management in Indian Automotive SMEs”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 135-146 (with Ibrahim Shaikh).
97. “Productivity Improvement in Blow Molding Process Through Energy Savings”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 167-176 (with Rajendra Khavekar and Nida Sayed).
98. “Improving the On-Time Delivery of Projects in a Complex Industrial Environment”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 231-238 (with Rajendra Khavekar and Krishnan Kaushik).
99. “A Review of the Reliability Techniques Used in the Case of Casting Process Optimization”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 309-318 (with Amit Choudhari).
100. “Investigating Red X Parameter for Short Shot-Type Defect in Plastic Injection Moulds Using Shainin’s Design of Experiments”, in “Lecture Notes in Mechanical Engineering”, Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2020, PP: 533-542 (with Rajendra Khavekar and Dharam Ranka).
101. “Effect of Machining Parameters on Surface Integrity in End Milling of Inconel 625”, in “Lecture Notes on Multidisciplinary Industrial Engineering”, Springer Singapore, DOI: 10.1007/978-981-32-9417-2_42 (2019), PP 505-515, (with Rajguru Ramesh).

*International
Publications:
Journal*

102. "A Review and Analysis of the Machining Process involving Nickel Based Super Alloy" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018, PP 425-432 (with Ramesh Rajguru).
103. "Predictive Modelling of Delamination Factor and Cutting Forces in the Machining of GFRP Composite Material using ANN" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Ramesh Rajguru and Rajnarayan Yadav).
104. "Green Supply Chain Management Practices and its Impact on Business Performance in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Gandhi Meeta).
105. "Multi Characteristics Optimization in the Turning of GFRP Composites based on Grey-Taguchi method" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Ramesh Rajguru and Kalpesh Tank).
106. "Experimental Investigation and Optimization of End Milling Parameters in the Machining of Inconel 825 using Carbide Coated Tool" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018, PP 401-412 (with Ramesh Rajguru and Geet Dave).
107. "Optimization of Injection Molding Process Parameters using Response Surface Methodology" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Khavekar Rajendra and Gosar Vimal).
108. "Supplier Selection in Plastic Products Manufacturing MSMEs using a Combined Traditional and Green Criteria Based on AHP and Fuzzy AHP" in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Deshmukh Ashish).
109. "Optimization of Machining Parameters in the Turning Operation of Inconel 825 using Grey Relation Analysis in "Lecture Notes in Mechanical Engineering", Springer Singapore, ISSN: 2195-4356, ISSN: 2195-4364 (e), 2018 (with Ramesh Rajguru, Shreyans Jain, Jaineel Desai, Milan Kaklotar and Sanidhya Mathur).

*International
Publications:
Conference*

1. "Preparation of Quadruple Hybrid Nanofluids to Enhance Machinability of Titanium Alloys Under Minimum Quantity Lubrication", at the International Conference on Mechanical and Production Engineering (ICMPE) held in Mumbai, India, organised by Institute For Technology and Research, on 23rd September 2025 (with Timbadia Virag).
2. "Sustainable Product Design Attributes for Overall Product Sustainability", presented at the Acharya International Design Conference (AIDC 2025) organised by the Acharya School of Design, Bengaluru, India during 28th – 30th May 2025 (with Basavraj Sankhgond).
3. "Emerging Trends in Machining with Hybrid Nanofluids under Minimum Quality Lubrication (MQL)", presented in the 14th International Conference on Recent Challenges in Engineering and Technology (ICRCET-2025), organised by Yenepoya University, Bhartiya City and IFERP Academy, in Bengaluru, India from 26th – 27th April 2025 (with Timbadia Virag A.).
4. "Sustainable Attributes for Product Design at the Conceptual stage of a product", presented in the international Conference on Geological and Environmental Sustainability: ICGES-2025, Bengaluru, India, on 01st March 2025 (with Basavraj Sankhgond).
5. "Optimization of a Lightweight Brake Master Cylinder for Formula Student Vehicle", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak and Darshit Rathod).
6. "Design and Optimization of Rear Suspension Geometry of an ATV", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak, ayank Sanjay Gupta, Yash Nitin Sharma).

