

Faculty Profile

1. Name : Dr. K. Raja
2. Designation : Associate Professor
3. Date of Joining : 10.06.2010
4. Nature of Association : Regular
5. E mail : rajak@ksrct.ac.in
6. Mobile no. : +91 9842314418



7. Academic Qualifications:

Course	Name of the Institution / University	Year of Passing	% of Marks	Class
Ph.D	Anna University, Chennai, India	2021	-	-
M.E – CAD/CAM	Kongu Engineering College / Anna University	2008	81.00	First class with Distinction
B.E - Automobile Engg	Institute of Road and Transport Technology / Bharathiar University	2001	76.80	First Class
H.S.C - Academic	Vaidheeswara HSS,MetturDam,/State Board	1997	85.5	First Class
S.S.L.C	Vaidheeswara HSS,MetturDam,/State Board	1995	76.6	First Class

8. Teaching Experience

- Associate Professor, K.S.Rangasamy College of Technology, Tiruchengode, from 01.03.2014 to till-date.
- **Assistant Professor**, K.S.Rangasamy College of Technology, Tiruchengode, from 10.06.2010 to 28.02.2014.
- **Assistant Professor**, Sree Sastha Inst. of Engg. Technology, Chennai, from 13.07.2009 to 24.05.2010.
- **Lecturer**, Kongu Polytechnic College, Perundurai, from 21.11.2003 to 03.07.2008.
- **Lecturer**, Thanthai Roever Institute of Polytechnic college,Perambular, from 12.07.2001 to 20.11.2003.

9. Projects

Under Graduate

- **Title:** “Development of Injection system in Petrol Engine”

Post Graduate

- **Title:** “Study and Analysis of Inflation Pressure and Radial Load on a wheel Rim”

Ph. D

- **Title:** “Studies on *Sesbania Rostrata* Fiber Characterization and Properties of *Sesbania Rostrata* Reinforced Polycaprolactone Biocomposite”

10. Publications

International Journals

1. Raja, K., P. Senthilkumar, G. Nallakumarasamy, and T. Natarajan. 2016. Characterization of Natural Fiber Extracted from *Sesbania rostrata*: An Alternative Potential for Synthetic Fibers. *Journal of Advancement in Chemistry*. 12 :4930-4937.
2. MSS Kumar, MCP Selvan, PS Sampath, K Raja, K Balasundaram. 2018. Influence of nanoclay on interlaminar shear strength and fracture toughness of glass fiber reinforced nanocomposites. *IOP Conference Series: Materials Science and Engineering* 346 (1), 012081.
3. MS Senthil Kumar, Chithirai Pon Selvan, PS Sampath, K Raja, Reshmi Nair. 2019 Enhanced Mechanical Properties of Glass Fiber/Epoxy Composites using Nanoclay. *Advances in Science and Engineering Technology International Conferences (ASET)*, pp 1-9.
4. Raja, K, Senthilkumar, P, Nallakumarasamy, G and Natarajan, T 2020, ‘Effect of Eco-Friendly Chemical Treatment on the Properties of *Sesbania Rostrata* Fiber’, *Journal of Natural Fibers*, pp.1-13. ISSN: 1544-046X.
5. K Raja, S.R.Mouleeswar, K.Prithiv Raj and E.Sri Ram 2023, ‘ Study the Mechanical Properties of *Sesbania Rostrata* Fiber Reinforced Polymer Composites’, *European Chemical Bulletin*, doi: 10.31838/ecb/2023.12.s1-B.292.

Patent

6. Patent title on “Investigation of Mechanical Properties of *Sesbania rostrata* Natural Fibers Reinforced Biocomposite”, by Mr.K.Raja, Dr.P.Senthilkumar, Dr.G.Nallakumarasamy, Dr.T.Natarajan & Dr.S.Magibalan, applied on 10.12.2020.
7. Patent title on “Development of Smart primary Safety Set-up with Jackey for Heavy Vehicles to Reduce Accidents”, by Biju P, Prakash V, Srinivash S, Prakash R and Dr. Raja K, applied on 24.03.2023.

