

## **Profile of Dr.P.Gopinath**

**Name of the College** : K S R Institute for Engineering and Technology  
**Name of Department** : Mechanical Engineering  
**Name of Faculty Member** : Dr.P.Gopinath  
**Present Designation** : Associate Professor & Head of Department  
**Residential Address** : 1/49-11, Sindhu Nagar,  
Kadachanllur (PO) Namakkal - 637015  
Mobile: +919500998458  
**Contact Details** : Email: [gopipalani@ksriet.ac.in](mailto:gopipalani@ksriet.ac.in)  
**Gender** : Male  
**Community** : BC  
**PAN Number** : AKHPG1749H  
**Passport** : -  
**Date of Birth & Age** : 13-04-1976 & 46



### **ACADEMIC QUALIFICATIONS :**

Degree	Branch / Stream	Institution / University	Year
Ph.D	Mechanical Engineering / Composite Materials	Anna University, Chennai, Tamil Nadu.	2019
MBA	Human Resources	Allagappa University	2010
M.E.	Mechanical Engineering / Computer Aided Drawing	Mahendra Engineering College, Anna University, Chennai.	2011
B.E.	Mechanical Engineering	Coimbatore Institute of Technology, Bharathiyar University, Coimbatore,	2007
DME	Mechanical Engineering	K S Rangasamy Institute of Technology	1996

**PROFESSIONAL EXPERIENCE:**

S.No	Designation	Name of the Institution	Period	Experience
1.	Instructor	K S Rangasamy Institute of Technology	01-06-1996 to 05-06-1997	1 year
2.	Sr.Lecturer/ HOD	K S R Polytechnic College	23-06-1997 to 30-05-2009	11 years 11 months
3.	Associate Professor	K.S.R Institute for Engineering and Technology	01.07.2011 to till date	8 years 6 months

**Awards / Prizes / Certificates:**

- 100% results achievement awards for 9 times in various subjects in Polytechnic.
- 100% results achievement awards for 4 times in Engg College.

**COURSES TAUGHT:**Undergraduate Level:

- Kinematics of Machinery
- Engineering Graphics
- Basics of Civil and Mechanical Engineering
- Design of Machine Elements
- Design for Manufacturing Assembly and Environment
- Competitive Manufacturing Systems
- Advanced IC Engines
- Manufacturing Technology-II
- IC Engines
- Strength of Materials
- Principles of Management
- Professional Ethics in Engg
- Unconventional Machining Process
- Metrology and Non-destructive Testing
- Engine Performance and Emission Testing Laboratory

**MEMBERSHIP OF PROFESSIONAL BODIES:**

- Life Membership, Indian Society for Technical Education (ISTE) India – LM 42264
- Life Membership, Society for Aerospace and Mechanical Engineering Professionals (SAMP)

**BOOK PUBLISHED:**

- Basics of Civil and Mechanical Engineering
- Unconventional Machining Process

**RECOGNIZED Ph.D. SUPERVISOR**

- Anna University, Chennai – 600 025, Tamil Nadu, INDIA.  
**Supervisor ID: 4120063**

**PATENTS:**

S. No.	Patent Title	Name of Applicants	Patent No.	Award Date	Agency/ Country	Status
1.	Wind turbine nacelle with phase change material which controls temperature using AI	Dr.M.Venkatesan <b>Dr.P.Gopinath</b> A.Mohanraj R.Vasanthkumar	2021102254	02-06-2021	Australia n	Granted
2.	IOT Based ARM	Dr.K.Vadivelan Dr.D.Rajalakshmi Dr.M.Venkatesan Dr.P.Meenakshi Devi <b>Dr.P.Gopinath</b> et. al.	385365-001	24-07-2023	INDIA	Granted
3.	A Portable Wind Mobile Power Generator	<b>Dr.P.Gopinath</b>	202241072815 A	30/12/2022	INDIA	Published
4.	A System and Method for Added Security in Unlocking an	Dr.P.Gopinath Dr.M.Sivakumar Mr.K.Gopalakrishna	202241052077 A	16/09/2022	INDIA	Published