*International
Publications:
Conference*

7. "Torsional Rigidity of a FSAE Spaceframe Chassis", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak, Krishna Vora, Bhavik Kapadia, Mann Dave and Prathamesh Desai).
8. "Analysis of an Accumulator of a Formula Student Vehicle", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak, dvait Jadhav, Shubh Dodia and Ved Chavan).
9. "Exploring Rocket Engine Power Cycles: An In-Depth Overview", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak, Ayush Shah and Vrisha Shah).
10. "A review on various methods used for reducing the maldistribution on tube side of shell and tube Heat Exchanger", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak and Kartik Ajugia).
11. "Evaluating Stress Distribution in Flat Plates with Dual Semicircular Notches", accepted for presentation and publication in the proceedings of the Fourth International Conference on Advances in Materials Studies (ICAMS-2024), organized by Dr. Vithalrao Vikhe Patil College of Engineering, Ahilyanagar, India in association with Technology Research and Innovation Centre, Pune from 17-18 December 2024 (with Khatawate Vinayak, M. A. Dharap, Balikai V.G and Revankar P.P.).
12. "Design and Analysis of Differential Bar of a Rover", accepted for publication in the proceedings of the International Conference on Composites: Design, Processing, Manufacturing and Health Monitoring (CDPMHM-2024), being organised by IIT Mandi from 20th - 22nd June 2024 (with Khatawate Vinayak, Rayar Pavan, Adithya Pillai, Chinmay Dalal, Sakshi Basrur).
13. "Investigation of Surface Roughness Parameters under Dry End Milling of Inconel 625 with Coated Tool.", in the proceedings of the 9th International & 30th All India Manufacturing Technology, Design & Research Conference (AIMTDR-2023), organized by the Department of Mechanical Engineering, IIT (BHU), Varanasi, during 8th-10th December 2023 (with Rajguru Ramesh).
14. "Predictive Modeling of Surface Roughness Parameters and MRR during Turning of Inconel 625 with Coated Inserts using Artificial Neural Network.", in the proceedings of the 9th International & 30th All India Manufacturing Technology, Design & Research Conference (AIMTDR-2023), organized by the Department of Mechanical Engineering, IIT (BHU), Varanasi, during 8th-10th December 2023 (with Rajguru Ramesh).
15. "A Conceptual Framework for Drivers Aiding the Integration of Additive Manufacturing with Industry 4.0 Practices", in the Proceedings of the International Conference on Recent Advances in Mechanical Engineering, organised by IIT Jodhpur, Rajasthan, India from 25th - 27th of August 2022 (with Trupti Markose).
16. "Investigating Casting Process Parameters Through Casting Defects Using Analytical Hierarchical Process", in the Proceedings of the International Conference on Recent Advances in Mechanical Engineering, organised by IIT Jodhpur, Rajasthan, India from 25th - 27th of August 2022 (with Chaudhari Amit).
17. "Critical Success Factors for Industry 4.0 Readiness and Adoption: A Conceptual Framework for Indian Manufacturing Industries", presented and published in the International Conference on Advanced Production and Industrial Engineering (ICAPIE-2022), organised jointly by CAPIER,

*International
Publications:
Conference*

- Delhi Technological University and Department of Mechanical Engineering, NIT Delhi, held during 11th – 12th June 2022 (with Birajdar Dhaval).
18. "A model for challenges and opportunities in the Implementation of Digitized Transforming Enablers in Manufacturing Industries", presented and published in the International Conference on Advanced Production and Industrial Engineering (ICAPIE-2022), organised jointly by CAPIER, Delhi Technological University and Department of Mechanical Engineering, NIT Delhi, held during 11th – 12th June 2022 (with Dharam Ranka).
 19. "Innovativeness and its Relationship with Firm Performance in SMEs: Understanding the Research Gap through Literature review", in the International Conference on Industrial and Manufacturing Systems (CIMS-2021), jointly organised by the department of Industrial and Production Engineering, Dr. B. R. Ambedkar National Institute of Technology, Jalandhar and the department of Production and Industrial Engineering, Punjab Engineering College, Chandigarh-160012, India from 11th- 13th November 2021 (with Chawan Anup).
 20. "Technological Innovativeness and Technological Alliances in The Context of Indian Manufacturing SMEs: A Qualitative Investigation", in the 23rd Annual International Conference of the Society of Operations Management (SOM 2019), organised by the department of Industrial and Management Engineering, IIT Kanpur, INDIA from 19th to 21st December 2019 (with Chawan Anup).
 21. "Boosting Technological Innovativeness in Indian Manufacturing SMEs: A Novel Approach", in the 23rd Annual International Conference of the Society of Operations Management (SOM 2019), organised by the department of Industrial and Management Engineering, IIT Kanpur, INDIA from 19th to 21st December 2019 (with Chawan Anup).
 22. "Technological Innovativeness and its Impact on Firm Performance in Indian Manufacturing SMEs", in the International Conference on Mechanical Engineering Design (ICMechD-2019), organised by SSN College of Engineering, Chennai, during 25th to 26th April, 2019 (with Chawan Anup).
 23. "Multi Criteria Decision Making Techniques for Supplier Selection in the Context of Gear Manufacturing in India", in the proceedings of the Diamond Jubilee National Convention of IIIE & International Conference (Role of Industrial Engineering in Industry 4.0 Paradigm ICIEIND 2018), organised from 27th to 30th September 2018 at Bhubaneswar, Odisha, India (with Deshmukh Ashish).
 24. "Optimization of Injection Moulding Process Parameters using Taguchi DoE Methodology", in the proceedings of the Diamond Jubilee National Convention of IIIE & International Conference (Role of Industrial Engineering in Industry 4.0 Paradigm ICIEIND 2018), organised from 27th to 30th September 2018 at Bhubaneswar, Odisha, India (with Khavekar Rajendra).
 25. "Optimization of Process Parameters in Electrical Discharge Machining of DIN-X36CrMo17 steel using Grey Relational Analysis", in the proceedings of the 4th International Conference on Industrial Engineering (ICIE-2017) organised by SV National Institute of Technology, Surat from 21st to 23rd of December 2017 (with Khavekar Rajendra and Ajaykrishna C.).
 26. "Understanding the Benefits of Green Supply Chain Management and the frame work for a generic approach in measuring the organizational programme", in the proceedings of the 4th International Conference on Industrial Engineering (ICIE-2017) organised by SVNIT, Surat from 21st to 23rd of December 2017 (with Meeta Gandhi).
 27. "Shainin Tool Approach for Quality Monitoring in Injection Moulding", in the proceedings of the 4th International Conference on Industrial Engineering (ICIE-2017) organised by SV National Institute of Technology, Surat from 21st to 23rd December 2017 (with Khavekar Rajendra and Salian Harshitha).
 28. "Improvement of Gear Quality in Machining Industry using Shainin System", in the International Conference on Materials, Manufacturing and Design 2016, organised by Dr. Babasaheb Ambedkar Technological University, Maharashtra on 20th & 21st December, 2016 (with Khavekar Rajendra and Deshpande Girish).

