

## FACULTY PROFILE

1. Name of the faculty with Qualification : **Mr.R.Harichandran. M.E.,**
2. Age & Date of birth : 31 & 06.10.1984
3. Designation : AP (SG)
4. Experience in NEC as on 01.06.16 : 09.07.2007  
(With joining Date in NEC)



Name of the College/Institute	Designation	From	To	Experience		
				Years	Months	Days
National Engineering College, Kovilpatti.	AP(SG)	10.07.2013	Till date	2	10	24
National Engineering College, Kovilpatti.	AP	01.11.2011	09.07.2013	1	8	8
National Engineering College, Kovilpatti.	Lecturer	09.07.2007	31.10.2011	4	3	22
<b>Total</b>				<b>8</b>	<b>10</b>	

5. Area of Expertise : Design, Nanocomposites, Refrigeration and Airconditioning.
6. Name of the Courses handled for the last 5 years (2011-12 to 2015-16) :

Academic Year	Odd Semester	Even Semester
2011-2012	Computer Integrated Manufacturing Power Plant Engineering Computer Aided Simulation and analysis Lab	Finite Element Analysis Basic Civil and Mechanical engineering Computer Aided Machine Drawing Laboratory
2012-2013	Automated Computer Integrated Manufacturing Systems Process planning and cost Estimation Computer Aided Simulation and analysis Lab	Finite Element Analysis Basic Civil and Mechanical engineering Computer Aided Machine Drawing Laboratory
2013-2014	Dynamics of Machinery Computer Integrated Manufacturing Computer Aided Simulation and analysis Lab	Finite Element Analysis Basic Civil and Mechanical engineering Computer Aided Machine Drawing Laboratory

2014-2015	Engineering Metrology and Measurements Refrigeration and Airconditioning Computer Aided Simulation and analysis Lab	Finite Element Analysis Advanced Modeling Techniques Project work-coordinator
2015-2016	Computer Integrated Manufacturing Fundamentals of Nanotechnology Computer Aided Simulation and analysis Lab	Finite Element Analysis Advanced Modeling Techniques Fluid Mechanics Lab-Assist

7. Research Area : Nanocomposites

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8. Details of Project guided (BE and ME) :

Sl.No	UG/PG	Title of the Project	Student Details	Academic Year	Outcome
1	PG	Wear analysis of BNT reinforced AMCs	S.Athilingam	April 2014	National Conference
4	UG	High temperature wear behavior of B <sub>4</sub> C particle reinforced aluminium composites	T.Vickneswaran	April 2015	National Seminar

9. Research Publication details : International Journal

**Harichandran, R** & Selvakumar, N 2016, 'Effect of nano/micro B<sub>4</sub>C particles on the mechanical properties of aluminium metal matrix composites fabricated by ultrasonic cavitation-assisted solidification process', Archives of Civil and Mechanical Engineering (Elsevier), vol.16, no.1, pp.147-158, ISSN:1644-9665 (Annexure I). **IF- 1.793.**

**Harichandran, R**, Selvakumar, N & Venkatachalam, G 2016, 'High temperature wear behaviour of nano/micro B<sub>4</sub>C reinforced aluminium matrix composites fabricated by an ultrasonic cavitation-assisted solidification process', Transactions of the Indian Institute of Metals (Springer), Accepted for publication, ISSN: 0972-2815 (Annexure I). **IF- 0.6**

Venkatachalam, G, **Harichandran, R**, Rajakumar, S, Dharmaraj, C, & Pandivelan, C 2008, "Determination of J-integral and stress intensity factor using the commercial FE software ABAQUS in austenitic stainless steel(AISI 304) plates", International Journal of Advanced Manufacturing Technology (Springer), DOI 10.1007/s00170-008-1872-z, ISSN: 0268-3768, **IF-1.42**

10. International Conference

**Harichandran, R** & Selvakumar, N 2016, 'Effect of h-BN solid nano lubricant on the dry sliding wear behaviour of Al-B<sub>4</sub>C nanocomposites', International Conference on Fascinating Advancement in Mechanical Engineering (FAME'16), Mepco Schlenk Engineering College, Sivakasi. Sivakasi. 18-19, March-2016.

11. National Conference

1. Numerical simulation of transient temperature in friction stir welding of AZ61A magnesium alloy, Emerging trends in Engineering and technology National level conference, Anna University of technology Madurai, 20/21-04-2011.
2. Determination of J-integral and stress intensity factor using ABAQUS, Recent advances in Mechanical Engineering, National Engineering College, Kovilpatti, 20/21-03-2008.
3. Numerical simulation of transient temperature in friction stir welding of AZ61A magnesium alloy, Recent trends in Mechanical Engineering National level conference, Dr. Sivanthi Aditanar college of Engineering, Tiruchendur, 25-03-2011.
4. High temperature dry sliding wear behaviour of B<sub>4</sub>C reinforced aluminium metal matrix composites, National level seminar on Advances in industrial tribology, National Engineering College, Kovilpatti, 11/12-02-2015.

12. FDP, Short term courses, workshops, seminar arranged :

Sl.No	Title	Place	Programme	Date
1	Recent Advances in Mechanical Engineering(RAIME'12)	National Engineering College, K.R.Nagar, Kovilpatti	National Conference	20 <sup>th</sup> April 2012

13. List of course module developed:

- Finite Element Analysis
- Fundamentals of Nanotechnology
- Computer Aided Simulation and Analysis Lab
- Computer Integrated Manufacturing
- Refrigeration and Airconditioning

14. FDP, Short term courses, workshops, seminar attended :

<b>Sl. No</b>	<b>Title</b>	<b>Place</b>	<b>Programme</b>	<b>Date</b>
1	Applications of FEM in Acoustic and Vibration Analysis	VIT University, Vellore	Faculty Development Programme	22-23, April 2016
2	Formulation of Research and Development Grant proposals by scientists and Technologies	National Engineering College, K.R.Nagar, Kovilpatti	Workshop	18-20, November-2015
3	NPTEL	National Engineering College, K.R.Nagar, Kovilpatti.	Workshop	24.04.15
	Advances in Industrial Tribology	National Engineering College, K.R.Nagar, Kovilpatti.	11-12, February 2015	11-12, February 2015
4	Electron Microscopy	Mepco Schlenk Engineering College, Sivakasi	Workshop	13-14 Feb 2014
5	New Frontiers and advancements of Tribology	National Engineering College, K.R.Nagar, Kovilpatti.	Workshop	25.02.2014
	Eco Friendly Welding Process	Annamalai University, Annamalai Nagar	Workshop	-
6	National Conference on Emerging Trends in Materials, Manufacturing and Design	Mepco Schlenk Engineering College, Sivakasi	National Conference	07,08 Feb 2013
7	National Conference on Emerging Trends in Materials, Manufacturing and Design	Mepco Schlenk Engineering College, Sivakasi	National Conference	07,May-2013
8	International Workshop System thinking and Modeling	SCAD Group of Institutions, Tirunelveli	Workshop	15-16, October 2012
9	Advances in Finite Element Analysis	Sethu Institute of Technology, Kariapatti Virudhunagar Dist	Seminar	16,November-2011