	Automobile Ignition System	Mr.S.Rahul				
5.	AIAEC – IOT Technology: Artificial Intelligent – based Agriculture Environment Control using IOT Technology	Dr.P.Suresh <b>Dr.P.Gopinath</b>	202041013140 A	08-05-2020	INDIA	Published

#### Grant Received:

S. No.	Title of the Program	Name of the Funding Agency	Amount Granted (Rs)	Role	Status
<b>2023 - 24</b>					
1.	<b>International Conference</b> On Advances in Smart Systems and Intelligent Automation	SERB	1,00,000	Convenor	<b>Granted</b>

#### Funded Research Projects:

S. No.	Title Project	Name of the Funding Agency	Amount Applied (Rs)	Role	Status
<b>2023 - 24</b>					
1.	Deposition of nano crystalline diamond films with diamond/SiC composite interlayer on Titanium and its alloys	DST - Advanced Manufacturing Technology	62,81,381	Principal Investigator	Submitted
2.	Development of Solar Powered Coconut Dehusking Machine	TNSCST - Project Proposal	5,00,000	Co-Principal Investigator	Submitted
3.	Employing Bioinspired Interlock Sutures for Strength Improvements in Agricultural Quadcopter Structures by Additive Manufacturing	TNSCST - Project Proposal	5,00,000	Investigator	Submitted

4.	Socioeconomic Development of Scheduled Caste SC Communities in Tiruchengode Block, Namakkal District, Tamil Nadu State	DST - Scheduled Caste Sub Plan (SCSP)	1,33,61,357	Investigator	Submitted
<b>2022 - 23</b>					
1.	Science, Technology and Innovation Hub for creating Sustainable Livelihood Opportunities of Scheduled Castes in Tiruchengode Block, Namakkal District, Tamil Nadu	DST - STI Hub for SC Community	1,56,67,765	Co-Principal Investigator	Submitted
2.	Hybrid Energy Storage System	DST - Advanced Materials and Energy Storage Technology (AMEST)	60,40,000	Principal Investigator	Submitted
3.	Experimental Investigation on Joining Various Alloy Materials using Friction Stir Welding	SERB SURE	28,45,000	Principal Investigator	Submitted
4.	Design and Analysis of Thermal Management System for Lithium-ion Battery Modules in Electric Vehicles	SERB – Core Research Grant	46,60,000	Principal Investigator	Submitted

Sl. No.	Details of Papers Published in International/National Journals
1.	B. Babu, A. Thirumoorthy, <b>P. Gopinath</b> , R. Ramalingam, M. Anusha, A.Yasminebegum. “ <b>Tribological and mechanical properties investigations on polymer based composites reinforced with bio fillers</b> ” Materials Today Proceedings, Available online 25 August 2023. <a href="https://doi.org/10.1016/j.matpr.2023.08.228">https://doi.org/10.1016/j.matpr.2023.08.228</a>
2.	<b>P.Gopinath</b> , P.Suresh, V.Jeevanantham, 2023, <b>Mechanical, structural and optical properties of pristine and PVA capped zinc oxide nanocomposites</b> . Journal of Ovonic Research, Vol. 19, No. 1 & 23 – 30.