*International
Publications:
Conference*

29. "Optimization of Injection Moulding Process Parameters using Shainin System", in the International Conference on Materials, Manufacturing and Design 2016, organised by Dr. Babasaheb Ambedkar Technological University, Maharashtra on 20th & 21st December, 2016 (with Khavekar Rajendra and Modi Bhavik).
30. "Grey Fuzzy Multiple Criteria Optimization of Process Parameters for CNC Turning of GFRP/Vinyl-Ester Composites", in the International Conference on Materials, Manufacturing and Design 2016, organised by Dr. Babasaheb Ambedkar Technological University, Maharashtra on 20th & 21st December, 2016 (with Naresh Deshpande and Ramesh Rajguru).
31. "Multiple Criteria Optimization of Process Parameters for Edge Milling of NEMA G II Composites using Desirability Function Analysis", in the International Conference on Materials, Manufacturing and Design 2016, organised by Dr. Babasaheb Ambedkar Technological University, Maharashtra on 20th & 21st December, 2016 (with Ramesh Rajguru and Naresh Deshpande).
32. "Optimization of cutting Parameters for surface Roughness in the Machining of GFRP composites using Grey fuzzy method in the 6th International & 27th All India Manufacturing Technology, Design & Research Conference (AIMTDR-2016) held at College of Engineering, Pune from 16-18 December 2016 (With Naresh Deshpande, Ramesh Rajguru, Kalpesh and Mandar).
33. "Optimization of Material Removal Rate and Cutting Forces in Turning of GFRP composites" in the 6th International & 27th All India Manufacturing Technology, Design & Research Conference (AIMTDR-2016) held at College of Engineering, Pune from 16-18 December 2016 (With Ramesh Rajguru, Kalpesh and Mandar).
34. "Strength Analysis of two Component Epoxy Adhesive Bond between Carbon Fibre AND SS302" in the 6th International & 27th All India Manufacturing Technology, Design & Research Conference (AIMTDR-2016) held at College of Engineering, Pune from 16-18 December 2016 (with Narendran, Karan, Akash and Gaurav).
35. "A review and proposed framework of the generic approach for organisational performance measurement in Green Supply Chain Management" is published in the International Conference on "Big Data Analytics for Optimising Supply Chains", organised by SPJIMR in collaboration with Production and Operations Management Society (POMS) India Chapter on 29th-30th July, 2016 (with Gandhi Meeta).
36. "Utility Fuzzy Multicriteria Optimization of Process Parameters in CNC Turning of GFRP/ Vinyl ester Composites" presented and published in the ICMMM2014, International Colloquium on Materials, Manufacturing and Metrology, held at Indian Institute of Technology Madras, Chennai, during August 8-9, 2014 (with Naresh Deshpande and Ramesh Rajguru).
37. "Grey fuzzy optimization of milling parameters for G-11 GFRP/Epoxy composites with multiple performance characteristics" presented and published in the ICMMM2014, International Colloquium on Materials, Manufacturing and Metrology, held at Indian Institute of Technology Madras, Chennai, during August 8-9, 2014 (with Ramesh Rajguru and Naresh Deshpande).
38. "Multi Criteria Decision Making using Fuzzy Inference System: A Case in Manufacturing" in the ICCICCT 2014 conference held at Noorul Islam centre for higher education Noorul Islam university Kumaracoil, Tamilnadu, India, during July 10-11, 2014, published in the IEEE Xplore Digital Library (with Naresh Deshpande and Ramesh Rajguru).
39. "Utility Fuzzy Multiobjective Optimization of Process Parameters for CNC Turning of GFRP/Epoxy Composites" in the 5th International and 26th All India Manufacturing Technology, Design and Research Conference - "AIMTDR 2014" organized by the Department of Mechanical Engineering, IIT Guwahati, India from December 12-14, 2014 (with Naresh Deshpande, Ramesh Rajguru, Sandip Mane).
40. "Experimental Investigation and Optimization of Milling Parameters in the Machining of NEMA G -11 GFRP Composite Material using PCD Tool" in the 5th International and 26th All India Manufacturing Technology, Design and Research Conference - "AIMTDR 2014" organized by

