

**Dr. M.SARAVANAN.**  
No.3,4<sup>th</sup> cross, 5<sup>th</sup> street,  
Vijayaragavapuram,  
Saligramam,  
Chennai-600093.

**Mobile: +917845570762.**  
**Email : saravanamfg@gmail.com**

**Google Scholar Link:**

<https://scholar.google.co.in/citations?user=mliAQG4AAAAJ&hl=en&authuser=1>

**Scopus Link :**

<https://www.scopus.com/authid/detail.uri?origin=AuthorProfile&authorId=57190757568&zone=>

### **Career Objective**

To work for an Institution, that will provide me a good platform to utilize my teaching and administration skills which would be helpful for the growth of the institution and also for the development of my career.

### **Work Experience (11+ Yrs in Teaching & 1 Yr in Industry)**

- 1. Institution** : Hindustan Institute of Technology & Science, Padur, Chennai.  
**Designation** : Assistant Professor (Grade III)  
**Period** : From June 2017 to till now
- 2. Institution** : Velammal Engineering College, Surapet, Chennai.  
**Designation** : Assistant Professor (Grade II)  
**Period** : From June 2015 to June 2017
- 3. Institution** : SRM - Easwari Engineering College, Ramapuram, Chennai.  
**Designation** : Assistant Professor (Grade I)  
**Period** : From August 2010 to May 2015
- 4. Company** : AB Insys Tech Pvt Ltd., Madurai. Engineering and IT service company  
**Designation** : Engineer- Design Division.  
**Period** : From Jun 2007 to May 2008.  
**Job Responsibilities:** Design of components using Unigraphics and solidworks.  
Detailing of individual parts, 2D to 3D conversion, Drafting.

### **Subjects Frequently Handled**

CAD/CAM,  
Wear and Corrosion Engineering,  
Surface Engineering,  
Fundamentals of Nano Science,  
Material characterization Techniques,  
Thin Film Technology,  
Engineering Graphics.  
Engineering Mechanics,  
Engineering Materials and Metallurgy.  
Robotics.  
Manufacturing Technology – I.

## **Additional Responsibilities**

As a CBCS Coordinator in Mechanical Engineering department, involved in offering Open and Engineering Elective subjects and coordinated End Semester Exams for electives.

As a Placement Coordinator, actively encouraged and guided students to get company Job offers.

As a Student Counselor, enabled the students to sort out issues and improve their academic record.

As an Internal Auditor, participated in auditing various departments within the college campus.

## **Educational Background**

Ph.D in Mechanical Engineering, College of Engineering-Guindy, 2019, Anna University, Chennai.

Anna University, Madras Institute of Technology, Chennai-600044.  
Master of Engineering in Manufacturing Engineering.  
2008-2010 Secured CGPA of 7.0 with FIRST class.

PGP College of Engg. & Technology, Namakal-637206.  
Bachelor of Engineering in Mechanical Engineering.  
2002-2006 Secured an aggregate of 61% with FIRST class.

Kamaraj Matric. Hr. Sec. School, Kovilpatti -628501. Higher  
Secondary Examination, Tamilnadu State Board.  
2001-2002 Secured 79.5% in Final Exams.

Kamaraj Matric Hr. Sec. School, Kovilpatti-628501. Secondary  
School Examination, Tamilnadu Matriculation Board. 1999-2000  
Secured 72.5% aggregate in public examinations.

## **Publications**

### **Patents Filed**

1. Patent published - Wind power operated pump in 2020.  
Application No. 201941052755

## **International Journals**

1. Saravanan M, Krishnakumari A, G Venkatesan, S Jain, 2016, 'Application of Zhao-Atlas-Marks Transforms in Non-stationary Bearing Fault Diagnosis' , *Procedia Engineering* (Elsevier). Vol. 144 , pp. 297-304.
2. Saravanan M, Krishnakumari A, A Elayaperumal, 2016, 'Fault diagnostics of spur gear using decision tree and fuzzy classifier', *The International Journal of Advanced Manufacturing Technology* (Springer). Vol. 89, 9, pp. 3487–3494. (IM- 2.601)
4. Saravanan M, Krishnakumari A, N Venkateshwaran, A Devaraju, 2017, ' Surface Modification of 316L Stainless Steel By Plasma-Assisted Low Temperature Carburizing Process ', *Surface Review and Letters* , Vol. 24 (8), pp.1-8. (IM-0.734) Saravanan M, Krishnakumari A, N Venkateshwaran, A Devaraju, sarvesh J 2018, 'A Review on recent progress in coatings on AISI Austenitic Stainless Steel', *Materials Today Proceedings* (Elsevier), Vol. 5 (6), pp.14392.
5. Saravanan M, Krishnakumari A, A Devaraju, 2018, 'Evaluation of mechanical properties of hybrid root fiber reinforced polymer composites', *Materials Today Proceedings* (Elsevier), Vol. 5 (6), pp.14560.
6. Saravanan M, Krishnakumari A, N Venkateshwaran, A Devaraju, 2017, 'Tribological Behavior of Thin Nano Tungsten Carbide Film Deposited On 316L Stainless Steel Surface', *Surface Review and Letters*, Vol. 25 (8), (IM-0.734)
7. M Saravanan, Krishnakumari A, et. al., 2020, 'Vibration Condition Monitoring of Spur Gear Using Feature Extraction of EMD and Hilbert–Huang Transform', *Intelligent Manufacturing and Energy Sustainability*, Springer link, book chapter.
8. Krishnakumari A, M Saravanan, 2020, 'A hybrid surface modification by ND Yag laser in Austenitic Steels for wear and corrosion resistance', *Lasers in Manufacturing & material Processing*, Springer Link, vol.8, issue.2, pg 201-205.