3.	R.Karthikeyan, C.Shilaja, A.Sivalingam, <b>P.Gopinath</b> . (2022) <b>Experimental investigations on mechanical and water absorption properties of epoxy resin-banana fiber-tamarind seed particles hybrid biocomposites</b> , Materials Today: Proceedings, Vol.68, no. 6, pp. 2220-2225
4.	<b>P.Gopinath</b> , P.Suresh. (2022) <b>Influence of Laying Angles in Reinforcement of Epoxy in Sisal Plain Woven Structures</b> . Materials Science (Medziagotyra), Vol. 28, no. 2, pp. 236-241.
5.	K.RobinstonJeyasinghSwikker, T.Sankaramoorthy, L.Girisha, <b>P.Gopinath</b> , P.Suresh and S.Joe Patrick Gnanaraj. (2022) <b>Experimental investigation on the properties of glass fiber-reinforced polymer composites containing grapheme</b> . AIP Conference Proceedings, Vol. 2405, no. 1, 050009.
6.	<b>P.Gopinath</b> , P.Murugesan, Manjula Devi, M.Venkatesan, K.Sudha, J.C.Kannan, P.Keerthika. (2021) <b>Characterization of jute fibre-epoxy reinforced composites</b> . Materials Today: Proceedings, Vol.46, no. 17, pp. 8858-8863.
7.	<b>P.Gopinath</b> , A.Mohanraj, P.Suresh. (2020) <b>Investigation of Mechanical Properties of Jute Fibre Epoxy Reinforced Composites Using Taquchi Method</b> . International Journal of Tierarztliche Praxis, Vol. 24, no. 18, pp. 623-633.
8.	<b>P.Gopinath (2020) Testing and Evaluation of Mechanical Properties on Jute Fiber twill woven Fabric Composite Structures</b> . Journal of the Balkan Tribological Association, Vol. 26, no. 4. pp. 755-765
9.	<b>P.Gopinath</b> , & P. Suresh, 2019, ‘ <b>Effect of Jute Reinforcement Parameters on Mechanical Properties of Composite Structures</b> ’, Journal of Testing and Evaluation, <a href="https://doi.org/10.1520/JTE20170531">https://doi.org/10.1520/JTE20170531</a> . ISSN 0090-3973. (Impact Factor – 0.669) ANNEXURE I & SCI - INDEXED JOURNAL
10.	<b>P. Gopinath</b> , & P. Suresh, 2014, ‘ <b>Mechanical Behaviour of Fly Ash Filled, Woven Banana Fiber Reinforced Hybrid Composites as Wood Substitute</b> ’, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN (P): 2249-6890; ISSN (E): 2249-8001 Vol. 4, Issue 2, Apr 2014, 111- 116. SCOPUS INDEXED.
11.	<b>P. Gopinath,” Modelling and Analysis of thrust force and Torque in Drilling Natural FRP Composites”</b> , Proceeding of the national Journal for science and Technology (Tech Scripts), pp 56.
12.	<b>P. Gopinath,” Smart Agricultural Farm using IOT (Internet of Things)”</b> , Proceeding of the International Journal of Engineering Science and Computing, ISSN 2250-1371, Vol 9 Issue No.3 March 2019.
13.	<b>Dr.P.Gopinath</b> , Arun Prabakaran J, Gokulnath K Karthick R & Manikandan R “ <b>Design and Analysis of Garlic Peeling Machine</b> ” International journal of Advance Research in Science and Engineering, Vol. No.10, Issue No. 04, April 2021,PP 69 – 72.

14.	<b>P. Gopinath</b> , Nithish M, MonishKanan M, Saravanan R & Vigneshwaran S “Design and Fabrication of Medical Waste Disposal Machine” International journal of Advance Research in Science and Engineering, Vol.No.09,Issue No.04, April 2021, PP 129-134.
15.	<b>P.Gopinath</b> , P.Suresh. (2014) Experimental Approach and Optimization on Production of Composite Materials Using Ridge Gourd Natural Fiber. International Journal of Applied Engineering Research, Vol. 09, no. 23, pp. 19101-19111
16.	<b>Dr.P.Gopinath</b> , S.Rgavendhar, R.Ranjithkumar, B.Ruthrannan, G.Yogaraj. (2020) Mechanical and Microstructural Analysis of Glass Fibre Composite by using Epoxy Resin. International Research Journal of Modernization in Engineering Technology and Science, Vol. 02, no. 09, pp. 822-827