*International
Publications:
Conference*

- the Department of Mechanical Engineering, IIT Guwahati, India from December 12-14, 2014 (with Ramesh Rajguru, Naresh Deshpande, Sandip Mane).
41. "An Experimental Investigation into the Optimization of Cutting Force in CNC Turning of Woven Fabric based GFRP/Epoxy Composites using PCD Cutting Tool", in the International Conference on Design, Manufacturing and Mechatronics (ICDMM-2014) organized by KJEI's Trinity College of Engineering and Research, Pune from 9th to 10th January 2014 (with Deshpande Naresh, Rajguru Ramesh).
 42. "An Experimental Study on the Performance and Emission Characteristics of a Single Cylinder Diesel Engine Using CME-Diesel Blends", in the International Conference on Renewable Energy and Sustainable Development (ICRES-2014) organized by KJEI's Trinity College of Engineering and Research, Pune from 9th to 10th January 2014 (with Mane Sandeep, Deshpande Naresh and Rajguru Ramesh).
 43. "Analysis of a Multi-criteria optimization problem using Taguchi and Grey relational analysis: A case study in the machining of composite materials" in the International Conference on Advances in Mechanical Engineering (ICAME), organized by the department of Mechanical Engineering, College of Engineering Pune, Maharashtra from 29th-31st May 2013 (with Ramesh Rajguru and Naresh Deshpande).
 44. "Knowledge Management Barriers in Indian Manufacturing SEMs: Modeling using an Interpretive Structural Modeling Approach" in the International Conference on Business Intelligence, Analytics and Knowledge Management (BIAKM-2013) organized by IBS Hyderabad, IFHE University, Hyderabad, India from 18th to 19th April 2013 (with Chawan Anup). **Received the Best Research Paper Award in the conference.**
 45. "Study of Cutting Force in CNC Turning of Woven Fabric based GFRP/Vinylester Composites using PCD Cutting Tool" in the International Conference on Advanced Manufacturing and Automation (INCAMA-2013) organised by the Department of Mechanical Engineering (DST-FIST Sponsored) Kalasalingam University, Madurai, Tamil Nadu from the 28th-30th March 2013 (with Naresh Deshpande and Ramesh Rajguru).
 46. "Multi-criteria optimization using Taguchi and Grey relational analysis in CNC drilling of GFRP/E composite material" in the International Conference on Advanced Manufacturing and Automation (INCAMA-2013) organised by the Department of Mechanical Engineering (DST-FIST Sponsored) Kalasalingam University, Madurai, Tamil Nadu from the 28th-30th March 2013 (with Ramesh Rajguru and Naresh Deshpande).
 47. "Recent Trends and Developments in the use of Woven Fabric Reinforcements for Composite Materials" in the International Conference on Innovations in Automation and Mechatronics Engineering 2013 (ICIAME2013), organised by G.H. Patel College of Engineering & Technology, Vallabh Vidyanagar, Gujarat, India, 21-23 February 2013 (with Deshpande N.C. & Rajguru Ramesh).
 48. "Remanufacturing Benefits Versus Fear of Product Cannibalization: An Analysis of Recent Trends in the Indian Context", in the International Conference on Agile Manufacturing-2012 (ICAM-2012) organized by the Mechanical Engineering Department, Indian Institute of Technology- BHU, Varanasi, December 16-19, 2012 (with Terkar Ravi & Kalmkar Vilas).
 49. "Decision Criterion and Methods of Supplier Selection" in the International Conference on Recent Advances In Engineering, Technology And Management: SPICON 2012, organized by the Department of Mechanical Engineering, SPCE, May 31st - June 2nd, 2012 (with Ashish Deshmukh).
 50. "Importance of Remanufacturing Sector as a Secondary Market in India in view of Optimum Profit Life Cycle" in the International Conference on Recent Advances In Engineering, Technology And Management: SPICON 2012, organized by the Department of Mechanical Engineering, SPCE, May 31st - June 2nd, 2012 (with R. Terkar and V.R. Kalamkar).
 51. "Need for Product Cannibalization in Small Scale Manufacturing Industries through Product Life Cycle" in the International Conference on Industrial Engineering ICIE-2011) organized by Mechanical Engg. Dept., S.V.N.I.T., Surat, during 17th - 19th November 2011 (with Ravi Terkar).
 52. "Product Cannibalization due to Remanufacturing and its decisive strategies" in the International Conference on 'Sustainable Manufacturing: Issues, Trends and Practices'

