

Kings College of Engineering
Department of Mechanical Engineering

Name: Dr. R SHANKAR	
Designation	Associate Professor
Qualification	M.E., Ph.D.
Area of specialization	Mechanical Engineering, CAD/CAM, Material Science
Experience	Teaching : 15 Years 7 Months Industry : 2 years
No. of Workshop/ Conferences/FDP attended	45
Publication	Journal National: - 1 International: 7 Conference National: - 5 International: 3
Membership	The Indian Society for Technical Education
Subjects taught	✓ Engineering Graphics ✓ Engineering Mechanics ✓ Basic Mechanical Engineering ✓ Internal Combustion Engine ✓ Engineering Materials and Metallurgy ✓ Dynamics of Machines ✓ Unconventional Machining Process ✓ Production Planning and Control ✓ Metrology and Measurements ✓ Mechatronics ✓ Industrial Engineering ✓ Finite Element Analysis ✓ Automobile Engineering ✓ Power Plant Engineering ✓ Design of Machine Elements ✓ Hydraulics and Pneumatics ✓ Energy Storage Devices ✓ Introduction to Non Destructive Testing

Achievements	Got 100% results in Anna University Examination ✓ Engineering Graphics ✓ Basic Civil and Mechanical Engineering ✓ Production Planning and Control ✓ Industrial Engineering ✓ Mechatronics
Book Publications	01
Administrative Experience	Institute Level ✓ Member – Internal Quality Assurance cell ✓ Member – Grievances Redressal Cell ✓ Member – Institution Innovation Council ✓ Stock Verification Officer ✓ Overall Time Table coordinator Department Level ✓ Question bank verifier ✓ Class Committee Chairman ✓ Mechatronics Lab Incharge ✓ Engineering Practices Lab Incharge ✓ NAAC task force Member
Computer and Technical Skills	✓ AutoCAD ✓ Pro-E ✓ ANSYS ✓ Design of Experiments

Journal Publications

- | S.N. | Title |
|------|--|
| 1. | Shankar, K.R. Balasubramanian, S.P. Sivapirakasam, “Experimental Study of High Velocity Oxygen Fuel Sprayed Cr ₃ C ₂ -Ni-Cr-B-Si Coatings on Inconel 718 Using Design of Experiments”, Materials Science Forum, (969), 48-54 (2019). |
| 2. | R. Shankar, K.R. Balasubramanian, S.P. Sivapirakasam, K. Ravikumar, “ANN and RSM models approach for optimization of HVOF coating”, Materials Today: Proceedings, (46), 9201-9206 (2021). |
| 3. | R. Shankar, K. Premkumar, K. R. Balasubramanian, S. P. Sivapirakasam, “Oxidation resistance of Ni-Cr-TiO ₂ powder HVOF coating on carbon steel at elevated temperature” Materials Today: Proceedings, (46), 9194-9200 (2021). |
| 4. | R.Shankar, K.R. Balasubramanian, S.P. Sivapirakasam, “Hot corrosion behavior of nanostructured and conventional HVOF Cr ₃ C ₂ NiCrBSi coatings on superalloy”, Materials Today: Proceedings, 46, 9529-9536 (2021). |
| 5. | R.Shankar and V. Brahadeeshwaran, “Design Optimization of Dynamic Vibration Absorber for Boring Process” IJSTE - International Journal of Science Technology & Engineering, 2017, 4(5) 2349-784X (2017). |
| 6. | R. Shankar, K.R. Balasubramanian, S.P. Sivapirakasam V. Senthilkumar, “Oxidation Behaviour of Near Nanostructured Coating Developed by HVOF Process” Materials and Corrosion, 1–11, (2022). |

7. R Shankar, M Satthiyaraju, K Ananthakumar, CK Arvinda Pandian, "Comparative study of mechanical strength and piezoelectric coefficient of post-processed polyvinylidene fluoride nanofibrous films", Materials, Design and Manufacturing for Sustainable Environment, 135-141 (2022).
8. R. Shankar, K.R. Balasubramanian, S. Sabanayagam, R. Rajadurai, "Erosion behaviour of micro and nanostructured Cr₃C₂NiCrBSi coating on IN718 alloy via HVOF processing" Surf. Topogr.: Metrol. Prop. 13 (2025) 015026.

