# FACULTY PROFILE

HR-EMP-00001

#### **Personal Details**

Salutation:	Dr.
Instructor Name:	VENKATKUMAR. D
Designation:	Professor
Department:	MECHANICAL ENGINEERING - NEC
Date of Joining in NEC:	06-06-2005
Date of Joining in Present Post:	26-12-2017
Mobile Number:	9443660339
College Id:	MECT011
College Email Id:	dvkmech@nec.edu.in
Unique Staff Id:	1-455141917



#### **Address for Communication**

Address Line 1:	114/12E, Kasthuribai 2nd Street	Pincode:	628502
Address Line 2:	Thilagar Nagar, Lakshmi puram	District:	Thoothukudi
City:	post Kovilpatti	State:	Tamilnadu

#### **Educational Qualifications**

Sr	Name of the Degree	Specialization	Name of the Institute	Name of the University	Year of Passing
1	B.E	Mechanical Engineering	Arulmigu Kalasalingam College of Engineering	Maduari Kamaraj University	1999
2	M.E	CAD/CAM	Arulmigu Kalasalingam College of Engineering	Maduari Kamaraj University	2002
3	Ph.D	Welding	Anna University	Anna University	2017

## **Faculty Professional Experience**

Sr	Name of Institute / Organizations	Designation	Date of Joining	То	Total Experience
1	National Engineering College	Professor	06-04-2022		
2	National Engineering College	Associate Professor	26-12-2017	05-04-2022	4 years 4 Months

Sr	Name of Institute / Organizations	Designation	Date of Joining	То	Total Experience
3	National Engineering College	Assistant Professor (SG)	12-05-2010	25-12-2017	6 years 7 months
4	National Engineering College	Assistant Professor	06-06-2005	11-05-2010	5 years
5	R.V.S.College of Engg. & Tech., Dindigul	Assistant Professor	04-09-2002	03-06-2005	2 years 9 months

## FDP/ Workshop/ Seminar/ Training/ Knowhow Program Attended

Sr	Name of the Event	Event Type	Name of the Instituion or Organization	From	То
1	Orientation Training Program for mentor	Faculty Development Program	NITTTR, Chennai	26-07-2021	30-07-2021
2	Product Design using Fusion 360 (Online LIVE FDP)	Faculty Development Program	ICT Academy	19-04-2021	24-04-2021
3	AICTE Training And Learning	Faculty Development Program	Sardar Vallabhbhai National Institute of Technology	23-12-2019	27-12-2019
4	Application of computational Fluid dynamics in heat transfer and Energy Systems	National Workshop	National Institute of Technology, Tiruchirapalli	28-06-2019	29-06-2019
5	Pedagogy for online and blended Teaching- Learning Process	Faculty Development Program	IIT Bombay	03-05-2018	30-05-2018
6	Foundation Program in ICT For Education	Faculty Development Program	IIT Bombay	08-04-2018	12-04-2018
7	Smart Manufacturing	GIAN Course	Dr.B.R. Ambedkar National Institute of Technology, Jalandhar	19-02-2018	24-02-2018
8	Technology Enabled Learning Process	Training	National Institute of Technical Teachers Training & Research.	27-05-2017	29-05-2017
9	Innovative Methods for Teaching Mechanical Engineering"	Faculty Development Program	National Institute of Technology, Warangal	22-03-2017	26-03-2017
10	Three days' workshop on "Formulation of Research and Development Grant proposals by scientists and Technologists.	National Workshop	National Engineering College	18-11-2015	20-11-2015
11	One day workshop on "Intellectual Property Rights & Innovotations"	National Workshop	National Engineering College	07-11-2015	07-11-2015

Sr	Name of the Event	Event Type	Name of the Instituion or Organization	From	То
12	NPTEL Workshop	National Workshop	National Engineering College	24-04-2015	24-04-2015
13	Training of Evaluators / Resource Persons on Outcome Based Accreditation Phase – 1 and II	Training	National Board of Accreditation	14-06-2014	16-06-2014
14	CAN BUS implementation practice for mechanical engineers	National Workshop	National Engineering College	25-07-2013	26-07-2013
15	Workshop on R&D projects proposals – Awareness, needs and benefits.	National Workshop	Anna University, Chennai	28-06-2013	28-06-2013
16	Continuing Professional Development Programme on "Quality Initiatives in Technical & Higher Educational Institutions.	Faculty Development Program	Engineering Staff College of India.	23-01-2012	25-01-2012
17	BRNS theme meeting on "Diffusion, Mass transfer and its consequences in Materials"	National Seminar	Indira Gandhi centre for Atomic Research, Kalpakkam.	24-11-2011	26-11-2011
18	Two weeks workshop on "Recent advances in modeling and simulation of joining of materials"	National Workshop	National Institute of Technology, Tiruchirapalli	29-12-2008	10-01-2009
19	Two-day workshop on "Finite elements analysis of welding processes"	National Workshop	National Institute of Technology, Tiruchirapalli.	24-01-2008	25-01-2008
20	Training Programme on Electro Pneumatics	Training	Janatics India Private Limited, Coimbarote.	18-12-2006	20-12-2006
21	Hydraulics and Pneumatics controls	Faculty Development Program	K.L.N.College of Engineering, Pottapalayam.	05-12-2005	10-12-2005
22	Optimization Techniques for Engineering Aapplications.	National Seminar	R.V.S.College of Engg. & Tech., Dindigul	10-03-2005	11-03-2005
23	Emerging trends in CAD/CAM-Theory and Practice	Short Term Training Program	National Institute of Technology, Tiruchirapalli.	20-12-2004	31-12-2004
24	AICTE-ISTE sttp on "Recent trends in Automated Manufacturing systems"	Short Term Training Program	R.V.S. College of Engg. & Tech., Dindigul	15-12-2003	19-12-2003
25	Computer Aided Manufacturing	Faculty Development Program	Mepco schlenk Engineering college, Sivakasi.	24-11-2003	29-11-2003

