

Somaiya Vidyavihar University

Name: Dr. Shivangi Viral Thakker			E-mail:shivangiruparel@somaiya.edu		
Contact No: O- 022 66449513, M- 8976833080					
Department/Section: Mechanical Engineering					
College: K J Somaiya College of Engineering					
DOJ Somaiya: Jan 2005		Career Experience:20+ Yrs		Industry Experience: 0 Yrs	Teaching Experience: 20 Yrs
Present Academic Designation: Associate Professor				Present Administrative Designation: Associate HOD	

Area of research/specialization and Courses Delivered	
Research domain/interests/areas 1. Sustainable manufacturing and development 2. Waste management. 3. Renewable Energy sources Courses Delivered 1. Industrial Engineering and management 2. Sustainable manufacturing 3. Failure analysis 4. Supply chain management	

Recognition as a teacher by any University	UG: Yes	PG: Yes	Ph.D : Yes
Details of Recognitions 1. UG teacher recognized by MU and SVU 2. PG teacher recognized by SVU 3. Ph.D Guide in Mechanical Engineering recognized by SVU			

Education					
Examination	Name of the Degree	University/Board	Institute/College	Year	CPI/SPI/ %Marks
Ph.D	Doctorate in Technology	Mumbai	SPCE, Andheri	2021	9.8
PG	M.E	Mumbai	K J Somaiya college of Engineering	2012	80%
UG	B.E	Mumbai	Datta Meghe College of Engineering	2004	64%
HSC	HSC	Mumbai	K.J.Somaiya college of science and commerce	2000	70.83%

Notable Experience Details					
Sr. No	Name of the organization	Designation	Date of Joining	Date of Leaving	Experience (Years)
1.	K J Somaiya college of Engineering	Asso. Prof	Jan 2005	Till date	20

Research Accomplishments and Projects		
No of students pursuing Ph.D as on date: NIL		No of students completed Ph.D as on date:0
No of students completed PG thesis / Project work as on date: 4		No of students / groups completed UG projects as on date:20
Publications Total:16	Number of Peer review Journal papers: 6	Number of Conference papers:10
Details of Publications: 6 papers (Emerald : 3 papers in MEQ journal with Scopus Index 9.8 ; Emerald: 1 Paper in AAOU with Scopus index 5.6 ; Emerald : 2 papers in MSCRA journal with google scholar indexing). Google scholar citations= 437 , h index- 5, i10 index- 5		

International Journals

1. **Shivangi Viral Thakker**, Santosh B. Rane, (2018) "Implementation of green supplier development process model in Indian automobile industry", *Management of Environmental Quality: An International Journal*, Vol. 29 Issue: 5, pp.938-960, <https://doi.org/10.1108/MEQ-03-2018-0052>
2. Rane, S.B. and **Thakker, S.V.** (2019), "Green procurement process model based on blockchain-IoT integrated architecture for a sustainable business", *Management of Environmental Quality*, Vol. 31 No. 3, pp. 741-763. <https://doi.org/10.1108/MEQ-06-2019-0136>.
3. Rane, S.B., **Thakker, S.V.** and Kant, R. (2021), "Stakeholders' involvement in green supply chain: a perspective of blockchain IoT-integrated architecture", *Management of Environmental Quality*, Vol. 32 No. 6, pp. 1166-1191. <https://doi.org/10.1108/MEQ-11-2019-0248>
4. **Thakker, S.V.**, Parab, J. and Kaisare, S. (2021), "Systematic research of e-learning platforms for solving challenges faced by Indian engineering students", *Asian Association of Open Universities Journal*, Vol. 16 No. 1, pp. 1-19. <https://doi.org/10.1108/AAOUJ-09-2020-0078>
5. Gohil, D. and **Thakker, S.V.** (2021), "Blockchain-integrated technologies for solving supply chain challenges", *Modern Supply Chain Research and Applications*, Vol. 3 No. 2, pp. 78-97 <https://doi.org/10.1108/MS CRA-10-2020-0028>
6. **Thakker, S.V.**, Rane, S.B. and Narwane, V.S. (2024), "Implementation of blockchain – IoT-based integrated architecture in green supply chain", *Modern Supply Chain Research and Applications*, Vol. 6 No. 2, pp. 122-145. <https://doi.org/10.1108/MS CRA-01-2023-0005>