Conference Publications

S.N	Title
1	R. Shankar, T. Pushparaj, S. Ramabalan, "Analysis, performance and emission characteristics of high speed diesel engine using palm oil biodiesel with additives", NCGEIRET-2010, Oxford Engineering College, Trichy, pp. 102-108 (2010).
2	R. Shankar & T. Pushparaj, "Effects of Nano additive on Cashew Nut Shell Liquid bio-oil blends in diesel engine", ICETES-2016, Kings College of Engineering, Punalkulam, Thanjavur. ISSN: 978-1-4673-6725-7/16 pp.813-817 (2016).
3	R. Shankar & G. Mathivanan, "Characterization study of Ni-Cr-B-Si coating obtained by HVOF Process", NCRAME, Kings College of Engineering, Thanjavur (2018).
4	R. Shankar, "Efficiency Improvement in Polycrystalline Solar Panel by thermal control" NCEMS -2021, Kings College of Engineering, Thanjavur (2021).
5	R. Shankar, "Design and fabrication of motorized sheet metal rolling machine" NCEMS -2021, Kings College of Engineering, Thanjavur.
6	R. Shankar, Design and Development of a Remote controlled Scrap collecting vehicle for industrial appliances, Proceedings of ICRTES - 2024, Kings College of Engineering, Thanjavur.

Book Publications

S.N	Title
1.	R. Shankar & P. P. Shantharaman, "Power Plant Engineering", ISBN:9789354455711, Kings Publications, Thanjavur (2021).

Short term Courses/Seminars /FDP/Workshop/Conference Attended

S. N.	Title of the event	Organized by	Date	
			From	To
1	Workshop on " Perspective and Challenges in Outcome based Education"	NIT Trichy	13.7.2020	17.7.2020

2	Two weeks workshop on “Recent Advances in Solar Energy Technologies for Sustainable Development”	NIT Trichy	29.4.2019	11.5.2019
3	STTP on “NBA Accreditation”	NITTTR Kolkata	22.4.2019	26.4.2019
4	STTP on “Modern Manufacturing Systems”	NITTTR Kolkata	18.2.2019	22.2.2019
5	STTP on “Development of Laboratory Instruction and Manual”	NITTTR Kolkata	04.02.2019	8.2.2019
6	Three days “Faculty Development program for student induction”	SCE, Trichy	22.8.2018	24.8.2018
7	Two days workshop on “Modern Instructional Practice for Teaching and Learning”	NIT Trichy	30.01.2017	31.1.2017

Short term Courses/Seminars /FDP/Workshop/Conference organized

S.No	Title of the event	Organized by	Date	
			From	To
1	Seminar on “Rights for Citizens”	KCE, Pudukottai	13.12.2021	-
2	Webinar on “Problem Solving Ideation”	KCE, Pudukottai	06.12.2021	-
3	Webinar on “Solar energy and its applications”	KCE, Pudukottai	06.10.2021	-
4	Webinar on “Impact of entrepreneur in HEI and Startup to IPR”	KCE, Pudukottai	25.10.2021	-
5	Webinar on “Lead cadmium tin alloys and its mechanical and corrosion behaviours”	KCE, Pudukottai	26.09.2020	-
6	Webinar on “Building an Innovation/Product fit for market”	KCE, Pudukottai	04.06.2021	-
7	Webinar on “ Angel investment/VC funding opportunities for early stage entrepreneur”	KCE, Pudukottai	05.06.2021	-
8	Workshop on “Prototype/Process Design and Development-Prototyping”	KCE, Pudukottai	31.05.2021	-
9	Webinar on "Orientation session on IPR"	KCE, Pudukottai	29.05.2021	-
10	Webinar on “Business model canvas”	KCE, Pkt.	28.05.2021	-

11	Webinar on “IPR & IPM for start-ups”	KCE, Pudukottai	17.03.2021	-
12	Webinar on” Machine tools”	KCE, Pudukottai	21.05.2020	-
13	Webinar on “Piezoelectro nano-fibers for Nano-generators”	KCE, Pudukottai	23.03.2021	-
14	Three days workshop on “Design thinking, critical thinking and Innovation design, Awareness talk in Entrepreneurship and Entrepreneurship Development Phases”	KCE, Pudukottai	22.1. 2021, 23.1. 2021	25.1. 2021
15	Webinar on “Students Social Developments in current Scenario”	KCE, Pudukottai	12.01.2021	-
16	Workshop on “Welding Technologies”	KCE, Pudukottai	07.02.2020	-
17	National Conference on” Recent Advances in Mechanical Engineering”	KCE, Pudukottai	16.03.2019	-
18	National Conference on “Recent Advances in Mechanical Engineering – 2016 “NCRAME–16”	KCE, Pudukottai	29.12.2016	-