## **International Conferences**

1. Saravanan M, Devaraju A, Krishnakumari A, Manivannan N, Tribological Behaviour Of Tungsten Carbide Coated AISI 316 LN Type Stainless Steel in Air at Room Temperature, International Conference on Advances in Tribology [ ICAT14], NIT, Calicut.2014

2. Saravanan M, Venkateswaran N, Devaraju A, Krishnakumari A, Sathiyaraj P, Saarvesh J, A tribological analysis of thin film of nano tungsten carbide coated AISI 316 L stainless steel, International Conference on Advances in Materials, Manufacturing and Applications [AMMA15], NIT, Trichy.2015
3. Saravanan M, Krishnakumari A, Tejoh Nanda Boopesh R, Saarvesh Jayakumar, A Comparative study on tribological properties of AISI 316 L Austenitic Stainless Steel by various surface modification techniques, International Conference on Advances in Materials, Manufacturing and Applications [AMMA15], NIT, Trichy.2015
4. Saravanan M, Kishore kumar Panneer Selvam, Saarvesh Jayakumar, "Evaluation of Mechanical Properties of Root Reinforced Epoxy Polymer Hybrid Composites", International Conference on Modern, Intelligent and Green Manufacturing, December, Kongu Engineering College, 2015.
5. Saravanan M, Devaraj A, Venkateshwaran N, Krishnakumari A, Sarvesh J, "Influence of the counter material on the dry sliding wear behaviour of low temperature plasma assisted gas carburized AISI 316L steel", International Conference on Modern, Intelligent and Green Manufacturing, December, 2015.
6. Saravanan M, Krishnakumari A, G Venkatesan, S Jain, "Application of Zhao-Atlas-Marks Transforms in Non-stationary Bearing Fault Diagnosis", International Conference on Vibration Problems, ICOVP, DECEMBER, 2015, IIT – Guwahati
7. Saravanan M, "Design and analysis of a mine detecting robotic manipulator" in national conference on Recent Innovations in Production Engineering at Anna University, MIT campus, Chennai in 2010.
8. Saravanan M, Krishnakumari A, 2017, "Non-linear feature extraction from zhao atlas-marks transforms in non-stationary gear fault diagnosis", National Conference on Condition Monitoring, IGCAR, Kalpakkam.
9. Saravanan M, Krishnakumari A, G Venkatesan, S Jain, 2018, "A visual clustering model for online condition monitoring of gear fault diagnosis using vibration signals.", International Conference on Robotics, Automation and Non-Destructive Evaluation. HITS, Chennai.

## **Technical Exposure**

Working experience in Advanced 3D Printer (Stratasys F270 model).

Completed CAD using Unigraphics in CIPET (Central Institute of Plastic Engineering and Technology), sponsored by company.

Having a good knowledge in design software packages – Unigraphics, Catia, Solidworks, Autocad.

Other skills: Very much conversant with Ms-Word, Excel, and Power point.

Organized two days workshop on Non-Destructive Testing & Evaluation in Velammal Engineering College at 2016

Organised National level - two days workshop on Vibration Condition Monitoring in 2018

### **Personal Details**

**Father's Name** : Late. S. Meenakshi Sundaram.  
**Date of Birth** : 26/11/1984.  
**Personal Status** : Male / Married / Indian.  
**Languages known** : English, Tamil.  
**Passport Number** : G5287647  
**Permanent mail** : No.3, 4<sup>th</sup> cross street, Vijayaragapuram, saligramam, Chennai-600093.

### **Declaration**

I, hereby declare that all the above said information is true and correct to the best of my knowledge.

**Date:**  
**Place: Chennai.**

**Signature**  
**(M. SARAVANAN)**