

NATIONAL ENGINEERING COLLEGE, K.R.NAGAR, KOVILPATTI - 628503.*(An Autonomous Institution Affiliated to Anna University, Chennai)***Department of Mechanical Engineering****Faculty Profile**

- 1) Name of the Faculty : M.Kathiresan
 2) Age & Date of Birth : 39, 11.05.1977
 3) Designation : Assistant Professor (Senior. Grade)
 4) Experience in NEC as on 01.06.16 : 11 Years (05.06.2009)
 (With joining Date in NEC)

Designation	Institute/Organization	Period	Nature of Duties
Asst Professor(S.G)	National Engineering College, Kovilpatti	1.4.2011-till date 5 yrs 2 months	Teaching
Lecture	National Engineering College, Kovilpatti	5 yrs 9 months 1.06.2005-30.4.2011	Teaching
Lecturer	SACS MAVMM Engg. College	6 months	Teaching
Lecturer	Bharath Niketen Engg. College	12.06.2003 – 11.10.2004 1 yrs , 5 months	Teaching
Graduate Engineering Trainee	Madura coats India ltd,	10.08.198-09.08.1999 1 yr	Engineer Trainee
	Total	Teaching –Yrs 12 , 10 Months	Industry - 1 Year

5) Qualification :

Sl. No.	Qualification	Specialization	Year of Completion	University
2	UG	Mechanical Engineering	1998	University of Madras
3	PG	CAD/CAM	2001	Madurai Kamaraj University
4	Ph. D	Studies on crashworthiness Characteristics of thin-walled conical frusta Under axial loading	Thesis submitted	Anna University, Chennai

6) Area of Expertise

Particulars	Area of Project
Interest to Guide Projects to UG/PG Students	P.G /U.G – FRP composites, crashworthiness study, FEA analysis
Prepare Proposals for funding	-

7) Name of the Courses handled for the :
Last 5 years (2011-12 to 2015-16)

	Name of the Subject	No. of times
ODD Sem.	Advanced Materials Technology	2
	Robot Design and Programming	2
	Robotics	2
	Mechatronics and Modern controls	2
	Computer Aided Design and Computer Aided Manufacturing	1
EVEN Sem.	Unconventional Machining Process	1
	Basic Civil and Mechanical Engineering	2
	Maintenance Engineering	1

7.a) Practical Subjects handled so far

	Name of the Subject	No. of times
ODD Sem.	Mechatronics Lab	4
	CAD/CAM lab	1
EVEN Sem.	Computer aided Drafting and Modeling Lab	1

8) Research Area: CRASHWORTHINESS CHARACTERISTICS OF THIN-WALLED CONICAL FRUSTA UNDER AXIAL LOADING

9) Ph.D work and publications:

1. **Kathiresan, M**, Manisekar, K & Manikandan, V 2012, 'Performance analysis of fibre metal laminated thin conical frusta under axial compression', Compos Struct., vol. 94, pp. 3510-3519, ISSN: 0263-8223 (Annexure I). IF-3.318.
2. **Kathiresan, M**, Manisekar, K & Manikandan, V 2014, 'Crashworthiness analysis of glass fibre/epoxy laminated thin walled composite conical frusta under axial compression', Compos Struct., vol.108, pp. 584-599, ISSN: 0263-8223 (Annexure I). IF-3.318.
3. **Kathiresan, M** & Manisekar, K 2016, 'Axial crush behaviours and energy absorption characteristics of aluminium and E-glass/epoxy over-wrapped aluminium conical frusta under low velocity impact loading', Compos Struct., vol.136, pp. 86-100, ISSN: 0263-8223 (Annexure I). IF-3.318.

10) Progress after Ph.D : Pursuing P.hD

11) Details of Project guided (BE and ME) : List with outcomes

Project Details	Out Comes
Numerical analysis of thin-walled conical frusta	Design and analyze complex load conditions
Design and Fabrication of Drop-weight impact test setup.	Apply design knowledge for the fabrication of test setup.
Low-velocity impact study on FML conical frusta	Design and fabricate FML conical frusta
Study of energy absorption characteristics thin-walled GFRP conical frusta under quasi-static loading	Able to layup Glass fiber laminates through hand layup and test the samples.
Study of energy absorption characteristics thin-walled aluminium conical frusta under quasi-static loading	Knowledge on buckling behaviors of aluminium conical frusta
Study on mode of collapse of thin aluminium conical shells with cutouts (2012-2013)	The mode of collapse of conical shell with different types of cutouts is characterized and the effect of these cutouts were analyzed.

Research Publication details

National Conferences

1. **Kathiresan, M** & Manisekar, K 2013, 'Crashworthiness analysis of fibre metal laminated thin conical frusta under static & dynamic loading condition', Recent Advances In Mechanical Engineering - RAIME'13, National Engineering College, Kovilpatti, Tamilnadu, India, April 2013.
2. **Kathiresan, M** 2014, 'Study on low velocity axial impact behaviour of glass fibre / epoxy composite conical frusta', conference on Emerging Trends in Thermal, Industrial and Manufacturing Engineering - e-TIME'14, Karpagam College of Engineering, Coimbatore, Tamilnadu, India, March 2014

12) List of faculty publications along with date if issues DOIs and publication/SCI impact factor details for the last 5 years (2011-12 to 2015-16)

13) Details of R&D Projects : Nil

14) Details of Consultancy Projects : Nil

15) Faculty interaction with outside world : Nil

(Please attach proof)

16) Professional society activities, events, conferences organized: Nil

17) Professional society activities, events, conferences attended:

1. Attended One day industry institution interaction program organized CII (Thoothukudi Zone) on 17, April 2014

18) FDP, Short term courses, workshops, seminar arranged : Nil

19) FDP, Short term courses, workshops, seminar attended :

- Attended three days workshop on formulation of Research and Development Grants Proposal by Scientists and Technologists, at National Engineering College on 18-20, Nov. 2015.
- Attended one day workshop on intellectual property rights & innovations at National Engineering College on 07, Nov 2015.
- Attended two days workshop on Application of natural fiber composites, at National Engineering College on 27 & 28, June 2012.
- Attended two day workshop in Recent Advances in Welding of Dissimilar Materials at National Engineering College on 19-20, April 2013
- Attended two day workshop in Application of Natural Fiber Composites for the Development of Rural Societies at National Engineering College on 27-28, June 2012

20) List of course module developed :

CAD/CAM
Mechatronics and modern control.
Robotics

21) Records of new program specific facility created by faculty : Nil

22) Faculty Intellectual Property Rights (FIPR) applied : Nil

23) Laboratories/research facilities established :

1. Established test setup for low velocity impact testing
2. Assisted for CDIO laboratory establishment activities