Conferences

1. Shivangi Ruparel, Sangita Bansode, Paresh Tulankar, "Analysis of transient thermal stresses in a delayed coke drum", 31st May 2012 to 2nd June 2012, International conference on Recent Advances In Engineering, Technology And Management, Sardar patel college of Engineering, Mumbai
2. Shivangi Ruparel, Sangita Bansode, "Fitness for service evaluation of bulging in a Delayed coke drum", 8th to 10th December 2011, International conference on Current trends in Technology, Nirma University, Ahmedabad
3. R.R. Lekurwale , (Dr.) G. V. Shah , Shivangi Ruparel, "Life Cycle Issues In Product Design and Manufacturing", 10th to 12th November 2011, International conference on sustainable manufacturing- issues trends and practices (ICSM2011), Birla Institute of Technology and Science, Pilani (BITS Pilani)
4. Shivangi Thakker, Dr. Santosh Rane, "Green Procurement Modelling using Fuzzy Logic and MCDM Methods", paper presentation in International Conference on 'Smart Strategies for Digital World - Industrial Engineering Perspective' by IIIE, at Shri Ramdeobaba College of Engineering & Management, Nagpur, 21-22 October 2016.
5. Shivangi Thakker, Dr. Santosh Rane, Formulation of strategies for Performance improvement of Green supply chain using balanced score card method Diamond Jubilee National Convention of IIIE & International Conference, Odisha, September 2018, SCM- 20193, pp- 94.

6. Shivangi Thakker, Dr. Santosh Rane, Performance improvement of Green supply chain using balanced score card method ISDSI, 12th annual International conference , SPJIM, Mumbai, December 2018, Paper No- 452, pp-44.
7. Shivangi Thakker, Dr. Santosh Rane, Performance Evaluation of Green supply chain using Fuzzy TOPSIS and Balanced Scorecard Method 5th International Conference on Industrial Engineering (ICIE 2019), SVNIT, Surat, India December 2019, ISBN: 978-93-86238-81-8, pp-66-70.
8. Awadhesh Kumar Yadav, Shivangi V. Thakker (Proceedings of ICIE 2019), Design and Analysis of Pneumatic Compression Moulding Machine, 5th International Conference on Industrial Engineering, pp 852-856, ISBN: 978-93-86238-81-8
9. Chaudhari, P., Thakker, S. (2021). Biogas Generation by Utilizing Agricultural Waste. In: Pawar, P.M., Balasubramaniam, R., Ronge, B.P., Salunkhe, S.B., Vibhute, A.S., Melinamath, B. (eds) Techno-Societal 2020. Springer, Cham. https://doi.org/10.1007/978-3-030-69921-5_82
10. Shivangi Thakker, Shweta Pandey, (2024), Development of Sustainable Tableware Materials Produced with Agricultural waste, ICTEAH- International conference on technologies for Energy, Agriculture and healthcare at KJSCE, Mumbai.

Details of Research / consultancy / projects:

No of Research / consultancy / projects completed: 1 Rs: 50,000	No of Research / consultancy / projects on-going: 1 Rs: 53,10,000	No of Research / consultancy / projects on applied as on date: Rs: 27,04,000
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MU Funded project Completed:

1. Design and Development of Green packaging material from Sugarcane Bagasse to replace Bubble wraps Mumbai University, Minor Research Grant, University letter No. ADP/237/323 of 2018 dated 23/03/2018. **Amount:** Rs. 50,000/- **Status:** Completed in 2019. **Outcomes:** Work used as Proof of concept for DST project. UG project :1, Internships: 2

DST funded project ongoing:

1. Utilization of Paddy straw for making Paper and Tableware using novel pulping technique, DST, TDT division, Government of India, DST/TDT/WMT-3/Rice Husk to Paddy Rice. **Amount** Sanctioned: Rs. 53,29,696/-. **Status:** Final review and third year funds release pending. **Outcomes:** PG Project: 1, UG Project: 1, Internships: 2, JRF: 2 (One has co authored a paper), Papers: 2 Conference papers, Lab Developed: B008 with compression moulding machine and pulping set up, Product developed: Tableware using Bagasse and Paddy straw

SVU seed funded project ongoing:

1. Green Hydrogen Production using PEM electrolyser, Somaiya Vidyavihar University, **Amount:** Rs. 3,00,000/-. **Status:** First review done by SVU. **Outcomes:** Lab experiment developed: PEM electrolyser is installed in A307 lab and is working and will be used in RE lab expt, Mini Project: 1, PG Project: 1 ongoing, UG Project: 1 Ongoing, Poster: 1, Journal Papers: 1 Submitted

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered	
Attended	
1.	One week ISTE approved STTP on, “Renewable energy systems and technology”, by Mechanical engineering department, K J Somaiya College of Engineering, from 29th June 2009 to 3rd July 2009.
2.	One week ISTE approved STTP on, “Core Java”, by Information Technology department, K J Somaiya College of engineering, from 21st June 2010 to 25th June 2010.
3.	Two week ISTE approved STTP on, “Computational Fluid dynamics” by IIT Bombay from 12th June 2012 to 22nd June 2012 under the National Mission on Education through ICT (MHRD, Govt. of India). The course was attended at Remote centre K J Somaiya college of Engineering.
4.	Two- Days ISTE approved Workshop on “Aakash For Education”, under the National Mission on Education through ICT (MHRD, Govt. of India) conducted by IIT Bombay, from 10th Nov. 2012 to 11th Nov. 2012 at the remote centre K. J. Somaiya College of Engineering.
5.	Two week ISTE approved STTP on, “Technical Communication for Scientists and Engineers”, by IIT Bombay from 8th October to 8th November and 30th November to 5th December 2015 under the National Mission on Education through ICT (MHRD, Govt. of India). One week Online and one week Face to face attended at Remote Centre K J Somaiya college of Engineering.
6.	Two day Practice Leader Forum on “Innovations in Manufacturing operations to enhance firm performance” at NITIE, Mumbai in association with POMS USA from 18th – 19th December 2015.
7.	Two day workshop on “Statistical analysis using R software” at K J Somaiya College of Science and Commerce, Vidyavihar from 26th – 27th August 2016.

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8. Two day Seminar on “Make in India: Igniting manufacturing Renaissance” at D J Sanghvi College of Engineering, 31st March to 1st April 2016.
9. One day workshop on “Parallel computing with GPUs”, by IIT Bombay, at K J Somaiya college of Engineering, 4th October 2016.
10. Innovations in manufacturing Operations to enhance Firm performance NITIE, POMS (USA), 18th – 19th December 2015, (2 days), Recent advances in manufacturing and operations for improving performance of industries were discussed.
11. Statistical analysis using R software K J Somaiya College of Science and Commerce 26th – 27th August 2016, (2 days)
12. Make in India: Igniting manufacturing Renaissance D J Sanghvi College of Engineering, Mumbai 31st March – 1st April 2016 (2 days)
13. Innovation, Entrepreneurship and Incubators, TEQUIP course IIT Bombay 14th -18th March, 2017 (1 week), Received second prize for presentation on “Business canvas model on Green materials in packaging”.
14. Software Flexsim, KJSCE, Mumbai 22nd -23rd June, 2017, (2 days).
15. Multi criteria decision making in Manufacturing, K K Wagh Institute of Engineering education and research, Nashik 26th-28th May 2020, (3 Days), MCDM Methods like TOPSIS, VIKOR were demonstrated with case studies to utilise in survey based research.
16. Role of Technology transfer in driving innovation, M H Saboo Siddik college of Engineering, Mumbai, 30th May 2020 (1 day), Knowledge about IP patenting and transfer of IP.
17. One week Online Faculty Development Program (FDP) on “Exploring the Dimensions of Innovation, Incubation and Emerging Technologies to Embrace Post COVID Changes”, Organized by Department of Mechanical Engineering from 08th June to 12th June 2020.
18. One Week National level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research, organised by the DST-CURIE-AI center of Sri Padmavati Mahila Visvavidyalayam (SPMVV University), Tirupati in association with ipsr solutions limited from 18 March 2024 to 23 March 2024
19. One week IPR awareness and skill development- Patents and Start ups, 16-20 March 2024, by NIT Mizoram sponsored by MISTIC

