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KCG Nagar, Karapakkam

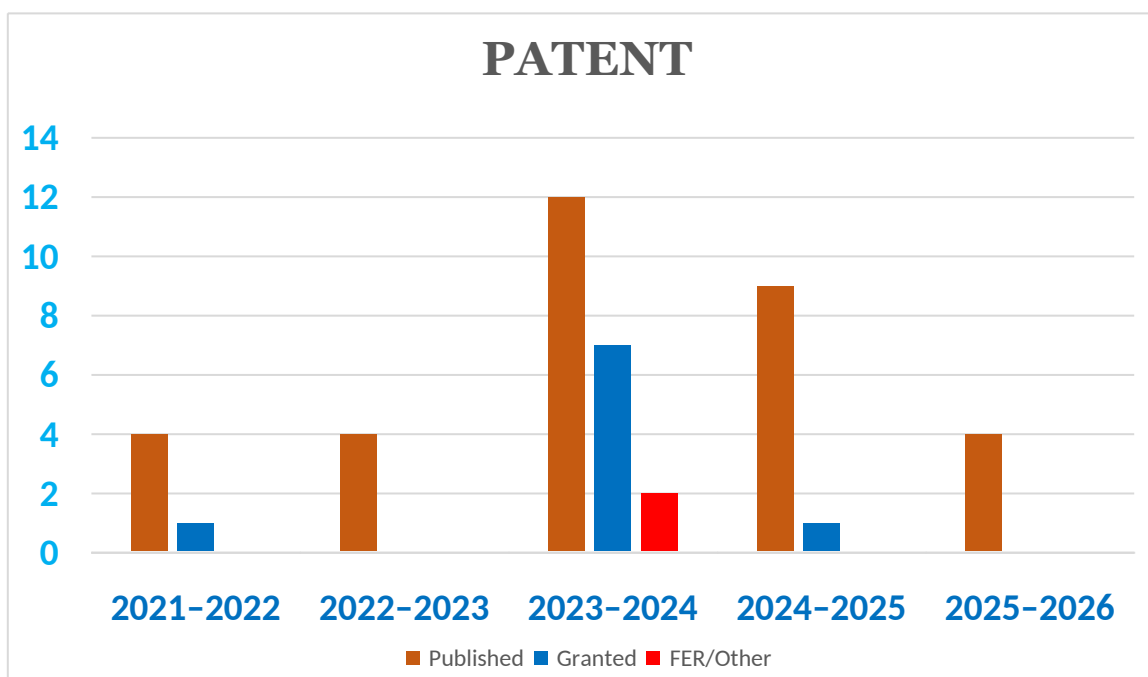
Chennai – 600 097

**DEPARTMENT OF MECHANICAL
ENGINEERING**



FACULTY PATENT DETAILS

Department of Mechanical Engineering



Academic Year	Published	Granted	FER/Other
2021-2022	4	1	0
2022-2023	4	0	0
2023-2024	12	7	2
2024-2025	9	1	0
2025-2026	4	0	0

S. Jesudoss Thomas.

HOD/MECH



Department of Mechanical Engineering

Details of Patents granted/published by faculty members

CAY (2025-2026)

S.NO	NAME OF THE INVENTORS	TITLE OF THE PATENT	PATENT TYPE (UTILITY/DESIGN)	PATENT NUMBER (REFERENCE)	DATE OF PUBLICATION/ GRANT	STATUS (PUBLISHED/GRANT/ EXAMINATION)
1	Dr. S. Kalliappan	Thermoelectric Waste Heat Recovery System for Automotive Engines with Nanostructured Materials	Utility	202541061160	11-07-2025	Published
2	Dr. S. Kalliappan	Boron Carbide-Reinforced Morphing Wind Turbine Blade	Utility	202641043329	17-04-2026	Published
3	Dr. S. Jesudass Thomas	Morphing Blade Technology for Wind Turbine Blades	Utility	202641043300	17-04-2026	Published
4	Mr. I. Manikandan	Algae Based CO2 Reduction System for Aircraft Cabin Air Quality Improvement	Utility	202641049563	01-05-2026	Published

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Department of Mechanical Engineering

Details of Patents granted/published by faculty members CAY (2024-2025)