International Conferences

8. K.Raja et al “*Design and Fabrication of Thermal Energy Storage Celing Made of Phase Change Material*”, *Proceedings of the International conference on*

- Sustainable Materials – 2K19, K.S.R. College of Engineering, Tiruchengode, 19-20th March 2019.
9. K.Raja et al “*Fabrication of Electromagnetic Brake*”, Proceedings of the International conference on Sustainable Materials – 2K19, K.S.R. College of Engineering, Tiruchengode, 19-20th March 2019.
 10. Raja, K, Senthilkumar, P, Nallakumarasamy, G and Natarajan, T 2020, “Sesbania rostrata natural fibers reinforced composite for automotive application”, Proceedings of the first international conference on Advanced Materials and Manufacturing Process, pp. 42.
 11. Raja, K, Senthilkumar, P, Nallakumarasamy, G and Magibalan, S 2020, “Mechanical properties of Sesbania Rostrata fiber “, Proceedings of the ESN international conference on Multidisciplinary Research and Innovation (ICMRI-2020), pp. 121.
 12. Raja, K, Sri Hari Jagatheeswaran S, Suryaraj K and Lokesh K 2022, “Factors Affecting Drilling Hole Quality of Biocomposite: A Review”, Proceedings of the Recent Innovations in Robotics, Construction and Mechanical Sciences, (ICRIRCMS-2022).
 13. Raja, K, Mouleeswar S R, Prithiv Raj K and Sriram E 2023, “Study yhe mechanical properties of Sesbania rostrata fiber reinforced polymer composites“, Proceedings of the International Conference on Innovation, Creativity and Computing applications in Engineering, pharmacy, architecture and Management (ICICAEPHAM 2023).

National Conferences

14. K.Raja et al “*Fabrication and Analysis of Aqua Silencer using Charocal*”, Proceedings of the National conference on NCAMMCE– 18, M.Kumaraamy college of Engineering, Karur , 09th March 2018.
15. K.Raja et al “*Design and Fabrication of Saree Folding Machine*”, Proceedings of the National conference on Recent Trends and Advancements in Mechanical Engineering-2016 , Angel College of Engineering and Technology, Tirupur, 02nd April 2016.
16. K.Raja et al “*Cycle time reduction in shifting of Billet from trio to mill-design for roller table*”, Proceedings of the National conference on Small Gas Turbine

Engine, K.S.Rangasamy College of Technology, Tiruchengode, 28-29th January 2016.

17. K.Raja, et al “Study on the effect of Inflation Pressure and Radial Load on a wheel Rim”, Proceedings of the National conference on RTIME-2008, Sardar Raja College of Engineering, 5th April, 2008.

18. K.Raja, et al “*Analysis of Inflation Pressure and Radial Load on a wheel Rim*”, Proceedings of the National conference on OPTTEST-2008, Bannari Amman Institute of Technology, 27-28th March 2008.

19. WORKSHOP / CONFERENCE / SEMINAR PARTICIPATED (1 TO 3 DAYS ONLY)

SPECIFY TOPIC	VENUE	DATE
Exploring the advances in digital product design, simulation and manufacturing	Bannari Amman Institute of Technology sathyamangalam	15.03.06 to 16.03.06
Edge CAM 1 st user meet	Abroitec Information systems Limited, India & Pathtrace Engineering Systems, England	27.04.06
ISTE 36 th Annual Convention & National Seminar	Bannari Amman Institute of Technology sathyamangalam	14.12.06 to 16.12.06
Current Trends In Automobiles	Kongu Polytechnic College, Perundurai	30.03.07 to 31.03.07
Impacts and Imparts of CAD/CAM on Small Industries and Technical Institution	Kongu Polytechnic College, Perundurai	02.04.07 to 03.04.07
Eco-friendly, Energy efficient Technologies in Casting and welding Catalyzed	Kongu Engineering College	25.05.2007
Technical forum of NI	NI Bangalore	12.10.11 to 13.10.11
Bio Degradable Materials	Nandha Engineering College, Perundurai	15.11.13 to 16.11.13
Advanced CNC and Automation Tools	K.S.Rangasamy college of Technology, Tiruchengode	08.12.2014

Research focus on Non-Destructive Testing and Evaluation of Composite Materials	Kongu Engineering College, Perundurai	21.02.2014
Intellectual Property Rights	K.S.Rangasamy college of Technology, Tiruchengode	06.08.2016
Current Trends in Biomaterials and Application of FEM	K.S.Rangasamy college of Technology, Tiruchengode	09.09.16 to 10.09.16
Autodesk Fusion 360 Workshop	KKM Soft(P)Ltd.	31.03.2021
Revised Assessment and Accreditation Framework of NAAC : Understanding and Opportunities in HEI's	NAAC Sponsored Seminar	06-05-2022 to 07-05-2022
NBA Accreditation Process	AICTE- Share and Mentor Institutions	12.10.2022 – 14.10.2022
Industrial visit	Ashok Leyland Hosur Plant - 1	09.11.2022
Advances in design, manufacturing and surface engineering for mobility	SAEINDIA Sothern Section, Chennai	25.11.2022 -26.11.2022
Champions Leadership Training	SAEINDIA Sothern Section, Chennai	21.01.2023
Asia Book of Records Awarded,"Sustainable development of the nationa-The role of engineers"	The institute of Engineer (India), Salem	23.04.2022 -30.11.2022.