*International
Publications:
Conference*

- (ICSM2011) organized by Mechanical Engg. Dept., BITS Pilani, during 10th - 12th November 2011 (with Ravi Terkar and Vilas Kalamkar).
53. "Achieving Zero Defects at an Economically Affordable Cost" in the International Conference of Society of Operations Management (Nasik: Symbiosis Institute of Operations Management, Maharashtra, Dec., 2007) (with Sawan Kumar Naik).
 54. "Market Orientation-Manufacturing Performance Relationship: An Empirical Study" in the International Conference-COSMAR (Bangalore: Indian Institute of Science, Karnataka, India, September, 2006).
 55. "Vibration Analysis of an Assembly by Converting it into a Mass Spring System" in the International Conference on Advances in Materials Processing and Characterization (Chennai: Anna University, Tamil Nadu, India, August, 2006) (with Bhosale Ajith, Lakal Narendra and Khavekar Rajendra).
 56. "Effect of Market Orientation on Manufacturing Performance of Emerging Market SMEs" in the Academy of Management Annual Meeting and Conference on Knowledge, Action and Public Concern (Atlanta: USA, Aug., 2006) (with Gaur, S. S. and Singh, D. A.).
 57. "Influence of Environment, Resources and Market Orientation on Manufacturing Performance" in the American Marketing Association Annual Meeting and Summer Educator's Conference (Chicago: USA, Aug., 2006) (with Gaur S S. and Singh, D. A.).
 58. "Market Orientation-Manufacturing Performance Relationship: Role of Firm Resources and External Environment" in the Academy of International Business Annual Meeting and Conference (Beijing: China, June, 2006) (with Gaur, S S. and Singh, D. A.).
 59. "Effect of Market Turbulence and Market Focus on Firm's Performance in Small and Medium Scale Manufacturing Firms" in the International Seminar on Creating Entrepreneurship Environment and Developing Entrepreneurial Management (Mumbai: Indian Institute of Technology Bombay, India, Mar., 2006) (with Gaur, S. S.).
 60. "Market Orientation and Manufacturing Outputs" in the AMS 12th Biennial World Marketing Congress (Muenster: University of Muenster, Germany, July, 2005) (with Gaur S. S.).
 61. "A Review of the Determinants of Customer Loyalty" in the AMS 12th Biennial World Marketing Congress (Muenster: University of Muenster, Germany, July, 2005) (with Gaur S S. and Agarwal Richa).
 62. "Exploring Relational Switching Cost-Commitment Link in Small and Medium Manufacturing Firms" in the International Conference on Marketing Paradigms for Emerging Economies (Ahmedabad: Indian Institute of Management Ahmedabad, Gujarat, India, January, 2005) (with Gaur S. S. and Shinde R K.).
 63. "Developing an Understanding of the Mid-Size Manufacturing Firms' Buying Behavior for ERP" in the International Conference on Indian Midsize Manufacturing Enterprises- 'Opportunities and Challenges in a Global economy', jointly organized by MDI Gurgaon and Confederation of Indian Industry in New Delhi (Hotel Le Meridien) from 19-20, 2004 (with Gaur S S. and Kundu Protik).

*Edited Book/
Text Book/
Book Chapter/
Proceedings:*

1. "Intelligent Approaches to Cyber Security", Chapman and Hall/ CRC Press – Taylor & Francis, USA, eBook ISBN – 9781003408307, DOI, <https://doi.org/10.1201/978-100-340-8307-1,2023>.
2. "Lecture notes in Mechanical Engineering", Springer Publications, ISBN: 978-981-19-7970-5, ISBN: 978-981-19-7971-2 (E), <https://doi.org/10.1007/978-981-19-7971-2> (eBook), Proceedings of International Conference on Intelligent Manufacturing and Automation: ICIMA 2022 (with K. N. Vijayakumar and Amool A. Raina).
3. "Cyber Security Threats and Challenges facing Human Life", CRC Press – Taylor & Francis Publications, USA, ISBN No.: 9781032111285 HB, e ISBN No.: 9781003218555 EB, Category No.: 481460.
4. "Cyber security challenges in digital manufacturing and possible ways of mitigation" published as a book chapter in "Cyber Security Threats and Challenges facing Human Life", by CRC Press, Taylor and Francis Group, HB 9781032111285.

