Name: Dr. Kashinath	Name: Dr. Kashinath N Patil			E-mail: kashinath@somaiya.edu		
Contact No: 022 6644	9015					
Department/Section: N	Iechanical Engineering					
College: K J Somaiya	College: K J Somaiya College of Engineering					
DOJ Somaiya:	Career Experience: 23 Yrs	Industry Exp	erience: 1 Yr	Teaching	Experience:	
01/08/2013	6 months			22 Yrs 6 n	nonths	
Present Academic Des	Present Administrative Designation: Associate Dean			ociate Dean		
Research and Development						

Area of research/specialization and Courses Delivered

Research domain/interests/areas

- 1. Thermal Engineering
- 2. Refrigeration and air conditioning
- 3. Strength of Material
- 4. Non-conventional Energy sources
- 5. Nano-science and Nanotechnology
- 6. Carbon nanotubes and other novel materials

Courses Delivered

- 1. Material Technology
- 2. Elements of Machine Design
- 3. Instrumentation, Automatic and Control
- 4. Energy Conservation in Building
- 5. Energy Systems Modeling
- 6. Materials for Energy Applications
- 7. Renewable Energy
- 8. Alterative to Energy and Energy Conversion

- 9. Strength of Material
- 10. Non-Conventional Energy Sources
- 11. Heat Transfer
- 12. Solar Energy
- 13. Biomass and Wind Energy
- 14. Foundation to Energy Engineering
- 15. Energy Conversion-III
 - 16. Energy Conversion-II

Recognition as a teacher by any University	UG	PG	Ph.D
Mumbai University	Yes	Yes	Yes
Pune University	Yes	Yes	Yes
Somaiya Vidyavihar University	Yes	Yes	Yes

	Education					
Examination	Name of the	University/Board	Institute/College	Year	CPI/SPI/	
	Degree				%Marks	
Ph.D	Energy Science	Indian Institute of	Indian Institute of	2011	10/10	
	and Engineering	Technology Bombay	Technology Bombay			
PG (M.Tech.)	Energy Systems	Indian Institute of	Indian Institute of	2006	9.2/10	
	Engineering	Technology Bombay	Technology Bombay			
UG (B.E.)	Mechanical	Mumbai University	K G C E Karjat Raigad	2000	68.87 %	
	Engineering		Maharashtra			
Diploma	Mechanical	Bombay Board	S S V P S Polytechnic	1996	70.21 %	
	Engineering		Dhule Maharashtra			

		Notable Experi	ence Details		
Sr. No	Name of the	Designation	Date of Joining	Date of Leaving	Experience
	organization				(Years)
1.	Konkan Gyanpeeth	Assistant Professor/	01/08/2001	31/12/2011	10 years 5
	College of	Dean Research and			months
	Engineering Karjat	Development			
	Raigad Maharashtra				
2.	S N D College of	Professor/ Vice	02/01/2012	31/07/2013	1 year 7
	Engineering and	Principal			months
	Research Center,	_			
	Yeola, Nashik,				
	Maharashtra				
3.	K J Somaiya College	Professor/ Dean	01/08/2013	Till Date	9 years 6
	of Engineering	Research and			months
	Vidyavihar, Mumbai	Development			
	Maharashtra	_			

Research Accomplishments and Projects					
No of students pursuing Ph.D as on date: 02		No of students completed Ph.D as on			
		date: 01			
No of students completed PG thesis / Project work as on		No of students / groups completed UG			
date: Nil		projects as on date: 21			
Publications	Number of Peer review Journal	Number of Conference papers: 19			
Total: 36	papers: 17				
Details of Publications:					

Details of Publications:

