

### Faculty Achievement Summary

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# SummaryAY 2021 – 22



#### AY 2021 – 22

Sr. No.	Date	Nature of Achievement	Name of Faculty	Details of Achievement	Event / Activity	Organized by
1.	16/07/2021	Patent Published	Mr. Dattatray Doifode	Published Utility Patent on "Artificial Intelligence Based Smart Solar Tracking Technique forUninterruptedPowering System"	The Patent Office Government of India	The Patent Office Government of India
2.	16/08/2021	Research paper publication	Mr. Dhiraj Bhandarkar	The Rocker Bogie Mechanism: Design and Fabrication	International Journal of Innovations in Engineering and Science	International Journal of Innovations in Engineering and Science
3.	24/08/2021	Research paper publication	Dr. Nilesh Salunke	A Comprehensive Review on Performance Improvement of Diesel and Biodiesel Fuelled CI Engines using Additives	International Journal of Performability Engineering SCOPUS Indexed	Totem Publisher USA
4.	August 2021	Research paper publication	Mr. Mohd. Juneduddin	Design and Analysis of Solar Water Purification System	International Research Journal of Engineering and Technology (IRJET)	International Research Journal of Engineering and Technology (IRJET)
5.	30/10/2021	Research paper publication	Dr. Amol Badgujar	Solution-processed CIGS thin film solar cell by controlled selenization process	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER
6.	24/11/2021 to 26/12/2021	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal"ASME – Thermal Science & Engineering Applications"	International Journal	ASME
7.	28/11/2021 to 28/12/2021	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Energy Nexus"	International Journal	ELSEVIER
8.	02/12/2021 to	Reviewer for Conference	Dr. Nilesh Salunke	Reviewer for International Conference"ASME & GT	International Conference	ASME

	03/12/2021			India Virtual Conference"		[]
	03/12/2021					
9.	08/12/2021	Patent Granted	Dr. Bhushan Behede	Granted Australian Utility Patent on "A novel acoustic fluidized bed device for heat transfer application"	Australian Government IP Australia	Australian Government IP Australia
10.	29/12/2021	Research paper publication	Dr. Bhushan Behede	Review on nanoporous inorganic desiccant materials in the context of application in rotary dehumidifiers	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER
11.	01/01/2022	Book Chapter Publication	Dr. Bhushan Behede	Performance Analysis of Desiccant Material Prepared by Simple Mixing of Silica Gel and Calcium Chloride	Book series "Recent Advances in Mechanical Infrastructure" published by Springer as a part of Book series "Lecture Notes in Intelligent Transportation and Infrastructure" SCOPUS Indexed	SPRINGER
12.	10/01/2022	Research paper publication	Dr. Hitesh Thakare Dr. Bhushan Behede	Application of mixed level design of Taguchi method to counter flow vortex tube	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER
13.	12/01/2022	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal Advances in Materials & Processing Technologies	International Journal	AMR
14.	31/01/2022	Research paper Dr. Hitesh publication Thakare		Techno-economic assessment of manufacturing process in small scale industry to evaluate energy saving potential	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER
15.	31/01/2022	Resource Person	Dr. Hitesh Thakare	Resource Person to deliver expert session on "Technical Paper Writing Skill"	Expert session for E&TC Students	St. John College of Engineering and Management,

SHRIVILE PARLE KELAVANI MANDAL'S INSTITUTE OF TECHNOLOGY, DHULE

#### DEPARTMENT OF MECHANICAL ENGINEERING

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16.	05/02/2022 to 06/03/2022	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Applied Thermal Engineering"	International Journal	ELSEVIER
17.	11/04/2022	Research paper publication	Dr. AmolBadgujar	Room Temperature Sputtered Aluminum- Doped ZnO Thin Film Transparent Electrode for Application in Solar Cells and for Low-Band-Gap Optoelectronic Devices	ACS Omega SCI Journal IF 4.132	ACS Publications
18.	April – 2022	Appreciation Mr. Dhiraj from NPTEL Bhandarkar		Certificate of Appreciation awarded in recognition of his role as mentor for the NPTEL Online Certification Course Fundamentals of Automotive Systems (Jan – Apr 2022)	NPTEL Certification Exam Mentorship	NPTEL, IIT Madras
19.	April – 2022	Appreciation from NPTEL	Mr. Dattatray Doifode	Certificate of Appreciation awarded in recognition of his role as mentor for the NPTEL Online Certification Course Non-Conventional Energy Resources (Jan – Apr 2022)	NPTEL Certification Exam Mentorship	NPTEL, IIT Madras
20.	20/04/2022	Resource Person	Dr. Hitesh Thakare	Resource Person to deliver expert session on "Energy Conservation: Technical and Financial Analysis"	Expert session for Final Year Diploma students	SMDR Government Polytechnic, Dhule
21.	23/06/2022	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal AMR: Advanced Materials Research	International Journal	AMR



