## Dr. M. Maran, ME, PhD.,

Professor, Department of Mechanical Engineering

Velammal College of Engineering and Technology, Madurai

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## **Educational Qualification**:

S. No.	Institution	Degree Awarded	Year	Field of Study
1	Anna University, Chennai	PhD	2017	Mechanical
2	University of Malaya, Malaysia	M.E	2008	Mechanical
3	Madurai Kamaraj University, Madurai	PGDM	2000	Mechanical
4	Madurai Kamaraj University, Madurai	B.E	1999	Mechanical

# **Experience in Years: 25 Years (11 Years in Teaching + 14 Years in Industry)**

# **Employment History:**

S. No.	Institution	Position	From (Date)	To (Date)
1	Velammal College of Engineering and Technology,	Professor	01/04/2020	Till Date
1	Madurai Technology,			
	Velammal College of	Associate	16/06/2017	31/03/2020
2	Engineering and Technology,	Professor		
	Madurai			
	Velammal College of	Assistant	01/06/2011	15/06/2017
3	Engineering and Technology,	Professor		
	Madurai			
4	Monier Roofing Tiles Pvt. Ltd.,	Asst. Manager	4/6/2008	7/5/2011
4	Bangalore			
5	Lafarge Roofing Tiles Sdn. Bhd.	Senior Engineer	1/5/2002	25/4/2008
	Kuala Lumpur – Malaysia			
6	Hindustan Motors (HML -PPD),	Engineer	3/6/1999	30/3/2002
6	Hosur	(Manufacturing)		

## **Interested Research Areas:**

- > Industrial Engineering
- ➤ Industry 4.0
- ➤ Lean Manufacturing

- > Maintenance Management
- ➤ Bio medical Devices
- ➤ Natural Fibers & Composites

## **Scholarships and Awards received:**

- ♦ Most Promising Innovator Award i3 (India Innovation Initiative) organized by **DST CII- AICTE** with cash prize of Rs. 50,000.
- ❖ i3 KLU- CHE Award for Best Student Innovators Gratis Incubation Support for Student Innovations.
- **❖ i3 SIDBI** Start-Up Mitra Awards for Most Promising Innovators Certificate of Recognition.
- **♦ BIRAC SoCH** Award (Solutions for Community Health) award with cash prize Rs. 15 Lakhs from BIRAC, GOI.
- ❖ ICTACT Design Award India Design Week competition organized by ICTACT with cash prize Rs. 30,000.
- **♦ CAD Project** contest Winners in Innovation in design 1 Lakh.
- ❖ Smart India Hackathan (SIH -2019), Finalists (Incubation support from IIT Patna).
- SIH 2020 (Software Edition Bio Medical & Health care devices IC469), Third place, Rs. 50,000.
- **❖ Dr. KALAM YOUNG ACHIEVER AWARD**, For Innovation in design 2019.

## **Funded Research Projects:**

Funding Agency	Scheme	Title	Sanctioned Amount	Year	Role
DST	Bio Medical Devices	Hemiplegia and Finger Rehabilitation Therapy device for stroke patients	35 Lakhs	2019	PI
BIRAC	BIG	Deworming Drench Gun	27.6 Lakhs	2018	PI
DST	IDP	Automatic button feeding-riveting machine for garments industries	16.49 Lakhs	2015	Co-PI
DST	IDP	Trio Rehabilitation Device (Ankle, knee & Toe)	16.49 Lakhs	2015	Co-PI
MSME	IH – 4.0	Product developed under demonstration (Currently in MSME- CIPD)	16.49 Lakhs	2015	Co-PI

## Patent rights received:

S.No.	Title of the Invention	Patent Application Number	Current Status
1	Multi Lead Mechanical Pencil	4368/CHE/2013	Provisional Patent
2	Automatic Banana Slicing Machine	4367/CHE/2013	Provisional Patent

3	Deworming Drench Gun	201841018914	Provisional Patent
4	Hemiplegia Device for Stroke Patients	201741043342	Provisional Patent
5	Ankle Rehabilitation Device	TEMP/E- 1/10090/2021-CHE	Provisional Patent
6	Wearable health care smart band for physicallychallenge people	202341007806	Provisional Patent

#### **Publications Details:**

### 1. International Journal Publication Details:

- 1. Investigate the mechanical properties of Cu-SiO2 nanocomposite via powder metallurgy, Interactions 245 (1), 167, in 2024
- 2. "Suitability evaluation of sida mysorensis plant fiber as reinforcement in polymer composite", Published in Pages 1-11 Journal of Natural Fibers, Taylor & Francis, 2020
- 3. "Improvement of Fist Time through in Heater" published in International Journal of Innovative Research in Science, Engineering and Technology, Volume 7 and Issue 4 in the year 2018.
- 4. "Snowmow System" published in the HBRP Recent and Development in Machine Design, Volume 1 Issue 2, in the year 2018.
- 5. "Competency enhancement and employee empowerment in a TPM organization An empirical study" published in the International Journal of Advanced Engineering Technology, Volume 7 Issue 2, in the year 2016.
- 6. "Safety Culture Assessment A review of the literature", published in International Journal of Informative & Futuristic Research (IJIFR), Volume 2, Issue 5, January 2015.
- 7. "Competency enhancement: intangible benefits of TPM implementation", International Journal of Innovative Research in Science Engineering and Technology (IJIRSET); ISSN (Print):2347-6710; ISSN (Online):2319-8753; vol. 3, no. 3.
- 8. "Overall equipment effectiveness measurement: weighted approach method and fuzzy expert system", IAENG Transactions on Engineering Technologies Chapter in Springer edited book Series Title 7818 2013 (Book ID: 305257\_1\_En / Book ISBN: 978-94-007-5623-6).
- 9."Fuzzy expert system for plant overall equipment effectiveness", European Journal of Scientific Research ISSN 1450-216X,vol.83,no.3, pp.430-438.

## 2. International Conference Presentation Details:

- 1. "Process Improvement using Lean six Sigma Techniques A perceptive of Indian SMEs", International conference on contemporary design and analysis of manufacturing and industrial engineering systems (CDAMIES-2018), organized by NIT Trichy, January 2018.
- 2. "Challenges for Industry 4.0 in Indian Industries, International Conference in Manufacturing", International conference on contemporary design and analysis of manufacturing and industrial engineering systems (CDAMIES-2018), organized by NIT Trichy, January 2018.
- 3. "Competency Enhancement and Employee Empowerment in a TPM Organization An Empirical Study", International Conference on Research Advances in Electrical, Electronics & Communication, at St. Ann's College of Engineering & Technology on 19th March, 2016.
- 4. "Competency enhancement: intangible benefits of TPM implementation", in IEEE International Conference on Innovations in Engineering and Technology on 21&22 March 2014 at K.L.N College of Engineering, Madurai.
- 5. "A review of intangible benefits of total productive maintenance implementation", in International Conference on Advances in Industrial Engineering Applications on January,pp. 6-8, 2014 at Anna University, Chennai.

### 3. National Conference Presentation Details:

1. "Safety Culture and Safety Climate: A Review of the Literature" in the international Conference on Emerging Trends in Automotive Technology (ETAT-2015), Organized by SAE INDIA Velammal Collegiate Club, Velammal Engineering College, Chennai, January 2015.

## 4. Google Scholar report:

https://scholar.google.com/citations?user=NXuEqngAAAAJ&hl=en&authuser=1

	AII	Since 2020
<u>Citations</u>	138	89
<u>h-index</u>	6	5
i10-index	5	1