STTP / FDP (4 TO 21 DAYS ONLY)

SPECIFY TOPIC	VENUE	DATE
Industrial Training	A.R.A.S & P.V.P.V Hyundai, Erode.	06.05.04 to 13.05.04
Industrial Training	TATA Service Training Centre, Namakkal.	25.04.05 to 29.04.05
AICTE-Short Term Training Programme on Emission control measures and techniques for automobiles	Kongu Engineering College, Perundurai.	28.11.04 to 11.12.04
Digital Prototyping	ICT academy, Sri Ramakarishna Engineering College,Coimbatore	19.03.2012 to

		23.03.2012
Processing and Characterization of Composite Materials	Dr. Mahalingam College of Engineering and Technology, Pollachi	20.04.2015 to 03.05.2015
Pedagogy for effective use of ICT in Engineering Education	IIT, Bombay	05.01.2015 to 18.01.2015
Modeling and Computational Techniques for Multiphase Systems	K.S.R college of Engineering , Tiruchengode	23.12.2020 to 28.12.2020
Design and Development of Electric Vehicle	AICTE Training and Learning Academy	09.07.2021 to 13.07.2021
Recent Advances and Applications in Mechanical Engineering	SRM TRP Engineering College	02.03.2022 to 07.03.2022
Fundamental of Automotive Systems	NPTEL - AICTE	Jan – April 2022
Creation of Start Ups in Campuses – Adopting Experiential Pedagogical Teaching Methods	AICTE Sponsored STTP	18.07.2022 -23.07.2022
Inculcating Universal Human Values in Technical Education	All India Council for Technical Education	19.12.2022 -23.12.2022
Product design and Development	NPTEL - AICTE	Jul – Aug 2022
Innovation by design	NPTEL - AICTE	Jan – Feb 2023
Product Design Engineering using Fusion 360	ICT Academy	26.06.2023 to 01.07.2023

20. Organize the Seminar/Workshop/Competition Title

S.No	Seminar/Workshop Title	Name of Funding Agency	Date
1	Composite Materials	----	11.10.2015
2	Manufacturing and testing of Composite Materials	----	26.02.2016
3	Bio Composite Materials	----	12.10.2017
4	Workshop on Aeromodel Designing	---	13.02.2020 & 14.02.2020
5	Machine Learning in Industrial Revolutions		24.06.2021 to 26.06.2021

	4.0		
6.	Workshop on Aeromodel Designing		13.02.2023 & 14.02.2023
7.	Electrical vehicle Design		08.03.2023
8.	National level competition on reverse engineering	SAEINDIA Sothern Section, Chennai	July – March 2023

21. Invited Lecture Delivered

S.No	Title	Program	Venue	Date
1	Bearings	Faculty Development Programme _ Design of Machine Elements	K.S.Rangasamy college of Technology, Tiruchengode	22.06.2015
2	Design Process	One Day CAD/CAM workshop	Sri Shanmugha college of Engineering and Technology, Sankari	20.03.18
3.	Design process for product development	Webinar	JKKN college of Engineering & Technology, Kumarapalayam	10.09.2022

22. Membership in Professional Bodies

- **Life Member**, Indian Society of Technical Education (ISTE) – LM 51010.
- **SAEINDIA- Member -7200410053**

23. Awards and Recognitions

- **Received The best faculty performer in created Innovative Learning for the academic year 2016-2017 in K.S.Rangasamy college of Technology, Tiruchengode**
- **Got 100 % result in the subject CAD/CAM, Engineering Graphics, Design of Machine Elements-II, Internal Combustion Engine & Advanced IC engine.**
- **Received Volunteer award SAEINDIA Sothern Section, Chennai on 16.10.2022.**
- **Received National level topper on Fundamental of Automotive System, Product design and Development & Innovation by design (NPTEL-Mentor)**
- **Acting as Secretary of SAEIndia Southern Section – Salem Division (2022-2024)**

- **Appréciions from SAEISS for act as a faculty advisor for Aerocrew Aviation team, K S Rangasamy college of Technology, particiapted in 8th SAEISS Drone Developemnt challenge 2023.**
- **Appréciions from SAEISS for act as a faculty advisor for KSR Tech team, K S Rangasamy college of Technology, particiapted in Electric Two Wheeler Design Compétition 2023.**

11.Subject Handled

- 1.Internal Combustion Engines
- 2.Engineering Graphics
- 3.Design of Machine Elements II
- 4.CAD / CAM
- 5.Basics of Mechanical Engineering
- 6.Automobile Engineering.

12.Personal Détails

Fathers Name : R.Krishnan

Date of Birth & Age : 05.01.1980 & 41 Years

Gender : Male

Marital Status : Married

Permanent Address : **72/2, SVS Complex,**
Brindhavan Nagar,
Kootapalli Colony,
Tiruchengode – 637 214,
Tamilnadu, India.