Sr	Name of the Event	Event Type	Name of the Instituion or Organization	From	То
26	CAD/CAM	Faculty Development Program	Mepco Schlenk Engineering College	09-06-2003	13-06-2003

### International and National Conferences Attended

Sr	Name of the Conference	Event Type	Name of the Instituion or Organization	Title of the Paper	Authors	From	То
1	2nd INTERNATIONAL CONFERENCE ON ADVANCES IN MATERIALS RESEARCH - 2021 (ICAMR 2.0)	International Conference Participation	Bannari Amman Institute of Technology, Sathyamangalam - 638 401.	EXAMINATION OF MICRO STRUCTURE PROPERTIES OF 316 L STAINLESS STEEL FABRICATED BY WIRE ARC ADDITIVE MANUFACTURING	VINOTH V, SATHIYAMURTHY S, NATARAJAN U, VENKATKUMAR D, PRABHAKARAN J, SANJEEVI PRAKASH K	03-12- 2021	04-12- 2021
2	International Conference on Emerging Trends in Materials and Manufacturing Engineering (IMME17)	International Conference Presentation	National Institute of Technology, Trichy.	Finite Element Analysis of Heat Input Effect on Temperature, Residual Stresses and Distortion in Butt Welded Plates	Dr. D Venkatkumar, Dr. D. Ravindran and Dr. G. Selvakumar	10-03- 2017	12-03- 2017
3	International Conference on Fascinating Advancement in Mechanical Engineering (FAME2016)	International Conference Presentation	Mepco Schlenk Engineering College, Sivakasi.	Modeling and Prediction of Thermal Histories and Residual Stresses in Single Bead on Plate Welding Process	Dr. D Venkatkumar, Dr.D. Ravindran	18-03- 2016	19-03- 2016

### FDP/ Workshop/ Seminar/ Conference Programs Organized

Sr	Name of the Event	Event Type	Nature of funding	Name of the Funding Agency	Amount received from funding Agency	Role	Venue	From	То
1	3rd International conference on Recent Advances in Material Processing Technology	International Conference	Fund Received from external funding agency	BRNS, DST, CSIR	₹ 4,50,000.00	Organizing Secretary	NEC	07-01- 2013	09-01- 2013

#### **Guest Lecture Delivered**

Sr	Name of the Event / Program	Name of the Institution / Organization	Title of the Lecture delivered	From	То
1	AICTE – ISTE Induction/Refresher Programme on "Advancement of Pneumatics & Hydraulics"	P.A.C. Ramasamy Raja Polytechnic College	Basics of Hydraulics	22-12-2021	22-12-2021
2	Moodle – Orientation	Madras School of Social Work, Chennai	Moodle – Orientation	27-10-2021	27-10-2021
3	Faculty Development Programme	SCAD College of Engineering, Cheranmahadevi,	FDP on "E- Learning Management System – MOODLE"	06-12-2019	07-12-2019
4	One day workshop on "Moodle LMS"	Francis Xavier Engineering College, Tirunelveli	Moodle LMS	07-11-2019	07-11-2019
5	MOODLE – Hands on training	National Engineering College	MOODLE LMS	15-05-2019	17-05-2019
6	Guest Lecture	P.A.C. Ramasamy raja Polytechnic College	Finite Element Analysis & ANSYS	11-07-2017	11-07-2017
7	Guest Lecture	P.A.C. Ramasamy Raja Polytechnic College	Overview of CATIA V5 R14	07-09-2014	07-09-2014
8	Faculty Development Programme on "Engineering Mechanics"	National Engineering College	Faculty Development Programme on "Engineering Mechanics"	16-12-2013	22-12-2013