Sl. No.	Details of Papers Published in International Conferences
1.	<b>P. Gopinath</b> , “ <b>Analysis of Thrust Force and Torque in Drilling Natural FRP Composites</b> ”, Processing of the international conference on Advance in Civil and Mechanical Engineering in (ACME-2014).
2.	<b>P. Gopinath</b> , “ <b>Delamination Analysis of Jute Fiber Composites</b> ”, Proceedings of the international conference on Modelling, Simulation and Control in (ICMSC-2015).
3.	<b>P. Gopinath</b> , “ <b>Eco friendly Characterization of Composite Materials</b> ”, Proceedings of the international conference on Innovative Engineering Skills in (ACETIC-2014).
4.	<b>P. Gopinath</b> , “ <b>Investigation of Mechanical Properties and behaviour of Stir Cast AL-alloy based Composites</b> ”, Proceedings of the international conference on Civil, Mechanical, Chemical Engineering and Technologies - 2018 in (ICCMCT - 2018).
5.	<b>P. Gopinath</b> , “ <b>Characterization of Jute – Epoxy Reinforced Composites</b> ”, Processing of the international Conference on Innovations in Science, Engineering and Technology for Sustainable Development in (ISETSD-2018).
6.	<b>P. Gopinath</b> , “ <b>Optimization of Mechanical Properties using Ridge Gourd, Sisal and Jute Fibres</b> ”, Processing of the international Conference on Innovations in Science, Engineering and Technology for Sustainable Development in (ISETSD-2018).
7.	<b>P. Gopinath</b> , “ <b>Jute Fibre and Ridge Gourd, Composites using Vinyl ester</b> ”, Proceedings of the international Conference on Advanced Manufacturing and Automation in (INCAMA-2018).
8.	<b>P. Gopinath</b> , “ <b>Smart Agricultural Farm using IOT (Internet of Things)</b> ”, Proceeding of the international Conference on Innovative Engineering Initiatives in (ICIEI-2019).
9.	<b>P. Gopinath</b> , “ <b>Soil Testing for Smart Agriculture using Arduino UNO</b> ”, Proceeding of the international Conference on Sustainable Materials in (ICSM-2019).

Sl. No.	Details of Papers Published in National Conferences
1.	<b>P. Gopinath, “Modelling and Analysis of Thrust Force and Torque in Drilling GFRP Composties”,</b> Proceeding of the national Conference on Mechatronics and Mechanical Systems in (NCMMS-2013).
2.	<b>P. Gopinath, “Modelling and Analysis of Thrust Force and Torque in Drilling GFRP Composties”,</b> Proceeding of the national Conference on Recent Trends in Engineering and Technology in (NCRTET-2013).
3.	<b>P. Gopinath, “Modelling and Analysis of Thrust Force and Torque in Drilling GFRP Composties”,</b> Proceeding of the national Conference on Emerging Trends in Engineering and Technology in (ETET-2014).
4.	<b>P. Gopinath, “Development of Fracture Fixation Plate using Natural Composite Materials”,</b> Proceeding of the national Conference on Modern Trends in Mechanical Engineering in (MTME-2014).
5.	<b>P. Gopinath, “Comparison of Thrust Force and Torque in Drilling Composite Materials by Experimental Analytical and Fuzzy Logic”,</b> Proceeding of the national Conference on Recent Inventions in Dynamic Engineering in (RIDE-2015).
6.	<b>P. Gopinath, “CFD Combustion Analysis of Hydrogen Supplement with Diesel Fuel in CI Engine”,</b> Proceeding of the national Conference on Computational Fluid Dynamics Applications in Biotechnology Process in (DST-2015).
7.	<b>P. Gopinath, “Failure Analysis in Composite Material Using Lamb wave Methods”,</b> Proceedings of the ISTE Sponsored National conference on Innovations in Engineering and Technology (NCIET-2017).
8.	<b>P. Gopinath, “Green Manufacturing Analysis in Composite Material”,</b> Proceedings of the ISTE Sponsored National conference on Innovations in Engineering and Technology (ITME-2017).
9.	<b>P. Gopinath, “Optimization of Mechanical Properties Using Ridge guard, Sisal and Jute Fibres”,</b> Proceeding of the Project Expo ENTHIRA – 17 Sponsored by SOCIETY OF AEROSPACE AND MECHANICAL PROFESSIONALS (SAMP).
10.	<b>P. Gopinath, “Design and Analysis of Heavy Vehicle Head Light Frame Using Banana Fibre Composite Material.”</b> Proceeding of the Project Expo ENTHIRA – 17 Sponsored by SOCIETY OF AEROSPACE AND MECHANICAL PROFESSIONALS (SAMP).
11.	<b>P. Gopinath, “Study on Performance Analysis of IC Engine Fins”,</b> Proceeding of the national Conference on Energy & Environment in (NCONEE-2018)