# SummaryAY 2022 – 23



#### AY 2022 – 23

Sr. No.	Date	Nature of Achievement	Name of Faculty	Details of Achievement	Event / Activity	Organized by
1.	27/07/2022 to 27/08/2022	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Applied Thermal Engineering"	International Journal	ELSEVIER
2.	19/09/2022	Resource Person	Dr. Hitesh Thakare	Resource Person to deliver expert session on "Energy Audit"	Expert session for Final Year Diploma students	SNJB's HHJB Polytechnic, Chandwad, Nashik
3.	23/09/2022	PhD Completion	Dr. Md. Modassir Hussain	Completed PhD in "Tribological study of sustainable biodegradable lubricant and its hydrodynamic journal bearing application"	Ph.D. Program	Institute of Chemical Technology, Mumbai
4.	20/10/2022	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal Solid State Phenomena (SSP)	International Journal	SSP
5.	26/10/2022	Book Chapter Publication	Dr. AmolBadgujar	Nano-inks based on metal oxides for electronic industries	Smart Multifunctional Nano-inks, Fundamentals and Emerging Applications SCOPUS Indexed	ELSEVIER
6.	22/11/2022 to 29/12/2022	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Energy"	International Journal	ELSEVIER
7.	29/11/2022	Research paper publication	Dr. Md. Modassir Hussain	Tribological study of sunflower TMP ester and silica nanoparticles additives for hydrodynamic journal bearing application under boundary lubrication condition	Industrial Lubrication and Tribology SCI Journal IF 1.489	Industrial Lubrication and Tribology
8.	13/12/2022	Resource	Dr. Hitesh	Resource Person to deliver expert session on	Invited expert talk during	Shree L R Tiwari



		Person	Thakare	"Role of Energy in Industry 4.0 Scenario – Various Aspects"	National Level FDP on Industry 4.0	College of Engineering, Mumbai
9.	18/12/2022 to 20/01/2023	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Applied Thermal Engineering"	International Journal	ELSEVIER
10.	26/12/2022	Design Patent Granted	Dr. Nilesh Salunke Dr. Hitesh Thakare Dr. Amol Badgujar	Granted Design Patent on "Centrifugal Pump"	The Patent Office Government of India	The Patent Office Government of India
11.	28/12/2022	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal AMR: Advanced Materials Research	International Journal	KEM
12.	11/01/2023	Funding obtained	Dr. Amol Badgujar& Dr. Yogesh Sonawane	Development of Dome Shaped Passive Solar Desalination System using 3D Printer	Development of Dome Shaped Passive Solar Desalination System using 3D Printer	Maharashtra Solvent Extraction (P)Limited, Dhule
13.	30/01/2023	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal MDPI Electrochem	International Journal	KEM
14.	20/02/2023	Research paper publication	Dr. Bhushan Behede	Review of CompositeDesiccants and Their Properties for Rotary Dehumidifiers	European Chemical Bulletin SCOPUS Indexed	European Chemical Bulletin
15.	20/02/2023	Award Received	Dr. Nilesh Salunke	Best Chapter Chairman Award	Best Chapter Chairman Award	ISTE, New Delhi
16.	17/03/2023	Funding obtained	Mr. Mohd. Juneduddin	Unnat Bharat Abhiyaan 2.0	Solar Powered Smart School	Rural Energy Systems (IIT DELHI)
17.	25/03/2023	Research paper publication Dr. Nilesh Salunke		Multi objective optimization of diesel engine performance and emission characteristics using Taguchi-grey relational analysis	International Journal of Advanced Technology and Engineering Exploration <b>SCOPUS</b>	International Journal of Advanced Technology and Engineering Exploration

					Indexed		
18.	27/03/2024 to 28/04/2024	Reviewer for Journal	Dr. Hitesh Thakare	Reviewer for Journal "Wood Material Science and Engineering"	International Journal	Taylor & Francis	
19.	10/04/2023	Book Publication	Dr. Hitesh Thakare	Analysis of Vortex Tube	Notion Press Ltd. Chennai	Notion Press Ltd. Chennai	
20.	27/04/2023	Research paper publication	Dr. Nilesh Salunke	Effect of nano materials for the nano fluids in solar thermal energy: A review on applications in solar collector	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER	
21.	27/04/2023	Resource Person	Dr. Hitesh Thakare	Resource Person to deliver expert session on "Impacts of Professional Engineering Solutions on Social & Environmental Context & Need for Sustainable Development"	Expert session for Mechanical and E&TC Students	SNJB's Late Sau. K. B. Jain College of Engineering, Chandwad, Nashik.	
22.				Resource Person to deliver expert session on "Energy Audit of Industry / Institute"			
23.	05/05/2023	Research paper publication	Dr. Nilesh Salunke	Phase change materials (PCMs) in solar still: - a review of use to improve productivity of still	Materials Today: Proceedings SCOPUS Indexed	ELSEVIER	
24.	01/06/2023	Award Received	Mr. Mohd. Juneduddin	Awarded with TechSaksham Ambassador 2023	Awarded with TechSaksham Ambassador 2023	Edunet Foundation	
25.	07/06/2023	Research paper publication	Dr. Yogesh Sonawane	Optimization and Modelling of EGR rate and MIS for POME fueled CRDI diesel engine	Case Studies in Thermal Engineering SCIE Journal IF 6.8	ELSEVIER	
26.	10/06/2023	Research paper publication	Mr. Satish Patil	Predicting and forecasting building energy performance using RSMand ANN	Asian Journal of Civil Engineering SCOPUS Indexed	SPRINGER	