# Faculty Research Publications

Sr	Title of the Paper	Name of the Journal	Year of Publication	Authors	DOI (Digital Object Identifier System)
1	Examination of Microstructure Properties of AISI 316L Stainless Steel Fabricated By Wire Arc Additive Manufacturing	Materials Today: Proceedings	2022	V. Vinoth, S. Sathiyamurthy, U. Natarajan, D. Venkatkumar, Prabhakaran, K. Sanjeevi Prakash,	
2	Effect of Boundary Conditions on Residual Stresses and Distortion in 316 Stainless Steel Butt Welded Plate	High Temperature Materials and Processes	2019	D.Venkatkumar, D.Ravindran	https://doi.org/10.1515/htmp-2019-0048
3	Finite Element Analysis of Heat Input Effect on Temperature, Residual Stresses and Distortion in Butt Welded Plates	Materials Today: Proceedings	2017	D.Venkatkumar, D.Ravindran & G.Selvakumar	https://doi.org/10.1016/j.matpr.2017.11.525

Sr	Title of the Paper	Name of the Journal	Year of Publication	Authors	DOI (Digital Object Identifier System)
4	3D finite element simulation of temperature distribution, residual stress and distortion on 304 stainless steel plates using GTA welding	Journal of Mechanical Science and Technology	2016	D. Venkatkumar & D. Ravindran	https://doi.org/10.1007/s12206-015-1208-5
5	Design and analysis of grounding systems for wind turbines using Finite element method	IEEE Xplore	2011	P. Manikandan; M.P.E. Rajamani; P. Subburaj; D. Venkatkumar	10.1109/ICETECT.2011.5760107
6	Stress analysis at knuckle of variable thickness in torispherical end vessels using axisymmetric shell finite element	Journal of structural Engineering	2008	H Kanagasabapathy, KSK Chockalingam, D. Venkatkumar, G. Selvakumar	

## **Research Supervisor & Scholars Details**

Sr	Name of the University	Name of the Faculty	Reference No. (Supervisor id Number)	Research Area	Date of supervisor recognition
1	ANNA UNIVERSITY	Mechanical Engineering	3520002	Welding, CAD/CAM, FEM, WAAM	04-12-2019

Sr	Name of the Research Scholar	Internal or External / Full time or Part Time	Research topic	Present Status
1	Suresh kumar C	Internal	WAAM, FEM	Doing Course Work

## **Funded Research Project Details**

Sr	Name of the Project	Principal Investigator	Co-Investigator	Amount of Fund Received	Funding Agency	Project Duration	Present Status
1	Prediction and Control of distortion in components during hardfacing	Dr.D. RAVINDRAN	D. Venkatkumar	₹ 20,00,000.00	BRNS	3 years	Completed

# **Product Development Activities**

Sr	Product Title	From	То	Funding Agency	Funds Received	IPR Status
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Sr	Product Title	From	То	Funding Agency	Funds Received	IPR Status
1	Automatic Floor Cleaning and Mopping Robot	01-04-2018	31-03-2019	NewGen IEDC	₹ 2,00,000.00	Published

## Membership in Professional Societies

Sr	Name of the Society / Organization	Type of Membership	Membership ID
1	Institution of Engineers (India)	Life Member	M-152413-5
2	Indian Society for Technical Education	Life Member	LM37201
3	Society for Manufacturing Engineers	Life Member	

#### **Consultancy Work Details**

Sr	Consultancy Work Detail	Name of Industry / Agency	Amount	From	То	Status of the work
1	Providing facility for conducting online test for coducting campus recruitment Process	M/s Stradegi Solutions Ltd., Chennai	₹ 10,000.00	01-06-2021	20-08-2021	Completed

# Book / Book Chapters Published

Sr	Name of the Book	Name of the Chapter	Authors	Publisher	ISSN Number	Year of Publication
1	Proceedings of 3rd International Conference	Recent Advances in Material Processing Technology	Dr.S.L.Mannan, Dr.K.Manisekar, Mr.D. Venkatkumar, Mr.N.Lenin, Mr.P. Ramanan	Society of Manufacturing Engineers	ISBN 978-81- 904334-2-6	2013

# Instructor Log

Sr	Academic Year	Academic Term	Program	Course
1	2020-21	2020-21 (ODD)	B.E (MECHANICAL ENGINEERING)	15ME33E - Mechatronics and Modern Control
2	2020-21	2020-21 (ODD)	B.E (MECHANICAL ENGINEERING)	15ME54C - Computer Aided Design and Manufacturing
3	2020-21	2020-21 (EVEN)	B.E (MECHANICAL ENGINEERING)	15ME61C - Metrology and Quality Engineering
4	2021-22	2021-22 (EVEN)	B.E (MECHANICAL ENGINEERING)	19ME45C - Materials Science and Metallurgy

Sr	Academic Year	Academic Term	Program	Course
5	2021-22	2021-22 (EVEN)	B.E (MECHANICAL ENGINEERING)	19ME61C - Metrology and Measurements
6	2021-22	2021-22 (EVEN)	B.E (MECHANICAL ENGINEERING)	19ME66C - Metrology and Automation Laboratory