### LIST OF SHORT TERM COURSES ATTENDED

Sl. No.	Details of Short term Courses/Seminars/Workshops Attended
1.	One week National level Faculty Development Program on “Cloud Infrastructure (AWS) organized by the Sathyabama Institute of Science and Technology, Tamilnadu, in collaboration with Brainovision Solutions India Pvt. Ltd., and AICTE, India, from 21 <sup>th</sup> August to 25 <sup>th</sup> August 2023.
2.	DST Sponsored five day National Faculty Development Program on “ <b>Generative AI and Cyber Security</b> ” organized by the School of Computer Science and Engineering, Reva University, Bangaluru, India, from 24 <sup>th</sup> July to 28 <sup>th</sup> July 2023.
3.	Two week National level Virtual Workshop on “ <b>Advanced Research Methodology</b> ” organized by the Department of Commerce, Information System and Management, SRM Institute of Science and Technology, Ramapuram campus, Chennai, India, from 3 <sup>rd</sup> July to 18 <sup>th</sup> July 2023.
4.	Five day Online Faculty Development Program on “ <b>Data Analyst</b> ” organized by Andra Pradesh State Skill Development Corporation (APSSDC) in collaboration with ExcelR from 19 <sup>th</sup> June to 23 <sup>th</sup> June 2023.
5.	One Week International Virtual Faculty Development Program on “ <b>Research Opportunities and Futures of Additive Manufacturing Engineering</b> ” organized by the Department of Mechanical Engineering, Sri Manakula Vinayagar Engineering College, Puducherry, from 30 <sup>th</sup> January to 03 <sup>rd</sup> February 2023.
6.	One Week International Online Faculty Development Program on “ <b>Trends &amp; Challenges in the Development of Electric Vehicles &amp; Hybrid Vehicles (Series-2)</b> ” organized by the Department of Mechanical Engineering, Lendi Institute Engineering of Technology, Vizianagaram, Andra Pradesh, from 14 <sup>th</sup> to 18 <sup>th</sup> November 2022.
7.	One Week International Online Faculty Development Program on “ <b>Trends &amp; Challenges in the Development of Electric Vehicles &amp; Hybrid Vehicles (Series-1)</b> ” organized by the Department of Mechanical Engineering, Lendi Institute Engineering of Technology, Vizianagaram, Andra Pradesh, from 26 <sup>th</sup> to 10 <sup>th</sup> September 2022.
8.	Five days National Level Online Faculty Development Program “ <b>3D Printing Technologies</b> ” organized by the Department of Mechanical Engineering, Vemu Institute of Technology, P.Kothakota, Andra Pradesh, from 6 <sup>th</sup> to 10 <sup>th</sup> September 2022.
9.	Three days <b>Research Conclave</b> on “ <b>Testing and Evaluation of Mechanical Properties on Jute Fibre Plain Woven Fabric Composite Structures</b> ”, conducted by Teaching Learning Centre, CIT Coimbatore January 2020. RSC ID – 33, Track ID – MS – 429 Dated: 10.01.2020, 2.30 PM to 5.00 PM.
10.	Three days Workshop on “ <b>Instructional and Assessment Characteristics of OBE Framework and Hands on Practices for Designing and Mapping Outcomes</b> ”, 19 <sup>th</sup> November to 21 <sup>st</sup> November 2019 at K S R Institute for Engineering and Technology, Tiruchengode.