27.	27/06/2023	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal Advances in Materials & Processing Technologies	International Journal	KEM
28.	29/06/2023	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal Key Engineering Materials (KEM)	International Journal	KEM



## SummaryAY 2023 – 24



#### AY 2023 – 24

Sr. No.	Date	Nature of Achievement	Name of Faculty	Details of Achievement	Event / Activity	Organized by
1.	05/07/2023	Book Chapter Publication	Dr. AmolBadgujar	Monolithic Integration of Cu(In,Ga)Se <sub>2</sub> Thin Film Solar Modules by all Nanosecond Laser Scribing	Book Series: Recent Advances in Materials and Manufacturing Technology, Springer (Lecture Notes in Mechanical Engineering) SCOPUS Indexed	SPRINGER
2.	22/07/2023	Resource Person	Dr. AmolBadgujar	Invited Talk at International Conference on Recent Trends in Materials Science & Devices 2023 (ICRTMD 2023)	International Conference on Recent Trends in Materials Science & Devices 2023 (ICRTMD 2023)	G. A. V. Degree College, Patauda, Jhajjar, Haryana, India
3.	25/07/2023 to 06/08/2023	Reviewer for Journal	Mr. Dhiraj Bhandarkar	Reviewer for Journal Scientific Research	International Journal	Scientific Research
4.	06/10/2023	Resource Person	Dr. Hitesh Thakare	Resource Person to deliver expert session on "Energy Conservation: Technical and Financial Analysis"	Expert session for Final Year Diploma students	SMDR Government Polytechnic, Dhule
5.	12/10/2023	Research paper publication	Mr. Dattatray Doifode	Thermal Analysis of Vertical Heated Cylindrical SurfaceEmploying V - Shape Fin Surfaces	Journal of Advanced Zoology <mark>WOS Indexed</mark>	Journal of Advanced Zoology
6.	30/10/2023	Resource Person	Mr. Yogesh Sonawane	Delivered an Expert Talk on IC Engines	Expert session for Final Year Diploma students	SMDR Government Polytechnic, Dhule
7.	11/11/2023	Book Publication	Mr. Yogesh Sonawane& Mr. DattatrayaDoifode	A Textbook on Electrical Vehicles Technology	<b>Publisher</b> Scientific International Publishing House	Publisher Scientific International Publishing House
8.	15/11/2023	Reviewer for Journal	Mr. Bhushan Behede	Reviewer for Journal of Thermal Engineering	ournal of Thermal International Journal	

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9.	23/11/2023	Research paper publication	Dr. Yogesh Sonawane	Effect of NOx and Mechanical Efficiency in Single Cylinder Diesel Engine using Multiple Injection of Biodiesel- An Experimental Investigation	TuijinJishu/Journal of Propulsion Technology <b>SCOPUS Indexed</b>	TuijinJishu
10.	31/11/2023	Research paper publication	Dr. Bhushan Behede	Performance Analysis of Silica- Gel and Calcium Chloride Composite Desiccant Prepared by Varying Proportions: A Gravimetric Study	TuijinJishu/Journal of Propulsion Technology <b>SCOPUS Indexed</b>	TuijinJishu
11.	14/12/2023	Design Patent Granted	Dr. Bhushan Behede	Apparatus for synthesis of pharmaceutical nanosuspension	The Patent Office Government of India	The Patent Office Government of India
12.	25/12/2023	Research paper publication Dr. Bhushan Behede		Development of Rotary Dehumidifier with Silica-Gel- Based Composite Desiccant	Thermal Science(Vinca) SCI Journal IF 1.1	Society of Thermal Engineers of Serbia
13.	December 2023	Appreciation from NPTEL	Mr. Dhiraj Bhandarkar	Certificate of Appreciation awarded for his instrumental role as SPOC for the SWAYAM – NPTEL Local Chapter	Active SPOC based on Performance & Participation of Candidates for the Jul – Dec 2023 Semester	NPTEL, IIT Madras
14.	12/01/2024	Reviewer for Journal	Dr. Amol Badgujar	Reviewer forJournal ACS Applied Energy Materials	International Journal	ACS
15.	17/01/2024	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for International Journal of Energy Research	International Journal	WILEY
16.	31/01/2024 to 01/02/2024	Resource Person	Dr. Hitesh Thakare	02 Days Training Program Conducted on Energy Management System (ISO 50001:2018) &	Training Program for 2 <sup>nd</sup> Year Chemical Engineering Students	MIT Academy of Engineering, Alandi, Pune