Online Courses attended

S.No	Course Title	Organized by	Date	
			From	To
1	Online Training Programme on “Trends in CNC Machining & Metrology”	NITTTR, Chennai	04.10.2021	08.10.2021
2	Online Training Programme on “Solar, Wind and Bio Energy Applications”	NITTTR, Chennai	27.09.2021	01.10.2021
3	Online Training Programme on “Thermal Power and Energy Engineering”	NITTTR, Chennai	21.09.2021	25.09.2021
4	Webinar on “ Advanced Materials for Engineers”	KCE, Pudukottai	15.09.2021	-
5	Online Training Programme on “Nanotechnology & Applications”	NITTTR, Chennai	05.07.2021	09.07.2021
6	Workshop on “Introduction to patents for startups”	FXEC, Tirunelveli	12.06.2021	-
7	Workshop on “Patent commercialization methods and strategy”	FXEC, Tirunelveli	19.06.2021	-

8	Webinar on “Surface modification of magnesium alloy using Electrical Discharge coating	KCE, Pudukottai	24.05.2021	-
9	Webinar on “ Mock Audit for NBA”	KCE, Pudukottai	23.04.2021	-
10	Webinar on “ Challenges in Life on Faculty Perspective”	KCE, Pudukottai	29.03.2021	-
11	Webinar on “ Art of writing research articles”	KCE, Pudukottai	20.02.2021	-
12	Online Training Programme on “Solar, Wind and Bio Energy Applications”	NITTTR, Chennai	04.01.2021	8.1.2021
13	Webinar on “ Patents and Trademarks”	KCE, Pudukottai	19.01.2021	-
14	Online Training Programme on “Non Traditional Machining”	NITTTR, Chennai	25.01.2021	30.1.2021
15	Webinar on “ Outcome Based Teaching Learning”	KCE, Pudukottai	29.12.2020	-
16	Online Training Programme on “Advances in Materials and Manufacturing”	NITTTR, Chennai	30.11.2020	11.12.2020
17	Workshop on “Finite Element method for Engineering Applications”	Sairam Engg. College, Chennai	05.10.2020	10.10.2020
18	Webinar on “Materials and its applications”	KCE, Pudukottai	12.10.2020	-
19	Webinar on “Introduction on Industrial revolution”	KCE, Pudukottai	29.07.2020	-
20	Online Training Programme on “Energy and Environment Management”	NITTTR, Chennai	26.07.2020	30.7.2020
21	Webinar on Potential Methods for Manufacturing Nanocomposites”	LICET, Chennai	03.07.2020	-
22	Webinar on “ COVID-19 unlock 2.0 (An Awareness Program)”	CARE Institutions, Trichy.	04.07.2020	-
23	International webinar on “ Teaching Learning Methodologies”	KCE, Pudukottai	10.07.2020	-
24	Webinar on “ Industry 4.0 on the perspective of Die casting industry”	CIT, Chennai	02.06.2020	-
25	Webinar on “ Emerging Technology Trends in Life – Sciences industry”	KCE, Pudukottai	06.06.2020	-

26	Webinar on “Piping system in Process Industries”	KCE, Pudukottai	12.06.2020	-
27	Webinar on “Aluminum alloys Nanocomposites and its characterization”	KCE, Pudukottai	13.06.2020	-
28	Webinar on “Levers of digital Industry”	CIT Chennai	01.05.2020	-
29	Webinar on “Hangout with successful startups”	CIT, Chennai	03.05.2020	-
30	Webinar on “Opportunities for Engineers and Expectations from industry	CIT Chennai	02.05.2020	-
31	Webinar on “Design of earthing system for power plants”	PSNACET, Dindgul.	28.05.2020	-
32	Webinar on “Art of writing research papers”	CIT Chennai	29.04.2020	-