



**R&D Data 2023-24**

**Publications (Journal): Academic Year 2023-24 (1 July to 30 June)**

Sr. No.	Name Authors	Title of paper	Name of Journal	National/ International	ISSN No.	Vol/Issue No.	Page No.	Date/ Year	Indexing	Impact factor
1.	Dr Laxmikant D. Jathar	Parametric analysis and optimization of 660 MW supercritical power plant	Energy	International	ISSN 0360- 5442	280 128165	-	Oct 2023	SCI	8.857
2.	Dr Laxmikant D. Jathar	Performance investigation of an innovative solar heating unit for a powered self- sustained solar dryer	Applied Thermal Engineering	International	ISSN 1359- 4311	233	-	Oct 2023	SCIE	6.4
3.	Dr U V Awasarmol Dr JD Patil Prof RS Verma Dr LD Jathar	Experimental investigation of heat transfer enhancement by using perforated fin array having different perforation ratios, angle of inclination and configuration of fins under forced convection condition	International Communications in Heat and Mass Transfer	International	Online ISSN: 1879- 0178 Print ISSN: 0735- 1933	147 106995	-	Oct 2023	SCIE	7



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4.	Dr Laxmikant D. Jathar	Biofuels for a sustainable future: Examining the role of nano-additives, economics, policy, internet of things, artificial intelligence and machine learning technology in biodiesel production	Energy	International	ISSN 0360-5442	282 128874	-	Nov 2023	SCI	9
5.	Dr R B Gurav Dr Pritee Purohit	Computational study on forced convection heat transfer in pin fin heat sink (pfhs) with inclined wings	Journal of Physics: Conference Series (JPCS)	International	ISSN: 1742-6596	2601 012026	1-10	(2023)	Scopus	-
6.	Dr Pritee Purohit Dr R B Gurav	Improving crash-worthiness and occupant safety of bus seat structures in frontal crashes as per ais023 using finite element analysis	Journal of Physics: Conference Series (JPCS)	International	ISSN: 1742-6596	2601 012039	1-10	(2023)	Scopus	-
7.	Dr Pritee Purohit	Performance evaluation of adjustable stroke piston pump with varying fulcrum position	Journal of Physics: Conference Series (JPCS)	International	ISSN: 1742-6596	2601 012011	1-7	(2023)	Scopus	-



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8.	Dr Pritee Purohit	Kinematic Design of Adaptive Control Adjustable Stroke Piston Pump for Automated Lubrication System	Energy Environment Focus	International	ISSN: 2326-3040 (Print); EISSN: 2326-3059 (Online)	Volume 7, Number 2	189-193	August 2023	Emerging Sources Citation Index (ESCI) Web of Science (Thomson Reuters)	-
9.	Dr R B Gurav	Technological feasibility and challenges of hybrids: wave, hydro, offshore-wind and floating solar energy harnessing	Multidisciplinary Reviews	International	ISSN 2595-3982	Vol. 7 Issue 3	2024 054	January 3, 2024	Scopus	-
10.	Dr R B Gurav Dr Pritee Purohit	A critical review of Oxygen equipment for long-term Oxygen Therapy with the aid of renewable energy sources and comparison for use in low-resource settings	Journal of Integrated Science Technology	International	ISSN 2321-4635	12(5), 819	811-819	Feb 2024	Scopus	-



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11.	Dr Laxmikant D. Jathar Dr U V Awasarmol Dr JD Patil Dr R B Gurav	A comprehensive analysis of the emerging modern trends in research on photovoltaic systems and desalination in the era of artificial intelligence and machine learning	Heliyon	International	ISSN24 05-8440	Vol. 10 Issue 3	e2540 7	Feb 2024	SCIE	4
12.	Dr Laxmikant D. Jathar Dr U V Awasarmol	Perspectives on cultivation and harvesting technologies of microalgae, towards environmental sustainability and life cycle analysis	Chemosphere	International	ISSN:00 45-6535	Vol. 353	1415 40	April 2024	SCI	8.8



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**Publications (Conference): Academic Year 2023-24 (1 July to 30 June)**