*Edited Book/
Text Book/
Book Chapter/
Proceedings:*

5. "Lecture Notes on Data Engineering and Communications Technologies: 92", Springer Publications, ISSN: 2367-4512, ISSN: 2367-4520 (E), ISBN: 978-981-16-6600-1, <https://doi.org/10.1007/978-981-16-6601-8> (ebook), Proceedings of International Conference on Wireless Communication: ICWiCOM 2021 (with Zoran Gajic and Amit A. Deshmukh).
6. "Lecture Notes in Mechanical Engineering", Springer Publications, ISSN: 2195-4356, ISSN: 2195-4364(E), ISBN 978-981-15-4484-2, <https://doi.org/10.1007/978-981-15-4485-9> (ebook), proceedings of International Conference on Intelligent Manufacturing and Automotation: ICIMA 2020 (with Kottur Vijayakumar N. and Raina Amool A.).
7. "Algorithms for Intelligent Systems (AIS) book series", Springer Publications, ISSN: 2524-7565, ISSN: 2524-7573(E), ISBN: 978-981-15-3241-2, <https://doi.org/10.1007/978-981-15-3242-9> (ebook), Proceedings of 2nd International Conference on Advance Computing Technologies and Applications: ICACTA 2020 (with Antonis Michalas, Narendra Shekokar and Meera Narvekar).
8. "Lecture Notes on Data Engineering and Communications Technologies: 36", Springer Publications, ISSN: 2367-4512, ISSN: 2367-4520(E), ISBN: 978-981-15-1001-4, <https://doi.org/10.1007/978-981-15-1002-1> (ebook), Proceedings of International Conference on Wireless Communication: ICWiCOM 2019 (with Zoran Gajic and Amit A. Deshmukh).
9. Editor-in-Chief, Proceedings of "DJASCII 2019", ISBN: 978-93-5382-856-1.
10. Editor-in-Chief, Proceedings of "DJ Spark 2019", ISBN: 978-93-5346-349-4.
11. "Integrated Approach of Quality Cost and Six Sigma" Customer Delight, Lambert Academic Publishing, ISBN: 978-620-0-09163-5, 2019 (with Amar Mumurkar & S. N. Teli).
12. "Lecture notes in Mechanical Engineering", Springer Publications, ISBN: 978-981-10-9040-0, ISBN: 978-981-10-9041-7 (e), Proceedings of International Conference on Intelligent Manufacturing and Automation: ICIMA 2018 (with K. N. Vijayakumar and Amool A. Raina).
13. Editor-in-Chief, Proceedings of "DJASCII 2018", ISBN: 978-93-5346-097-6.
14. Editor-in-Chief, Proceedings of "DJ Spark 2018", ISBN: 978-93-86724-75-5.
15. "Lecture Notes on Data Engineering and Communications Technologies", Volume 19, Springer Publications, ISSN: 2367-4512, ISBN: 978-981-10-8338-9, Proceedings of International Conference on Wireless Communication: ICWiCOM 2017 (with Deshmukh Amit & Ray K. P.).
16. Editor-in-Chief, Proceedings of "DJASCII 2017", Excel India Publishers, ISBN: 978-93-86724-10-6.
17. Editor-in-Chief, Proceedings of "DJ Spark 2017", ISBN: 978-93-86256-77-5.
18. Editor-in-Chief, Proceedings of "DJ Spark 2016", ISBN: 978-93-85777-54-7.
19. Editor in Chief of Procedia Computer Science: ELSEVIER/ScienceDirect, Volume 45 (2015); Proceedings of International Conference on Advanced Computing Technologies and Applications (ICACTA) organised by SVKM's DJSCE, ISSN: 1877-0509 (with Dr. Abhijit R. Joshi and Dr. Narendra Shekokar).
20. "Perfect Product Launching strategies in the Context of Survival of Small Scale, Consumer Products Industries" Dr. Hari Vasudevan, in K. Shah, V.R. Lakshmi Gorty and A. Phirke (Eds.): ICTSM 2011, CCIS 145, pp.321-326, 2011, Springer "Verlag Berlin Heidelberg 2011.
21. "Effect of Market Turbulence and Market Focus on Firm's Performance in Small and Medium Scale Manufacturing Firms" in S. Bhargava (ed.) IIT Bombay, Entrepreneurial Management, (Sage Publications), Feb. 2008 (with Gaur S.S.).

*National
Publications:
Journal*

1. "A Review of Machining Processes and Machinability in the case of GFRP Composite Materials" in the IPI Journal, the Official Publication of Indian Plastics Institute, Vol.18, Iss 03, August/September 2013 (with Rajguru Ramesh).
2. "Electron- Beam Curing of Polymeric Composites: An Enabling Technology for Advanced Manufacturing in the IPI Journal/Official Publication of Indian Plastic Institute, Vol.18, Iss.2, June/July 2013 (with Deshpande Naresh).
3. "Quality Improvement in the Manufacture of Air Circuit Breakers" Dr. Hari Vasudevan, TECHNOFOCUS: Journal for Budding Engineers Vol.1 (2), 2011 (with Valia Akash).
4. "Press working of Composite Sheets: A Compound Die Design Approach" Dr. Hari Vasudevan, TECHNOFOCUS: Journal for Budding Engineers Vol.1 (1), 2010 (with Phadnavis Vrushank).

*National
Publications:
Journal*

5. "Understanding the Benefits and Need for Implementation of ERP in Small and Medium Manufacturing Firms" in Voice of Technology, Indian Society of Manufacturing Engineers, 2004, Combined Issues 3 and 4, July/Sep and Oct/ Dec.
6. "Information & Communication" in Voice of Technology Indian Society of Manufacturing Engineers, 2000, Issue 4, Oct/Dec.

Work Books:

Two Engineering Drawing Workbooks covering the syllabus of "Engineering Drawing-I" and "Engineering Drawing -II" for Semester 1 and 2 respectively of the University of Mumbai during the academic year 1996-1997.