S.NO	NAME OF THE INVENTORS	TITLE OF THE PATENT	PATENT TYPE (UTILITY/DESIGN)	PATENT NUMBER (REFERENCE)	DATE OF PUBLICATION/ GRANT	STATUS (PUBLISHED/GRANT/ EXAMINATION)
1	Dr. S. Kalliappan	Real Time Sustainability Assessment for Tamil Nadu's Automotive Sector	Utility	202441097634	13-12-2024	Published
2	Dr. S. Kalliappan	Quantifying the triple bottom line of Sustainable Buildings in Tamilnadu	Utility	202441097635	10-12-2024	Published
3	Dr. S. Kalliappan	AI Based Micro Robotic Hydraulic System for Printing Conductive Ink	Utility	202441054152	26-07-2024	Published
4	Dr. S. Kalliappan	AI Based Hydraulics Powered Underwater Plants Uprooting Robotic System	Utility	202441054151	26-07-2024	Published
5	Dr. S. Kalliappan	Ultrasonic Sensor Based Depth Specific Self-Threading Robotic System for Wall Drilling	Utility	202441054148	26-07-2024	Published
6	Dr. S. Kalliappan	AI Based Hydraulic Robotic Vehicle system for Sapling Plantation	Utility	202441054146	26-07-2024	Published
7	Dr. S. Kalliappan	Automated Robotic System for Efficient Dismantling and	Utility	202441053095	19-07-2024	Published



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		Separation of End-of-Life Solar Panels				
8	Dr. S. Kalliappan	Development of AI-Powered Sorting System for Accurate Material Classification in End-of-Life Solar Panel Recycling	Utility	202441052620	19-07-2024	Published
9	Dr. S. Kalliappan	Method for AI-Powered Predictive Maintenance in Smart Manufacturing Systems	Utility	202541041995	30-05-2025	Published
10	Dr. S. Kalliappan	A Wearable Device For Monitoring and Improving Sleep Quality	Design	457186001	30-04-2025	Published

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Department of Mechanical Engineering

Details of Patents granted/published by faculty members CAYm1 (2023-2024)

S.NO	NAME OF THE INVENTORS	TITLE OF THE PATENT	PATENT TYPE (UTILITY/DESIGN)	PATENT NUMBER (REFERENCE)	DATE OF PUBLICATION/GRANT	STATUS (PUBLISHED/GRANT/EXAMINATION)
1	Dr.D.Easu	Suspension System Using MRF And Hybrid Magnet	Utility	530821	28-03-2024	Granted
2	Dr.D.Easu	Automated Lift System	Utility	485144	19-12-2023	Granted
3	Dr V Gopal	Design Of Flexure Hinges Tester	Utility	535911	29-04-2024	Granted
4	Dr V Gopal	Design And Analysis Of High Strength To Weight Backhoe Loaders	Utility	202441012315	21-02-2024	Published
5	Dr.S.Gopinath Nithish Kumar V Lokkesh R B Durai Raj D Kishore Kumar P	Lower Base Exoskeleton For Paralysed Patients	Utility	202341066712 A	27-10-2023	Published
6	Dr. Jesudass Thomas, Dr. S.Gopinath, Dr. M. Vignesh Kumar,	Dehydration Chamber Using Waste Heatrecovery System	Utility	20244103675	26-02-2024	Published

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	N.Dhanusha					
7	Dr.S.Gopinath	Laser Marking Machine For Mechanical Model	Design	403031001	25-12-2023	Granted
8	Dr.Vignesh Kumar M, Suraj Narayanan S, Vishaal R, Jagadish J S, Karthikeyan Y, Sudarshan, Kumaran	A IOT System Eyewear For Law Enforcement	Utility	202341052198	03-08-2023	Published
9	Dr.S.Gopinath	Multi Axis CNC Milling Machine	Design	407501-001	14-02-2024	Granted
10	Dr. Avinash Malladi Dr. S.Kaliappan M.Muthukannan Dr. T.Mothilal M.D.Rajkamal S.Socrates	Specialized Bed With Robotic Clamping For Medical Procedures	Design	399213-001	04-11-2023	Granted
11	Dhanush	Bloom Mechanism	Utility	202241001929	14-07-2023	Published
12	Dr V Gopal	Development Of Low Cost Floor Cleaning Machine	Utility	202441041557	31-05-2024	Published
13	Dr. Edward Kennedy Dr. V.Andal	POWERED FRUIT HARVESTING DEVICE	Utility	202241007040	11-08-2023	Published

