

SETHU INSTITUTE OF TECHNOLOGY

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Pulloor, Kariapatti – Taluk. Virudhunagar Dist-626115.

Department of Mechanical Engineering									
Name	Dr DAVID GNANARAJ J								
Date of Birth	31-05-1986								
Unique ID	1-3583684383								
Educational Qualifications	M.E., Ph.D.,						Naco S		
Designation	ASSOCIATE PROFESSOR								
Email ID	david@sethu.ac.in								
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Experience	Industry	Teachi	ng	Others	Total				
	6 Months	12 Yrs 2 Months			12 Yrs 8 month				
Date of Joining the Institution	03-01-2018								
Area of Specialization	Polymer Composites								
	Machine Learning, Artificial Intelligence, Finite Element Analysis, Strength of materials, Kinematics of machinery, Additive Manufacturing, Automobile Engineering, Engineering Graphics.								
	Polymer Composites								
Subject Competency	Finite Element Analysis, Automobile Engineering								
No. of papers published	National Journals		I	International Journals			Conferences		
PG Specialization	7 CAD/CAM						6		
Ph.D. Specialization	Natural Fiber polymer composites								
Projects Carried out	Naan Mudhalvan Niral Thiruvizha- 2024								
,	(State Government Funded Project)								
Patents (Filed & Granted)	2								

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Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	B.E.,	MECHANICAL ENGINEERING	ANNA UNIVERSITY, CHENNAI	2009
PG	M.E.,	CAD/CAM	ANNA UNIVERSITY, CHENNAI	2013
Ph.D.	Ph.D	Polymer Composites	ANNA UNIVERSITY, CHENNAI	2023

Details of Journal Publication:

- **1. David Gnanaraj J**, VigneshV, Mohamed Hashem, Hassan Fouad 'Statistical approach to explore sustainable characteristics of cellulosic Desmostachya bipinnata fiber and its chemically modified conditions, Materials Research Express, 30(2), 1251-1257 (Aug 2024) Impact Factor 3.5 Doi: https://doi.org/10.1088/2053-1591/ad7446
- 2. **J David Gnanaraj,** S Mothilal, **V Vignesh,** T Karthick, SO Ismail, N Rajini Investigation into Mechanical, Thermal and Water Absorption Behaviors of Cocos nucifera Shell Filler Reinforced Vinyl Ester Polymeric Composites, Journal of Polymers and the Environment, 1-13 DOI:10.1007/s10924-021-02343-8, Impact Factor 4.7.
- 3. David Gnanaraj J, ArunBalasubaramania n K, Rajeshwaran S K, Saravanakumar C "Vibration Control on Cantilever beam using shape memory alloys", International Journal of Recent Researches in Science, Engineering and Technology (IJRRSET), Volume 11 Issue 4 April 2023 Pages 17-34 Impact Factor- 1.53
- 4. Paramasamy S, David Gananraj J, Siva Sundar S "Enhancing Mechanical properties of polyester composite through natural fiber and filler reinforcement: an experimental study", International Journal of Research in Mechanical, Mechatronics and Automobile Engineering (IJRMMAE), Volume 7 Issue 4, January March 2022 www.ijrmmae.in Pages 55-76 Impact Factor- 0.9275.
- **5.** David Gnanaraj J, Arun Balasubramanian K, Thamilselvan G K, Ragavendra Rao S, "Reduction of overall manufacturing expenses for both simple and complex assemblies" International Journal of Recent Researches in Science, Engineering and Technology (IJRRSET), Volume 9, Issue 3 March 2021 Pages 27-33 Impact Factor- 1.53
- 6. S. A. Sharuch Khan, J. David Gnanaraj, "Design of Open Hydraulic Jack and Analysis" ESP Journal of Engineering & Technology Advancements ISSN: 2583-2646 / Volume 4 Issue 2 April 2024 / Page No: 56-62 Doi: 10.56472/25832646/JETA-V4I2P109
- 7. J. David Gnanaraj, Z. A. Balassem, M. Naresh, T. N. P. Madhuri, K. S and M. Ramya, "Arbitrary Orientation 2-D Utilized to Reconstruct 3-D Space," 2025 International

Conference on Intelligent Control, Computing and Communications (IC3), Mathura, India, 2025, pp. 1196-1201, doi: 10.1109/IC363308.2025.10957193.

Details of Conference attended:

- 1. Design of Open Hydraulic Jack and Analysis- International Conference on Emerging Engineering Technology Science & Humanities (ICEETSH-2024)
- Analysis of Gearbox Casing Component and Chain Sprocket in Go Kart Vehicle- National Conference on Global Technologies in Manufacturing and Thermal Sciences (GTMTS 2024)
- 3. Synthesis and Characteristics of B-Tri-Calcium Phosphate- National Conference on Global Technologies in Manufacturing and Thermal Sciences (GTMTS 2024)
- 4. Physico Properties of Naoh Treated Kusha Grass Fiber- National Conference on Global Technologies in Manufacturing and Thermal Sciences (GTMTS 2024)
- 5. J.David Gnanaraj, "Experimental study on basalt fiber and steel slag reinforced brake pad" 4th International Conference on Advances in Automobile, Manufacturing, Automation and Mechanical Engineering (ICAAMME 25) held at Eswari engineering college on 19th March 2025
- 6. J.David Gnanaraj, "experimental investigation of calcium silicate reinforced TCP composite scaffold for critical bone defect application" 4th International Conference on Advances in Automobile, Manufacturing, Automation and Mechanical Engineering (ICAAMME 25) held at Eswari engineering college on 19th March 2025

Details of Patents Filed and Granted:

- 1. Solar grass cutting machine (Application No -3951141-001)
- 2. Semi-trailing arm suspension with integrated knuckle for vehicles Application No (202441100553)