SETHU INSTITUTE OF TECHNOLOGY

(An Autonomous Institution| Accredited with 'A++' Grade by NAAC)

Pulloor, Kariapatti –Taluk. Virudhunagar Dist-626115.

Department of Mechanical Engineering

Name	*Dr. T. Gangadharan*
Date of Birth	08.03.1983
Unique ID	*1422455840*
Educational Qualifications	*B.E, M.E, Ph.D.*
Designation	Associate Professor
Email ID	tgangadharan@sethu.ac.in
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Experience

Industry	Teaching	Others	Total
-	18 Years	-	18 Years

Date of Joining the Institution	05.07.2007
Area of Specialization	***Bio composite, composite material,***
Courses taught	Engineering Mechanics, Kinematics of Machinery, Dynamics of Machinery, Finite Element and Analysis, Gas dynamics and Jet Propulsion, Design of machine element, Design of Transmission system,
Research Focus	***Bio composite, Composite material, Optimization, Corrosion, Digital Twins***
Subject Competency	

No. of papers published

National Journals	International Journals	Conferences
-	**9**	**1**

PG Specialization	CAD/CAM
Ph.D. Specialization	Bio Composite
Projects Carried out	***1. Stair to ramp convertor using pneumatic cylinder for disabled people.(MSME)*** ***2. Bio composite (Multimedia university , Malaysia)***
Patents (Filed & Granted)	***1 – Patent Filed***
Technology Transfer	***Research work on Multimedia university , Malaysia***

Academic Credentials

Level	Degree	Specialization	University	Year of Completion
UG	B.E	Mechanical	Madurai Kamaraj University	2004
PG	M.E	CAD/CAM	Anna University	2006
Ph.D.	Ph.D	Bio Composites	Anna University	2022

Details of Journal Publication:

1. Palanisamy, Chockalingam, and Gangadharan Tharumar. "Review on Development of Digital Twins for Predicting, Mitigating Faults and Defects in Solar Plants." International Journal on Robotics, Automation and Sciences 6, no. 2 , 2024.

2. A Perumal, PR Rajkumar, G Venkatesan, S Paramasamy, T Gangadharan, “Multi-response optimization of machining parameters of Ti-6Al-2Sn-4Zr-2Mo alloy using EDM process through grey relational analysis”, 5, no 2, 025005, 2023

3. Gangadharan, T., C. Kailasanathan, and K. R. Chitra Priya Darshini. "Tribological and Mechanical Properties of Hybrid nHAp/SiO2/chitosan Composites Fabricated from Snail Shell Using Grey Rational Grade (GRG) Analysis." Silicon 14, no. 13 (2022): 7483-7500.

4. Velmurugan, G., N. Dinesh Kumar, A. Perumal, P. R. Rajkumar, T. Gangadharan, S. Sekar, S. Suresh Kumar, V. Siva Shankar, and M. S. Bhagavathi. "Potential utilization and characterization of epoxy based biomaterials under alkaline environment." In American Institute of Physics Conference Series, vol. 2516, no. 1, p. 050001. 2022.

5. Perumal, A., C. Kailasanathan, Balasubramaniam Stalin, S. Suresh Kumar, P. R. Rajkumar, T. Gangadharan, and G. Venkatesan. "Multiresponse Optimization of Wire Electrical Discharge Machining Parameters for Ti-6Al-2Sn-4Zr-2Mo (α-β) Alloy Using Taguchi-Grey Relational Approach." Advances in Materials Science and Engineering 2022 (2022).

6. A Perumal, C Kailasanathan, B Stalin, PR Rajkumar, T Gangadharan, G Venkatesan, “Evaluation of EDM process parameters on titanium alloy through Taguchi approach”, Materials Today: Proceedings, 45, 2394-2400, 2021.

7. A John Rajan, C Kailasanathan, B Stalin, PR Rajkumar, T Gangadharan, A Perumal, “Optimization of mould sand properties by mixing of granite powder using Taguchi method”, Materials today: Proceedings, 45, 2254-2259, 2021.

8. Kailasanathan, C., and T. Gangadharan. "Influence of bio inert Silica on Mechanical Properties and their dependence on Porosity of Nanocrystalline based Hydroxyapatite/Gelatin Composites synthesized by co-precipitation Method." Journal of the Australian Ceramic Society 52, no. 2 (2016): 52-61.

9. R.BalaChandar T.Gangadharan,S.BharathiManohar,V.Anandh. “International Journal of Applied Engineering Research”, 10,no. 28, 22008-22015,2015.

Details of Conference attended:

1. “Design and Analysis of Helical Compression spring to study the behaviour of steel and composites used as spring materials”, Research Advances in Mechanical Engineering, P.S.R Engineering College, June 05 &06, 2024.

Details of Patents Filed and Granted:

Alavudeen, S. Sivakumar, N. Sivakamasundari, Lokesh V, T. Gangadharan, B. Saritha, D. Sures, Application No. 202541022046, “Rotating arm Robot for pipe Inspection Tasks”, Patent Published on 21.03.2025.