International Journals

- Kashinath N. Patil and C. S. Solanki, Aspect ratio evaluation of carbon nanotubes grown on a calcium carbonate substrate for varying time and temperature, Journal of Nano Research, 4, (2008), pp127-135. DOI: <u>www.scientific.net/JNanoR.4.127</u>
- 2. Kashinath N. Patil and C. S. Solanki, Precursor to high purity carbon nanotubes: A step by step evaluation of carbon yield, Journal of Nano Research, 6, (2009), pp75-87. DOI: <u>www.scientific.net/JNanoR.6.75</u>
- 3. Kashinath N. Patil, Sanjay M. Mahajani and C. S. Solanki, Optimization of catalyst loading for effective utilization of feed stock for carbon nanotubes synthesis process, International Journal of Nano science, 10(4), 2011, pp1-5. DOI: <u>https://doi.org/10.1142/S0219581X1100899X</u>
- Kashiath N Patil, D. N. Raut, V. J. Pillewan, and D. K. Shinde, Carbon to Carbon Nanotubes Synthesis Process: An Experimental and Numerical Study, Materials Today: Proceedings Volume 5, Issue 2, Part 1, pp 6444-6452 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2017.12.257</u>
- Kashinath N. Patil, V. J. Pillewan, D. N. Raut, and D. K. Shinde, Carbon Nanotubes Based Porous Framework for Filtration Applications Using Industrial Grinding Waste, International Journal of Chemical, Molecular, Nuclear, Materials and Metallurgical Engineering, World Academy of Science, Engineering and Technology Vol:11, No:2, 2017. DOI: <u>https://publications.waset.org/10006932/pdf</u>
- Kashiath N. Patil, V. G. Dhore and W. S Rathod, Synthesis and Characterization of High Yield Multiwalled Carbon Nanotubes by Ternary Catalyst, Materials Today: Proceedings Volume 5, Issue 2, Part 1, pp 3432-3437 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2017.11.589</u>
- Kashiath N. Patil, V. G. Dhore and W. S. Rathod, Experimental Analysis and Power Law Model of Multiwall Carbon Nanotubes Yield on Fe-Co-Ni Ternary Metal Catalyst, International Conference On Advances In Thermal System, Materials And Design Engineering

(ATSMDE) 2017, December 21–22, 2017, SSRN Digital Library: SSRN- id3101616. DOI: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3101616

- Kashiath N. Patil, Mitual Doshi and Aman Jain, Performance analysis of solar air dryer for multi crop drying – effect of varying air mass flow rate, International Conference On Advances In Thermal System, Materials And Design Engineering (ATSMDE) 2017, December 21–22, 2017, SSRN Digital Library: DOI: 10.2139/ssrn.3101275. DOI: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3101275
- V J Pillewan, D N Raut and Kashinath N. Patil, Wear Analysis of Charcoal, Unpurified Carbon Nanotubes and Purified Carbon Nanotubes based Metal Matrix Composite, Materials Today: Proceedings Volume 5, Issue 9, Part 3 pp. 20679-20689 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2018.06.451</u>
- Vilas G Dhore, W S Rathod and Kashinath N. Patil, Investigation of mechanical properties of carbon nanotubes reinforced aluminum composite by metal injection molding, Materials Today: Proceedings Volume 5, Issue 9, Part 3, Pages 20690-20698 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2018.06.452</u>
- Vipul Damale and Kashinath N. Patil, Experimental Analysis of Turmeric Drying Process, Materials Today: Proceedings, Volume 5, Issue 9, Part 3, pp 18152-18161 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2018.06.151</u>
- Nikhil Lotake and Kashinath N. Patil, Study of Effect of Various Parameters on Desalination process, Materials Today: Proceedings, Volume 5, Issue 9, Part 3, pp 19391-19399 (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2018.06.299</u>
- Sandip Langade, Nandkumar Gilke and Kashinath N. Patil, Bagasse Ash for Manufacturing Construction, Materials Today: Proceedings, Volume 5, Issue 9, Part 3, pp19954-19962, (2018). DOI: <u>https://doi.org/10.1016/j.matpr.2018.06.361</u>
- Sandip Langade, Nandkumar Gilke and Kashinath N. Patil, Compression Strength Testing of Brick by FFT, IOP Journal on Material Science and Engineering, Volume 810, pp 012307:1-8, (2019). DOI: <u>https://iopscience.iop.org/article/10.1088/1757-899X/810/1/012037</u>
- Vilas G Dhore, W S Rathod and Kashinath N. Patil, Fabrication and characterization of coldpressed and sintered Aluminium - MWCNT composites, Materials Science Forum, 1025, 2021, pp 60-68 DOI: <u>https://www.scientific.net/MSF.1025.60</u>
- 16. Vilas G Dhore, W S Rathod and Kashinath N. Patil, Mechanical and Tribological Attributes of Al-CNT-Sn Composites Prepared by Press and Sintering, Journal of Composite Science, 5, 2023, pp 215 1-14 DOI: <u>https://doi.org/10.3390/jcs5080215</u>
- Sandeep Langade, Nandkumar Gilke, and Kashinath N Patil, Strengthen of Construction filler material Brick and it's Environmental Impact, AIP Conference Proceedings, 2985, 2024, pp 020007 DOI: <u>https://doi.org/10.1063/5.0204670</u>.