Organized

1. Cognizance of Industry 4.0 towards implementation and security KJSCE, Mumbai 30th Dec 2019- 4th Jan 2020, (1 week), Organizing this STTP enabled to get in contact with various experts and know in depth about Industry 4.0 and IoT.
2. One day symposium organized on “Awareness to action- Single use plastic” on 22nd Feb 2022 sponsored by DST, India.
3. One week STTP organized on, “Sustainable research and development” from 2-6 Jan 2024 at KJSCE partially funded by DST, India.
4. One week STTP organized on, “The Future of Education: Exploring Innovative Pedagogy, OBE, and AI” from 9-13 December 2024 in association with IQAC_KJSCE and TLC_KJSCE.

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Notable Key Scholastic Achievements	
1.	Best Ph.D Thesis award
2.	Received research grants from Mumbai University, DST and SVU
3	Received highest students feedback for two years

Notable Positions and Responsibility	
1.	Associate Head of department (Mechanical) from 2021 till date: Role includes attendance monitoring, Presentation in orientations and Parent meeting, assisting HoD with all presentations, Load allocation to faculty, syllabus revisions, attending meetings with principal and exam cell, assisting students with queries and permissions for internships and letterheads.
2	In charge Head of Department from February 2024 till October 2024: Worked as In Charge HoD for nine months that includes Load allotment, attending HoD meetings, department preparations for NAAC, HoD presentation for NAAC, arranging seminar Hall for NAAC peer review team visit, regular department work related to attendance, defaulter, orientation of FY and SY students etc.
3	Member of DEC mechanical from 2020 till date: Role includes assisting DEC chairman with Preparing exam panels, Supervision duties for ISE, Conduction of ISE, collections of Marksheets of TW and Orals from faculty.
4	Student Internship coordinator for Mechanical department: From 2018 till date: Assisting students with filling of IC01 and IC02 form for application of internship and submission of reports, collection of department internship data, approaching start up, websites and alumni for internships, coordinating semester long internship data and submission to exam cell, interviews of students for SLI
5	Member of Board of Studies Mechanical from 2021 till 2023: Preparing Presentation, syllabus modifications and formatting, coordinating meetings arrangements, Preparing Minutes of Meetings and Action Taken Report.
6	Departmental Student's body in Charge (MESA In charge) from 2009-2013: Organized and coordinated many events for students and faculty like Department Day, Industrial visits, Convocation, Project presentations, workshops, Seminar and guest lectures, Paper presentations to name a few.
7	Department Timetable In charge from 2007-2016: Work includes preparing Time table of Faculty and staff after taking subject choice, preparing as per SWTT and software based TT, printing distribution, modifications during semesters, load calculations and faculty requirements based on departmental load,
8	Department Library In Charge from 2010-2017: Job includes contacting various publishers and faculties for new book requirement. Coordinating with central library for Books, student projects, Magazines for students and staff reference.
9	Other work: Worked in Admissions, Examinations, Convocation, Symphony and skream, UG and PG project guide, NBA accreditation, NAAC accreditation and Autonomy documentations at Department level and college level.



Date: 10 / 4 / 2025

Signature of Faculty Member