Sr. No.	Name Authors	Title of paper	Name of Conference	Local level/State Level/National/International	ISSN/ ISBN	Page No.	Date/Year of Conference	Presented (Yes/No)
1.	Anand Ramgude Dr Pritee Purohit	Optimization of the hexahedral mesh by Condition Number Algorithm	2nd International Conference on Innovations in Mechanical and Civil Engineering	International			18 <sup>th</sup> & 19 <sup>th</sup> August 2023	Yes
2.	Anand Ramgude Dr Pritee Purohit	A Review on Mesh Refinement using different Optimization Techniques	Thirty-eighth National Convention of Mechanical Engineers on “Emerging Trends and Developments in Smart Manufacturing, Renewable Energy and Mechanical Systems Diagnostics/ Design”	National			08 <sup>th</sup> & 09 <sup>th</sup> September 2023	Yes



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3.	R S Godse Dr Pritee Purohit	Innovative Solar Air Dryer Designs for Agricultural Products-A Review	2nd International Conference on Innovations in Mechanical and Civil Engineering	International			18 <sup>th</sup> & 19 <sup>th</sup> August 2023	Yes
4.	R S Godse Dr Pritee Purohit	Innovative Solar Air Dryer Designs for Industrial Applications-A Review	Thirty-eighth National Convention of Mechanical Engineers on “Emerging Trends and Developments in Smart Manufacturing, Renewable Energy and Mechanical Systems Diagnostics/ Design”	National			08 <sup>th</sup> & 09 <sup>th</sup> September 2023	Yes



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Sr. No.	Name Authors	Title of paper	Name of Conference	Local level/State Level/National/International	ISSN/ ISBN	Page No.	Date/Year of Conference	Presented (Yes/No)
5.	Dr Pritee Purohit Nitin Mate Tejas Narsale Mandeep and Anurag Singh	Air Purifier & Humidifier using Water as a Filter	Green Technology for Sustainable Development” organised at The Institution of Engineers (India), Pune Local Centre during	National	-	-	30-31 March 2024	Yes
6.	Dr Pritee Purohit Piyush Shukla Dhiraj Patil Arshad Abbas Sitanshu Kumar	Development of Engine Decarboniser System	Green Technology for Sustainable Development” organised at The Institution of Engineers (India), Pune Local Centre during	National	-	-	30-31 March 2024	Yes



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7.	Dr S M Gaikwad Aman kumar Akash Gandhar Anuj kumar Anjlish	Design and implementation of automated cleaning of ceiling fan	Green Technology for Sustainable Development” organised at The Institution of Engineers (India), Pune Local Centre during	National	-	-	30-31 March 2024	Yes





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**Book Published: Academic Year 2023-24 (1 July to 30 June)**

<b>Sr. No.</b>	<b>Name of Authors</b>	<b>Title</b>	<b>ISBN</b>	<b>Local/ National/ International</b>	<b>Publisher Details</b>	<b>Date/Year</b>
1.	Dr Laxmikant Jathar	Energy Engineering	978-93-5585-313-4	National	Technical Publication, Pune	2022
2.	Dr Laxmikant Jathar	Engineering Thermodynamics	978-93-332-2201-3	National	Technical Publication, Pune	2022



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**List of Patent: Academic Year 2023-24 (1 July to 30 June)**

<b>Sr. No.</b>	<b>Name of Inventors</b>	<b>Title</b>	<b>National/ International</b>	<b>Application No.</b>	<b>Date of filing</b>	<b>Date of publication</b>	<b>Date of Grant</b>
1.	1. Mr Atharva Vinod Kulkarni 2. Mr Runal Ashok Mahabale 3. Mr Rahul Sunil Patil 4. Mr Vedant Rakesh Mhatre 5. Dr Keval Nikam 6. Mr Nitin Motgi 7. Mr Chetan Pawar 8. Dr Ganesh Jadhav 9. Dr Laxmikant D. Jathar	Solar panel cleaning system	National	407183-001	10/02/2024	25/04/2024	25/04/2024