National Journals

 Kashinath N. Patil, V. J. Pillewan, and D. N. Raut, Microscopic Analysis of Carbon Nano tubes based Metal, Nirma University Journal of Engineering and Technology (NUJET), (ISSN 2231-2870), NUJET Journal (Volume 4, No. 2, 2015, Page No. 06-10). DOI: <u>http://www.nujet.org.in/index.php/nujet/article/view/168</u>

Conferences

- 19. Kashinath. N. Patil, H. K. Prasad and C. S. Solanki, Novel approach for synthesis of highly dense carbon nanotubes, ANM2007 (2007).
- 20. Kashinath. N. Patil, Aneesh Gangal, Sanjay M. Mahajani and C. S. Solanki, Hydrogen Storage in as deposited carbon and Crystalline Carbon Nanotubes at Low Temperature, International

conference in Advances in Energy (ICEAR-2009) IIT-Bombay 2009, India pp 277-282.

- 21. Kashinath N. Patil, Sanjay M. Mahajani and C. S. Solanki, Step by step Evaluation of Carbon Nanotubes synthesis process, International Conference on Carbon Nanotechnology: Potential and Challenges (CARBON-10), IIT Kanpur (UP) India.
- 22. Kashinath N. Patil, Sanjay M. Mahajani and C. S. Solanki, Characterization of Fe-Co catalyst for CNTs Synthesis, International Conference on Advances in Electron Microscopy and Related Techniques (EMSI-2010), BARC Mumbai India.
- 23. A. Parab, S. Gade, G. Lavate and Kashinath N. Patil, Fabrication Cu-CNTs alloy, International Conference on Systems, International Conference on (NUoiCON-2011), Nirma University, Gujrat, India.
- 24. Kashinath N. Patil, An Experimental Evaluation of Carbon to Carbon Nanotubes (CNTs), International Conference on Recent Trends in engineering and Technology, 21-22nd March 2013, at MET, Nashik.
- 25. Nilesh Lad, A S. Sarode and Kashinath N. Patil, Preparation of Fe- CNT metal composite using Powder metallurgy method, International Conference on Emerging Trends in Technology and It's Applications 7-8th March 2014, ICETTA-2014 organized by Yadavrao Tasgaonkar College of Engineering, Mumbai.
- 26. Rohit Patole and Kashinath N. Patil, Heat Recovery Analysis for Domestic Applications, ICCC2017 Matoshree College of Engineering, Nashik India 18th –19th August 2017. (Awarded Excellent Paper Award).
- 27. Abhinav Singh and Kashinath N. Patil, Steam generation using solar parabolic dish, 6th International Conference on Advances in Energy Research 2017, 12–14th December, 2017.
- 28. Manohar Patil, Kashinath N. Patil and Sailesh Nikam, Energy Conservation and Targeting of Ammonia Decomposition Process in Steel Industry, 6th International Conference on Advances in Energy Research 2017, 12–14th December, 2017.
- 29. Tauseef Ansari and Kashinath Patil, Experimental Analysis of Indirect Type Solar Air Dryer, Proceedings of IRAJ International Conference, 21st July, 2019, Pune, India.
- 30. Partik Chaudhary and Kashinath N Patil, Thermal Modelling of Solar Crop Drying, International Conference of Renewable Energy and Green Technology (ICREGT), 09th 10th October 2020, SRM IST, Ghaziabad, India.
- 31. A. B. Tambe, K. Patil, A. K. Vishnoi, S. V. Prasad, Performance Evaluation of Receiver System for Mini Solar Thermal Power Plant, International Conference of Renewable Energy and Green Technology (ICREGT), 09th – 10th October 2020, SRM IST, Ghaziabad, India.
- 32. Prachi Chaudhary and Kashinath N. Patil "Refrigeration system for ice recovery from cane juice" International Conference of Renewable Energy and Green Technology (ICREGT), 09– 10th October 2020, SRM IST, Ghaziabad, India.
- 33. Sandeep Langade, Nandkumar Gilke, and Kashinath Patil, "Strengthen of Construction filler material Brick and it's Environmental Impact", Sardar Patel International Conference on Industry 4.0- Nascent Technology and Sustainability for "Make in India" Initiative, 23 and 24th December 2023, Bharatiya Vidya Bhavan's Sardar Patel College of Engineering and Sardar Patel Institute of Technology, Mumbai.
- 34. Ishan Upadhay, Sailesh Nikam, and Kashinath Patil "Stand-alone on-wheel Solar Milk Pasteurization", 9th International Conference on Advances in Energy Research (ICAER 2024), 12th and 14th December 2023 at Department of Energy Science and Engineering, Indian Institute of Technology Bombay, Mumbai-76 India.
- 35. Ganesh Katale, Nandkumar Gilke, and Kashinath Patil "Comparative study of Conventional Jaggery Making Process", International Conference on Technologies for Energy, Agriculture,

and Healthcare (ICTEAH 2024), 15th and 16th March 2024 at K J Somaiya College of Engineering, Vidyavihar Mumbai-77 India.