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	Sandeep George R Venkatesan M Vijay R					
14	Dr. G. Mohamed Zakriya Dr. V. Bhanu Rekha, K. Gowri, Dr. D. Easu	Fabrication Of Portable Sewing Thread Making Machine From Cutting Waste Of Garment Industry – A Sustainable Approach	Utility	202041040247	27-01-2023	FER Reply Filed On 12-07-2023
15	Dr V Gopal	Natural Fibre Composites For 3D Printing Applications	Utility	202341056378	01-12-2023	Published
16	Ramya Krishnan V, Shovitha M, Nishanth R, Mr V Sabu, Dr D Easu, Dr R Amrutha	Bed-Der Alternative- Smart Attachment To Bed	Utility	202241051563	15-03-2024	FER Reply Filed On 18-11-2025
17	Dr S Kaliappan	A Design Patent Uploaded Motorized Lead Screw System For Robotic Hole Drilling	Design	399211-001	04-11-2023	Granted
18	Dr S Kaliappan	A Design Patent Granted Is Published In Specialized Bed With Robotic Clamping For Medical Procedures	Design	399213-001	04-01-2024	Published



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19	Dr S Kaliappan	Mechatronics X-Y Gantry Based System For Customized FRP Sheet Manufacturing	Utility	202341075881	17-11-2023	Published
20	Dr S Kaliappan	Precision Extendable Robotic Arm Employing Hydraulics And LVDT Sensor	Utility	202341075879	24-11-2023	Published
21	Dr S Kaliappan	AI Based Semi-Automatic Window Washing System For Government Buses	Utility	202341075880	24-11-2023	Published

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Details of Patents granted/published by faculty members CAYm2 (2022-2023)

S.NO	NAME OF THE INVENTORS	TITLE OF THE PATENT	PATENT TYPE (UTILITY/DESIGN)	PATENT NUMBER (REFERENCE)	DATE OF PUBLICATION/ GRANT	STATUS (PUBLISHED/GRANT/ EXAMINATION)
1	Dr.Kannan M	Combined Performance Study On Solar Operated E-Vehicle.	Utility	202241063782	09-11-2022	Published
2	Dr. Sridhara Dr. Edward Kennedy Dr. V.Andal	Powered Fruit Harvesting device	Utility	201941053945	27-01-2023	Published
3	A.Kamalkhan, S.Devanand, D.Easu	Compactable couch	Utility	202141038032	25-03-2022	Published
4	Dr. D Easu, P M Karthikeyan, Md. Arafath, Md. Rizwan	Compactable Mini Drafter	Utility	202141038030	24-02-2023	Published

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Department of Mechanical Engineering

Details of Patents granted/published by faculty members

CAYm1 (2021-2022)

S.NO	NAME OF THE INVENTORS	TITLE OF THE PATENT	PATENT TYPE (UTILITY/DESIGN)	PATENT NUMBER (REFERENCE)	DATE OF PUBLICATION/GRANT	STATUS (PUBLISHED/GRANT/EXAMINATION)
1	Dr. D Easu	A Suspension System using Magnetorheological Fluid damper and Hybrid magnet to reduce road induced vibrations	Utility	202141038032	24-02-2023	Published
2	Tadisetti Charan Dixit Rao, S. Jesudass Thomas	Aerodynamic Rocket Decelerator Using Autorotation	Utility	202141038031	24-02-2023	Published
3	Dr. V Gopal, Anandh C Mathen Joseph, Jayaram P, Dhanasayan D	OFF DELAY FAN	Utility	202141033122	24-02-2023	Published
4	S. Jesudass Thomas Dr. M Vignesh Kumar Dr. V Gopal K. Gobivel Mr. S Rajesh Kannan	An Investigation of Abrasive Water Jet Machining on Glass Fiber Reinforced Polymers,	Utility	2021101722	26-05-2021	Granted



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5	M. Arul Inigo Raja AdityaNinan Oommen'	Design and Fabrication of Complete Waste Removal System	Utility	201741023015	27-02-2022	Published
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