11.	One-week Faculty Development Training Programme on “ <b>ME6701- Power Plant Engineering</b> ”, 4 <sup>th</sup> June to 10 <sup>th</sup> June 2018 at Gnanamani College of Technology, Namakkal.
12.	One-week Faculty Development Programme on Fundamentals of “ <b>Pedagogy in Engineering education</b> ”, 14 <sup>th</sup> May to 19 <sup>th</sup> May 2018 at Karpagam College of Engineering, Coimbatore.
13.	One day Workshop on “ <b>Tips for writing research proposals, journal papers and patent filing</b> ”, 27 <sup>th</sup> February 2018 at K S R Institute for Engineering and Technology, Tiruchengode.
14.	Two days National Seminar on “ <b>Recent Advances in Cryogenics and its Industrial Applications</b> ”, 6 <sup>th</sup> October & 7 <sup>th</sup> October 2017 at Muthayammal Engineering College, Rasipuram.
15.	One day National Seminar on “ <b>Human Factors and Ergonomics in Healthcare and Patient Safety</b> ”, 14 <sup>th</sup> September 2017 at Muthayammal Engineering College, Rasipuram.
16.	One day National Workshop on “ <b>Applications of Mathematical Modelling and Simulation in Engineering Problems</b> ”, 31 <sup>st</sup> August 2017 at Muthayammal Engineering College, Rasipuram.
17.	One day International Workshop on “ <b>Writing and Publishing Research Papers in High Impact Factor Journals</b> ” 17 <sup>th</sup> August 2017 at Hindustan College of Engineering and Technology, Coimbatore.
18.	Two days Workshop on “ <b>Manufacturing Process and Applications of Advanced Composite Materials</b> ”, 14 <sup>th</sup> and 15 <sup>th</sup> February 2017 at Karpagam College of Engineering, Coimbatore.
19.	One day Workshop on “ <b>Safety and Security in Automobiles (SSA-2015)</b> ”, 24 <sup>th</sup> November 2015 at Karpagam College of Engineering, Coimbatore.
20.	One day Workshop on “ <b>Environmental Pollution and Control (EPC-2015)</b> ”, 21 <sup>st</sup> November 2015 at Karpagam College of Engineering, Coimbatore.
21.	One day Workshop on “ <b>Robotics in Industrial Automation (RIA-2015)</b> ”, 20 <sup>th</sup> November 2015 at Karpagam College of Engineering, Coimbatore.
22.	One day Workshop on “ <b>Intelligent Product Design and Manufacturing</b> ”, 24 <sup>th</sup> August 2015 at Karpagam College of Engineering, Coimbatore.
23.	One day Workshop on “ <b>Composite Materials and its Technology Innovation</b> ”, 22 <sup>nd</sup> July 2015 at Karpagam College of Engineering, Coimbatore.
24.	One-week Faculty Development Training Programme on “ <b>ME2036- Production Planning and Control</b> ”, 17 <sup>th</sup> December to 23 <sup>rd</sup> December 2014 at Karpagam College of Engineering, Coimbatore.
25.	One day Seminar on “ <b>Writing Effective Research Paper (S) and Thesis</b> ”, 19 <sup>th</sup> July 2014 at K S R College of Engineering, Tiruchengode.

26.	One day National Seminar on “ <b>Characterization and Applications of Composite Materials</b> ”, 10 <sup>th</sup> March, 2014 at N.S.N College of Engineering and Technology, Karur.
27.	Three days National Symposium on Acoustics “ <b>Design and Analysis of Flexible Carping</b> ”, 5 <sup>th</sup> December to 7 <sup>th</sup> December, 2012 at K S R Institute for Engineering and Technology, Tiruchengode.
28.	Two days National Seminar on “ <b>Heat Exchanger and its Applications</b> ”, 8 <sup>th</sup> November & 9 <sup>th</sup> November, 2012 at K S R Institute for Engineering and Technology, Tiruchengode.
29.	Three days Workshop on “ <b>Hands on Training on Modelling and Simulation using MATLAB – Simulink and Soft Tools</b> ” during 14 <sup>th</sup> September to 16 <sup>th</sup> September 2012. At Kongu Engineering College, Perundurai.
30.	Two days National Seminar on “ <b>Consumables through Composites Processing and Preparation</b> ” during 6 <sup>th</sup> January to 7 <sup>th</sup> January 2012. at Kongu Engineering College, Perundurai.

#### ADDITIONAL INFORMATION:

- Team Leader Admissions KSRIET from 2013 to till date.
- Department Coordinator Performance Monitoring Team.
- Coordinator for KSRIET / ISTE staff chapter on 2012 - 2013.
- Member Life Skill Development cell.
- Chief Warden K S R I E T Boys Hostel.
- Participated in KSR Community Radio Children’s Day and Teachers Day Functions.
- Member and Singer in K S R Institute for Engineering and Technology MUSIC CLUB.
- President Alumni association K S R Polytechnic College. Tiruchengode, From 2005.