- 36. Ishan Upadhay, Sailesh Nikam, and Kashinath Patil "Theoretical Performance Analysis of Solar Pasteurization vehicle", International Conference on Technologies for Energy, Agriculture, and Healthcare (ICTEAH 2024), 15th and 16th March 2024 at K J Somaiya College of Engineering, Vidyavihar Mumbai-77 India.
- 37. Ishan Upadhay, Sailesh Nikam, and Kashinath Patil "Sustainable Practices in Jaggery Processing: Insights from India", International Conference on Technologies for Energy, Agriculture, and Healthcare (ICTEAH 2024), 15th and 16th March 2024 at K J Somaiya College of Engineering, Vidyavihar Mumbai-77 India.
- 38. Muzammil Ahamad, and Kashinath Patil "Heat Loss Analysis of Solar Cavity Receiver", International Conference on Technologies for Energy, Agriculture, and Healthcare (ICTEAH 2024), 15th and 16th March 2024 at K J Somaiya College of Engineering, Vidyavihar Mumbai-77 India.
- 39. Kashinath. N. Patil and C. S. Solanki, Mass production of carbon nanotubes for hydrogen storage, DMFE-BARC (2006).
- 40. Kashinath. N. Patil and C. S. Solanki, Growth of carbon nanotubes on CaCO₃ substrate, AER-2006 (2006).
- 41. Kashinath N. Patil, M. Eswara Rao, Sanjay M. Mahajani and C. S. Solanki, Catalyst deactivation models of Carbon Nanotubes Synthesis from acetylene, National Conference of Recent Trends in Chemical Research (NCRTCR-2010), Surathkal Karnataka India.
- 42. Kashinath N. Patil, V. Sharma, V. Patil and H. Pal, Heat Recovery from Two Wheeler to Charge Mobile or standalone device, National Conference on Recent Advances in Mechanical Engineering (NCRAME2011), Karnataka, India.

Book Chapters:

43. Book Name: Mechanical Engineering for Sustainable Developments Publisher: Apple Academic Press United State of America (USA) Chapter Numbers: 12 & 13.

Chapter - 12. TG-DTA Analysis of A Binary Metal Catalyst For Multi Wall Carbon Nanotubes Synthesis Author & Co-Authors: Dr. Kashinath N. Patil, V.J. Pillewan, D.K. Shinde

Chapter - 13. Characterization of Fe-Co-Ni Ternary Metal Catalyst For High Yield Multi Wall Carbon Nanotubes Synthesis Author Co-Authors: Dr. Kashinath N. Patil, V. Dhore, V.S. Rathod

44. Book Name: Advances in Interdisciplinary Engineering Publisher: Springer Nature brand, Scientific Publishing Services (P) Ltd. Chennai, India, Chapter Numbers: 66.

Chapter - 62. Modelling of photovoltaic losses from available meteorological data, Rachit Gada, Ishan Doshi and Kashinath N. Patil

45. Book Name: Advances in Fluid and Thermal Engineering, Publisher: Springer Nature brand, Scientific Publishing Services (P) Ltd. Chennai, India, Chapter Numbers: 66.

Chapter - 37. Novel Dryer Cum Grinding Unit: A Thermal Analysis of Herbs Drying, Avinash Kamble, Prtiam Bakal and Kashinath N. Patil

Patents	s/Copyrights							
		PA	TENTs					
Sr. No.	Title		lication mber		Date of Filling	Publica Date		Status
1.	A Vacuum Dryer	20182	1029075	02	2/08/2018	07/02/2	020	Granted
2.	A Bead Separating Device	20182	1037925	06	5/10/2018	30/08/2	019	Granted
3.	A Solar Energy Based Waste Incineration And Gas &	20182	1038902	12	2/10/2018	30/08/2	019	Granted
4.	A Bead/Pearl Coating Device	20182	1039853	22	2/10/2018	30/08/2	019	Granted
5.	Composition For Brick	20192	1010282	16	5/03/2019	30/08/2	019	Published
6.	A Cooling Pad Composition For Evaporative Cooling		1052194		5/12/2019	18/06/2		Published
7.	A System For Effluent Release	File No	1031230 p 361152		1/07/2020	28/08/2		Granted
8.	A Non Destructive Method For Determining The Compressive Strength of A	20202	1040311	17	7/09/2020	25/03/2	022	Published
9.	A Metal Particulates Porous Composite For Automobile	20202	1041070	22	2/09/2020	26/02/2	021	Published
10	A Wall Tile With Porous	20222	1012794	09	9/03/2022	14/03/2	023	Granted
11	A Device For Preparing Liquid/Semisolid Jaggery	20222	1052749		5/09/2022	21/10/2	022	Granted
12	A Liquid/Semisolid Jaggery Manufacturing Device	20222	1058400	12	2-10-2022	28/10/2	022	Granted
13.	An Efficient Cooking Pot	20232	1004807	24	4/01/2023	-		Filed
			GY TRAN	SFE	RS			
Sr. No.	Patent Title/ Number/Grant N	umber	Technolog	gу	Indus	stry		Remark
1	A Bead Separating Device/201821037925/445101		Pearl Bea Technolog		Kripa C Mfg. Pv Valsad	t LTD.	agı	principle reed to buy technology
	A Bead/Pearl Coating Device/ 201821039853/ 504452							
2	Composition For Brick/ 201921010282/ 503832		Sugar/Jagg y Processi	ng	Godavar Refiner	y Ltd.	der	oviding the nonstration
	A Vacuum Dryer/201821029075/ 449018		Technolog	ЗУ	Bagal Karna			n existing rototype
	A Device For Preparing							
	Liquid/Semisolid Jaggery From							
	Sugarcane Juice /20222105274 A Liquid/Semisolid Jaggery	9/						
	Manufacturing Device /202221	058400						
					1		1	