				Green Audit		
17.	<mark>07/02/2024</mark>	Reviewer for Journal	Dr. Amol Badgujar	Reviewer for Journal "Advanced Engineering Forum (AEF)"	International Journal	Advanced Engineering Forum
18.	13/05/2024	Research paper publication	Dr. Hitesh Thakare	Published <b>research</b> <b>paper</b> entitled "Enhancing energy conservation in power generation in a coal fired thermalpower plant through comprehensive energy audit"	Energy SCI Journal IF 9.0	ELSEVIER
19.	18/06/2024	PhD Completion	Dr. Bhushan Behede	Completed Ph.D. in "Design and Performance Analysis of Rotary Desiccant Wheel Dehumidifier"	Ph.D. Program	O P Jindal University, Raigarh (C.G.)



# SummaryAY 2024 – 25



#### AY 2024 – 25

Sr. No.		DateNature of AchievementName of Faculty				Details	s of Achievement	Event	/ Activity	Organize by	ed		
1.	03	/07/20	)24	Resea pape publica	er	Mr. Datt Doifo		Experimental analysis of hybrid AM60 magnesium composites reinforcedwith TiC and TiB2 via stir casting		Materials Today: Proceedings SCOPUS Indexed		ELSEVIE	R
				Dr. Badgujar	ujar Thin-Film Photovoltaics Using Cu(In,Ga)Se <sub>2</sub> Nanomaterials CSU Cu(In,Ga)Se <sub>2</sub> Nanomaterials Cu(In,Ga)Se <sub>2</sub> Nanomaterials Cu(In,Ga)Se <sub>2</sub> Nanomaterials		erials: roperties /ative ications, eentham ce	Bentha Scienc					
3.	Research 18/08/2024 paper publication		Mr. Sa Pati Dr. Nil Salun	il esh	Optimizing Thermal Management in Electric Battery Packs through Heat Pipe-Based Systems and Aluminum Sleeve Integration		Jou Mea Eng	nternational urnal of chanical ineering JS Indexed	Seventh Sense Researc Group, Trichy	h			
4. 5.		/09/20 /09/20		Resource Person		Dr. Hit Thaka			e person to deliver session on "Energy	First Year Induction Program		SVKM's Institute o Technoloo Dhule	of
6.	30	/09/20	)24	Resource Person		Dr. Hit Thaka		expert s Audit – Sustaina	urce Person to deliver rt session on "Energy – Practical Tool for ainable Development: rience Sharing"			Bureau c Indian Standard Surat Chapter	S,
7.						Dr. Hit Thaka		Materials	of Energy and s in Industry4.0 - A ic Deliberation		ments in Processing ogy, Volume		
8.			Book Ch Publica			Dr. Nilesh Salunke		Computational analysis of various fin configurations – a comprehensive assessment		r – Springer ngs in	SPRINGE	R	
								Energy	Performance		JS Indexed		
9.	03	03/10/2024 Book Chapter Publication		Dr. Hit Thaka		Assessm	nent of Industries dings: A Review of	Advancements in Materials Processing Technology, Volume 2, Select		SPRINGE	R		
10.									ational Analysis of o Study the Effect of		edings of PT 2023		

				Temperature and Fin Material	SCOPUS Indexed	
11.	10/10/2024	Resource Person	Dr. Hitesh Thakare	Training Program Conducted on Energy Management System (ISO 50001:2018)	Training Program for 48 Employees of Jalgaon, Alwar (Rajasthan) and Hyderabad Plant	Jain Irrigation Systems Ltd., Jalgaon
12.	13/10/2024	Research paper publication	Dr. Hitesh Thakare	Computational investigation and exergy analysis of swirling flow in vortex tube	Journal of Thermal Engineering SCOPUS and ESCI Indexed IF – 1.1	Yildiz Technical University, Istanbul, Turkey.
13.	08/11/2024	PhD Completion	Dr. Yogesh Sonawane	Completed Ph.D. in "Energy and Emission Analysis of Partially Premixed Combustion using Biofuels by Multiple Injection in Compression Ignition Engine"	Ph.D. Program	KBC North Maharashtra University, Jalgaon.