*National
Publications:
Conference*

1. "Application of Knowledge Management in an Indian Automotive Industry" in the National Conference of Emerging Trends in Engineering 'NCETE-13' during 4th & 5th January 2013, organized by M. H. Saboo Siddik College of Engineering, Byculla, Mumbai (with Chawan Anup).
2. "Delamination in Machining of Composite Materials: A Review in the Context of Drilling Operation" in the National Conference on Emerging Trends in Engineering 'NCETE-13' during 4th & 5th January 2013, organized by M.H. Saboo Siddik College of Engineering, Byculla, Mumbai (with Rajguru Ramesh & Deshpande N.C.).
3. "Near Dry Machining- a minimum quantity lubrication machining" in the National conference on Advances In Mechanical Engineering & Emerging Technologies (AMEET-12), organized by the Department of Mechanical Engineering, Kamla Nehru Institute of Technology, Sultanpur form April 07-08, 2012 (with Rajesh Patil and V.R. Kalamkar).
4. "A Modified Approach in Precision Manufacturing by Abrasive Flow Machining" in the National conference on Advances in Mechanical Engineering (Hyderabad: Vasavi College of Engineering, Andra Pradesh, India, May, 2005) (with Khavekar Rajendra, Lakal Narendra and Bhosale Ajit).
5. "Achieving Competitive Excellence in Contract processing in a Manufacturing Firm" in the National Conference on World Class Manufacturing (Wardha: B. D. College of Engineering, Sevagram, Maharashtra, India, March, 2004) (with Khavekar Rajendra and Lakal Narendra).

*Other
Experience:*

1. Member of the Board of Studies in Mechanical/Production/Automobile/Marine Engineering of the University of Mumbai and Convener, Syllabus revision committee in Production Engineering from the year 2006.
2. Visiting Faculty at Veermata Jijabai Technological Institute (VJTI), teaching M.Tech. (Production Engg.) students the subject of Supply Chain Management during January – May 2008.
3. Visiting faculty at NMIMS University's MPSTME, teaching subjects like "World Class Manufacturing" and "Manufacturing Systems & Strategy" for the MBA (Tech) course during the academic years 2006-2007, 07-08, 08-09 & 09-10.
4. Visiting faculty at NMIMS University's MPSTME, Shirpur (Dhule) Campus teaching subjects like "Engineering Drawing" and "Material Science" for the MBA (Tech.) and B.Tech courses during the academic years 2007-2008 & 08-09.
5. Visiting faculty at Chetana's Ramprasad Khandelwal Institute of Management and Research, Bandra (E), Mumbai - 51 in the subject of Production Management for the academic year 1996-1997.
6. Visiting faculty at Shri Bhagubhai Mafatlal Polytechnic, Vile Parle (W), Mumbai during 1994-1996, teaching subjects such as Production Management, Work Study & Ergonomics and Engineering Drawing.
7. Mumbai University panel member for conducting group discussion and personal interview for the MMS admissions during 1996-1997 and 1997-1998 on behalf of Directorate of Technical Education, Maharashtra state.
8. Panel member at NMIMS University for conducting personal interview for the MBA (Technology) admissions during 2005-2006, 06-07, 07-08 & 08-09.
9. Visiting Faculty at SVKM's Institute of International Studies (IIS), teaching students of IIS and Kingston University, London for their graduate program, the subject of "Technology and Change" during academic year 2006-2007.

*Short Term
Training
Undergone/
Programs
Attended*

One-day workshop on “Skill India” under TEQIP, conducted by VJTI, Matunga, Mumbai on 25th February, 2016.

Indian Engineering Deans Council: Global Summit on Engineering Education – Current Scenario & Future Prospects organised by the Indian Society for Technical Education at Chennai during 31st July – 1st August, 2015.

NITIE: 1. Just in Time for Indian Industries.
2. Production Management.

ISME/IIF: 1. Advances in Press Tool Design and Manufacturing.
2. Preparing Foundries for the Challenges Ahead.
3. National Seminar on Centre less Grinding.
4. International Conference on Advances in Manufacturing Technology.
5. National seminar on Metrology and Inspection.
6. High Tech Manufacturing.

ISTE Trends and Advances in Machine Tools and Manufacturing.

NCQM Three Keys for Business Excellence.

IIT PAN-IIT Conferences at IIT Bombay and IIT Madras.

*Programs
Coordinated/
Chaired*

Invited Speaker to address the delegates of World Education Congress (12th Edition) held on 14/07/2023 at Taj Lands End, Bandra, Mumbai on the topic “Affordable & Sustainable Education for All : The Role of Technology”.

Panel Member: Discussion on “Holistic Multidisciplinary Education with Universal Human Values, Are we Ready for Change?”, during the National Symposium on the Theme: Enhancing Quality & Driving Change in Higher & Technical Education through NEP-2020-Opportunities for Stakeholders, organised by the IQAC, Thakur College of Engineering and Technology, Mumbai on the 27th of April 2021.

Session Chairman (Session: Advanced and Traditional Optimization Techniques) in the 4th International Conference on Industrial Engineering (ICIE-2017) organised by SVNIT, Surat from 21st to 23rd of Dec-2017.

Session Chairman during the 1st International Conference on Emerging Trends in Computer and Mechanical Engineering (ICETCAME-17) organised by SBMP, Mumbai from 15th to 16th of December 2017.

Panel member: Discussion on “How Internet of things will be the game changer” organised by NASSCOM jointly with L&T Technology Services & Accenture as part of the NASSCOM COE-IOT conclave on 20th May 2016.

Session Chairman (Mechanical Engineering) in the International Conference on “Emerging Trends in Technology and its Applications” (ICETTA-2014), organized by Yadavrao Tasgaonkar College of Engineering & Management, Karjat, from 7th – 8th March 2014.

Convenor of the International Conference on Communication Technologies (ICCT 2013) organized by Dwarkadas J. Sanghvi College of Engineering during October 2013.