		COPYRIG	HTS			
Sr. No.	Title	Diary Number	Registra Numb		Date of Filling	Status
1	Linen Counting Machine	L-77738/2018	10942/201 CO/L	8-	08/09/2018	Granted
2	Pre-Warning Water Level Alarm System	L-77637/2018	10938/201 CO/L	8-	06/09/2018	Granted
3	Choke Monitoring and Alarm System in Bio-Toilets	L-77636/2018	10936/201 CO/L	8-	06/09/2018	Granted
4	Bio-Toilet Interactive Voice Responsive System	10943/2018- CO/L	L-79073/2	018	28/11/2018	Granted
5	Solar Vaccination Box	5614/2019-	L-83966/2	019	10/07/2019	Granted
6	IOT Based Water Dissemination System for	8175/2019- CO/SW	SW-12756	5/2019	23/08/2019	Granted
7	IOT Based Recommendation System for Soil Management	8172/2019- CO/SW	SW-12597	//2019	04/07/2019	Granted
8	Carbon Nanotubes Based Oil Spill Duster	8170/2019- CO/L	L-83802/2	019	04/07/2019	Granted
9	Indigenous solar chulla cum self -contained unit for lighting solution	9734/2019- CO/L	L-84667/2	019	20/08/2019	Granted
10	Novel Vertical Batch Biomass Pyrolysis Cum	820/2020- CO/L	L-90083/2	020	03-03-2020	Granted
11	Solar Charge Controller for Transportation System	20307/2020- CO/L	L-116405/	2022	28/06/2022	Granted
12	Solar Fragrancer	27104/2021- CO/L	L-114181/	2022	12/04/2022	Granted
13	Mathematical modelling of Polyhouse Structure	11679/2022- CO/L	-		02/06/2022	Filed
14	Solar Water Purifier System	5070/2023- CO/L	-		26/02/2023	Filed
15	Solar Thermal Ignitor	15322/2023- CO/L	L-130460)/2023	21/07/2023	Granted
16	Solar Cold Storage System	15981/2023- CO/L	L-135950)/2023	10/11/2023	Granted
17	Design and Development of Sustainable Community	26250/2023- CO/L	L-136389	0/2023	20/11/2023	Granted
18	Charcoal Production and Value Added Reclamation of	21622/2024- CO/L	-		08/07/2024	Field
19	Charcoal Production and Fungicide, Pesticide	21594/2024- CO/L	-		08/07/2024	Field
No of Research / consultancy / projects completed:No of Research / consultancy / projects on-going:No of Research / consultancy / projects on applied as on date:Rs: 2423354Rs: 298000Rs: 490000Details of Research / consultancy / projects:Projects on applied as on date:						
Comp						

Sr.	Project Title	Sponsoring Agency	Year	Amount	Status
No.				(Rs.)	
1	Design solar PV system for urban and rural Indian scenario and feasibility study		2019	8,00,000	Completed
2	Development of field assay/device for rapid detection of antibiotic susceptibility using Resazurin method		2018	2,40,000	Completed
3	Study towards development of Containerized solution for large scale solar PV plants	L&T Automation Ltd. Rable Thane, India	2016	2,58,000	Completed
4	Solar incinerator cum water heating system	S. A. Textiles Ltd. Bhiwandi, Thane, India	2016	1,08,000	Completed
5	Solar air dryers for artificial pearl drying	Tiranga Peral and Beds, Bhiwandi, Thane, India	2016	3,85,000	Completed
	 Motion sensor triggered brief announc ement system Intelligent linen accountal system Pre- warning system for water availability Choke monitoring systems for bio- toilets 	Western Railway, Mumbai Central, Mumbai, India	2016	77,254	Completed
7	Metal matrix composite by PIM route	A.T.E. Industries Ltd. Mumbai, India	2014	1,50,000	Completed
8	Warm clothing for cold environment	University of Mumbai	2019	69,000	Completed
9	Light weight Al-CNT composite for sound wave absorption	University of Mumbai	2019	1,04,000	Completed
10	Microcontroller based online support system for maintenance and monitoring electrical and physical parameters of solar PV panel		2018	87,700	Completed
11	Evaporative dessert cooler	University of Mumbai	2017	34,000	Completed
12	Design and development of multi crop solar heat drying	University of Mumbai	2017	1,07,000	Completed
13	IoT based system for monitoring and management of pH parameters	University of Mumbai	2017	76,000	Completed
14	sustainable packaging material with coconut shell powder, paper and egg shells	University of Mumbai	2017	72,000	Completed
15	IoT based water dissemination system for different crops	University of Mumbai	2017	58,400	Completed
16	Solar absorption refrigeration system	University of	2016	30,000	Completed

		Mumbai			
17	Technology development for jaggery and ice production from sugar cane by refrigeration	•	2016	25,000	Completed
18	Design and development of solar PV panel soiling station and evaluation of soiling losses	-	2016	30,000	Completed
19	Concentrator solar cooker testing and evaluation	KJSCE Mumbai	2014	30,000	Completed
20	Solar PV lighting solution for office	KJSCE Mumbai	2015	22,000	Completed
21	Solar absorption system	KJSCE Mumbai	2014	45,000	Completed

On-going

Sr.	Project Title	Sponsoring Agency	Year	Amount	Status
No.				(Rs.)	
1	50 kW Grid Connected Two Metering	Somaiya Trust	2024	37,50,000	On-going
	System for KJSCE Building				
2	Micro-plastics removal/degradation from	Somaiya Vidyavihar	2022	4,90,000	Ongoing
	water bodies using graphene based	University			
	magnetic nanocomposites under sunlight				
3	Design & creating Bill of Material	U	2024	8,10,000	Ongoing
	(BOM) of one variant of the printing	Converting			
	machine	Machines Pvt. Ltd.			
		Ambernath			

Applied

Sr.	Project Title	Sponsoring Agency	Year	Amount	Status
No.				(Rs.)	
1	Charcoal Production and Fungicide,	National	2024	1,10,58,0	Applied
	Pesticide Reclamation from Agricultural	Agricultural Science		00	
	Feedstock of Konkan Region	Fund, ICAR			
2	Charcoal production and value added	National	2024	86,96,000	Applied
	reclamation of chemicals from bagasse	Agricultural Science			
	torrefication	Fund, ICAR			
3	Biochar for rebuilding soil health, soil	National	2024	2,45,92,0	Applied
	carbon stocks and crop yields	Agricultural Science		00	
		Fund, ICAR			

FDPs/Seminars/Workshops/Training Programs Attended/ Organized/ Delivered

Attended

1. Attended Three days' workshop on "Africa-Asia Partnership for Sustainable Development (PIRA)" at Nareshwadi Learning Centre, Dahanu, Maharashtra, from 27th to 29th June 2022.

2. Attended Three days' symposium on "Integrated Approaches on Sustainable Agricultural" organized by Somaiya Institute of Research and Consultancy, Mumbai, Maharashtra, from

26th to 28th April 2022.