Member-Interactive Panel, Session titled “An Exchange between Science and Spirituality- Outer Space and Inner Space” in the SSTech 2012, i.e. the 2-Day National Conference on Science and Spirituality in the age of Technology held from October 05-06, 2012, organized by the University of Mumbai, India jointly with Dr. T. D. Singh’s Institute of Science and Religion at the University of Mumbai campus, Kalina, Mumbai.

Session Chairman in the International Conference on Recent Advances in Engineering, Technology and Management: SPICON 2012, organized by the Mechanical Engineering Department., SPCE from May 31st – June 2nd, 2012.

*Programs
Coordinated/
Chaired*

Session Chairman in the International Conference on 'Sustainable Manufacturing: Issues, Trends and Practices' (ICSM2011) organized by the Mechanical Engg. Dept., BITS Pilani, from 10th - 12th November 2011.

Convener, National Conference on Communication Technology (NCCT 2011) organized by Dwarkadas J. Sanghvi College of Engineering during October 2011.

Organising Secretary, International Conference on Technology Systems and Management (ICTSM) organized by Dwarkadas J. Sanghvi College of Engineering jointly with MPSTME of NMIMS (Deemed to be university) during February 2011.

Vice Chairman, Asia Pacific Regional Conference in ICTM - 2010 organized by Dwarkadas J. Sanghvi College of Engineering jointly with MPSTME of NMIMS (Deemed to be university) during March 2010.

Session Chairman (Manufacturing/Automobile/Others): National Conference on Recent Trends in Mechanical engineering (NCRTME-2010) organised by Datta Meghe College of Engineering, Airoli, Mumbai (August 2010).

Session Chairman National Conference on Advances in Mechanical Engineering (NCAME09), organized by the Mechanical Engineering department of MCT's Rajiv Gandhi Institute of Technology of Technology, Mumbai in Association with Bhabha Atomic Research Centre, Mumbai during 15-16th January 2009.

Organizing Committee member: National Conferences on Information and Communication Technology (NCICT) organized by Dwarkadas J Sanghvi College of Engineering during the years 2007, 2008 and 2009 as well as "Faculty Development Program" and "Seminar on Engineering Education: Challenges and Perspectives" approved by Indian Society for Technical Education at DJSCE from the 2nd to 6th January, 2007.

Coordinator: Short Term Training Program on "Computer Aided Solutions for Engineering Applications" recognized and approved by the Indian Society for Technical Education, New Delhi at DJSCE from 11th Dec' 2006 to 22nd Dec 2006.

*Awards
Received:*

- 1) Received the "Higher Education Leader of the Year 2025", given by the University Leaders Forum, at Pune on 12th December, 2025.
- 2) Received the "Principal of the Year Award for Institutional Excellence", at the 8th Higher Education Innovation & Technology Summit & Awards, held at Pune on 15th of May, 2025.
- 3) Received the "EDUCATION LEADERSHIP AWARD" at the "31st Business School Affaire & Devang Mehta National Education Leadership Awards" held at Taj Lands End, Bandra (W), Mumbai, on 22nd November, 2024.
- 4) Received the "Top Most Influential Principals (Education)" award at the World Education Congress 2023, 12th Edition, held at Taj Lands End, Bandra (W), Mumbai, on 14th July, 2023.
- 5) Received the "Late Prof. Y.K. Bhushan: Most Influential Professors" award at the World Education Congress 2023, 12th Edition, held at Taj Lands End, Bandra (W), Mumbai, on 13th July 2023.
- 6) Received Pratheeksha foundation award for social and educational contribution in the society on the 16th of October, 2022 from Shri Shripad Naik, Hon. Minister, Govt. of India.
- 7) Received "Outstanding Leader in Higher Education" award from Elets Education at the Education Innovation Summit, Pune on 10th December, 2022.
- 8) Received "EDUCATION LEADERSHIP AWARD" from "DYNERGIC Business Solutions" as part of their "GOLDEN AIM AWARDS for Excellence & Leadership in Education" on 19th June, 2020.
- 9) Received the "The IEI-FCRIT Excellence Award" for recognition of Academic Excellence as Principal, during the 3rd Biennial International Conference (ICNTE 2019) jointly held by The Institution of Engineers (India), Belapur Chapter & Fr. C. Rodrigues Institute of Technology, Vashi on the 05th of January 2019 at Vashi.
- 10) Received the "Distinguished Principal" award from the CSI (Computer Society of India) during the "TechNext India 2017", Symbiosis of Academicians and IT Industry, held at the Victor Menezes Convention Centre (VMCC) of IIT Bombay on 15/01/2017.

*Awards
Received:*

- 11) Received the "Social Action Award" from Indian Development foundation, a National Level NGO during the year 2015-16.
- 12) Received the Best Research Paper Award during the International Conference on Mechanical and Production Engineering (ICMPE) at Pune on 07th of August 2016.
- 13) Received the Best Paper Award during the 2nd International Conference on Business Intelligence, Analytics and Knowledge Management (BIAKM-2013), organised from April 18-19, 2013 at IBS, IFHE University, Hyderabad, India.

-----X-----X-----