- Attended one day National Conference on NEP 2020 at K J Somaiya College of Engineering, Mumbai in association with PERA on 30th March 2022.
- 4. Attended Three days' workshop on Climate Smart Precision Framing for Sustainable Development and Augmenting Farmers Income, organized by Somaiya Institute of Research and Consultancy and K J Somaiya Institute of Applied Agricultural Research, Sameerwadi , Bagalkot, Karnatka, from 8th March to 10th March 2022
- 5. Attended five days short training course on Renewable Energy and Power quality, organized by Electrical Department of VNIT Nagpur, from 29th August 2016 to 2nd September 2016.
- 6. Attended one day workshop on "Total Quality Management in Engineering Education", at K.K. Wagh Institute of Engineering and Education and Research, Nashik, 2012.
- Attended one week QIP short term course on "Carbon Nanotubes and Carbon Nanotechnology" organized by Mechanical Department IIT Kanpur from 22nd to 26th February 2010.
- 8. Attended <u>special lecture series on "Solar Cells" by Prof. Vikram L. Dalal</u> from 12th to 27th January 2007.
- Attended one week QIP short term course on "Micro-Nano Tribology" organized by Mechanical Department IIT Bombay, from 1st to 5th January 2007
- 10. Attended two day's workshop on "Renewable Energy Community Development and Showcase Workshop-2006" organized by Energy Systems Engineering on 21st and 22nd September 2006 at IIT Bombay.
- 11. Attended one day workshop on "Materials for Future Energy Systems", at BARC Mumbai, 2006.
- 12. Attended one day workshop on "Kinematics of Machinery", at Datta Meghe College of Engineering, Airoli, Mumbai, 2003.
- 13. Sixth month regular laboratory course on Renewable Energy conducted for M.Sc. Analytical and Inorganic Chemistry students of K J Somaiya College of Science and Commerce, Vidyavihar, Mumbai-77.
- 14. Demonstrated the renewable energy laboratory equipment's on environmental day-2017 to 120 schools students of The Somaiya International School, Vidyavihar Mumbai-77
- 15. One day course conducted on "Industry Academia Partnership" on 12th September, 2017, jointly organized by K. J. Somaiya College of Engineering, COSIA Thane, and German Development Cooperation (GIZ).
- 16. Interaction with DRDO-DIPAS-New Delhi for joint project development on 28th June 2017.
- 17. Two days visit to Dr Balasaheb Sawant Agricultural University Dapoli and Agricultural Engineering College Dapoli, on 30th June and 1st July-2017, to explore the joint research opportunities.
- Industrial visit to Godavari Bio-Refinery Samirwadi, Bagalkot Karnataka on 29th February 2016, to explore research opportunities.
- 19. Two day's workshop conducted on Solar PV System Design at K J Somaiya College of Engineering on 09th July 2015, in association with KWatt Solutions Pvt. Ltd. (Incubated

company at IIT Bombay).

20. Two days visit to Center for Nano Science at IISC Bangalore to explore utilization of various testing facilities at center, on 10th and 11th October 2014.

Organized

- ISTE approved short term training programme conducted on "Material Science and Energy Engineering" at Konkan Gyanpeeth College of Engineering Karjat, from 12th to 17th December 2011.
- Two days state level workshop conducted "Avishkar 2012" at SND College of Engineering and Research Center, Yeola, on 23rd to 24th March 2012.

Delivered

- Delivered webinar on "Energy Opportunities: Case Studies" for mechanical engineering students, faculties and research scholars, at Mathoshree Institute of Technology (MIT) Dhanore, Nashik, Friday, 24th February 2022 (1:00 to 2:30 pm).
- Delivered webinar on "Renewable Energy Utilization and Applications for Sustainable Rural Development" for mechanical engineering students, faculties and research scholars, at Loknete Gopinathji Munde Institute of Engineering Education & Research (LoGMIEER) Nashik, Friday, 29th May 2020 (4:00 to 5:30 pm).
- Invited lecture delivered on "Energy saving opportunities: Industrial case studies" at 5 day's international workshop on "Thermal Engineering: Theory and Applications" sponsored by Savitribai Phule Pune University, Pune & in association with ARAI, Pune: PCRA; SAE-India; ISHRAE, 17th 21st February, 2020.
- Invited lecture delivered on "Energy saving opportunities" at AICTE-ISTE one week training program on "Energy Audit and Management A Step towards Sustainability", Vidyavardhini's College of Engineering & Technology, Vasai Road (W), Dist - Palghar, Vasai, Maharashtra 401202, 1st July to 6th July 2019.
- Invited lecture delivered on "Tri-generation and Cogeneration", at Five day STTP on Energy, Environment and Water Conservation, at A. C. Patil College of Engineering, Kharghar, Navi Mumbai, on 27th June 2017.
- Invited lecture delivered on "Renewable Energy" at QIP workshop on Renewable Energy at JSPM'S Rajshree Shahu College of Engineering Thathwade, Pune, on 24th December 2014.
- Invited lecture delivered on "Carbon Nanotubes Synthesis" at STTP conducted by department of physics at Sardar Vallabhbhai Patel National Institute of Technology, Surat on 4th March 2013.

	Notable Key Scholastic Achievements
1.	Best Thesis Award by IIT Bombay in 2013 with a cash prize of Rs. 20000/-
2.	Dr. S. K Somaiya award-2018 for Excellence in Research for research contribution made in
	last five years. The award constitutes a cash price of Rs 15000, memento and certificate.
3.	K J Somaiya college of engineering Research Award-2013 and Research Award-2018 for
	research contribution. The award constitutes a cash price of Rs 10000 and certificate.
4.	Stood first in final year BE (Mechanical) at KGCE Karjat and won Gold Medal of Merit.
5.	Rotary Club Karjat Awarded Excellence in Education after completion of Ph.D. at IIT

Somaiya Vidyavihar University

	Bombay.
6.	Secured 10 CPI on a scale of 10 in Ph. D. course work.
7.	Scored 89.56 percentile in GATE-2002.
8.	Under global sustainable alliance on carbon, water, energy and food, Somaiya Vidyavihar
	University (SVU) Mumbai is working in collaboration with Michigan State University (MSU),
	Michigan USA on a research project titled "Novel Agricultural Residue Technologies for
	Carbon Neutral Cropping" with Dr. Wei Liao & team from Department of Biosystems &
	Agricultural Engineering of MSU and Dr. Kashinath N Patil from Mechanical Engineering of K
	J Somaiya College of Engineering & team members of SVU.
9.	Development of a sustainable solar drying solution for perishable goods such as Chikoo,
	Moringa leaves, Lemongrass is being carried out at Nareshwadi Learning Centre, Mumbai. A
	research team constituting with Dr. Ron Harichandran & Dr. Kristine Horvat from University of
	New Haven, USA in collaboration with Dr. Kashinath N Patil from Mechanical Engineering of
	K J Somaiya College of Engineering & team members of SVU.
10.	Worked as team a member with Dr. Karim Maredia from MSU, and submitted proposal titled on
	Alliance for an Eco-friendly, Healthy and Resilient Food System in a Rising India, to
	Rockefeller Foundation Food Prize Vision 2050.
	https://challenges.openideo.com/challenge/food-system-vision-prize/open-submission/alliance-
	for-an-eco-friendly-healthy-and-resilient-food-system-in-a-rising-india
11.	Partnerships for Innovation Research in Africa (PIRA), Africa-Asia Transregional Grant of
	\$50,000 approved (EU-SVU-MSU: International partnership with six focus area). In the
	proposal of "Africa-Asia Partnership for Sustainable Development" International collaborators
	Dr. Wei Liao (Michigan State University, USA) and Prof. Daudi Nyaanga (Egerton
	University, Kenya).

	Notable Positions and Responsibility		
1.	Dean Research and Development (from August 2015 to till date, K. J. Somaiya College of		
	Engineering, Vidyavihar, Mumbai, 400 077)		
2.	Ph.D. Coordinator (from August 2015 to January 2018, K. J. Somaiya College of Engineering,		
	Vidyavihar, Mumbai, 400 077)		
3.	Convener Department Examination Committee (DEC) (from August 2014 to August 2015 K.		
	J. Somaiya College of Engineering, Vidyavihar, Mumbai 400 077)		
4.	Department Thrust Area Coordinator (from November, 2015 to July 2017, K. J. Somaiya		
	College of Engineering, Vidyavihar, Mumbai, 400 077).		
5.	Examination Committee Member-Autonomy (EC) (from July 2014 to July 2015, K. J.		
	Somaiya College of Engineering, Vidyavihar, Mumbai 400 077).		
6.	Governing Body Member (GB) (from June 2018 to till date, K. J. Somaiya College of		
	Engineering, Vidyavihar, Mumbai, 400 077).		
7.	Member of Subject Board in Mechanical Engineering (from June 2017 to July 2019, K. J.		
	Somaiya College of Engineering, Vidyavihar, Mumbai, 400 077).		
8.	Governing Council Member (GC), (from September 2020 to till date), K. J. Somaiya Institute		

	Somarya (Raya) mar chiverony
	of Applied Agricultural Research (KIAAR), Mudhol Taluk Bagalkot District Karnataka State,
	Sameerwadi 587316)
9.	Vice principal (from January 2012 to July-2013, SND College of Engineering and Research
	Center, Yeola, Nashik, 423 401)
10.	Dean Research and Development (from August-2010 to December 2011, Konkan Gyanpeeth
	College of Engineering, Karjat, Raigad, 410 201).
11.	Member of Subject Board in Mechanical Engineering (from June 2020 to Till date),
	Matoshree College of Engineering and Research Center, Eklahareshivar, Near Odhagaon, Opp
	Nashik-Aurangabad Highway, Nashik, Maharashtra 422105).
12.	Member of Subject Board in B.Voc. Programs in Mechanical Engineering (from June 2020
	to Till date), Pimpri Chinchwad College of Engineering, Pune - 411 044, India.).
13.	Local area committee member appointed by University of Mumbai.
14.	Subject expert for UGC faculty selection committee panel member appointed by University of
	Mumbai.
15.	Local area committee member appointed by University of Pune.
16.	Local area committee member for research centre approval appointed by University of Pune.
17.	Research Recognition Committee member (RRC) for Mechanical Engineering at University of
	Pune

fait

Date: 10/09/2024

Signature of Faculty Member8