# **CURRICULUM VITAE**

Dr. SUDHEER. M. B.E., M.Tech., PhD, MISTE, MTSI, MISAMPE Dean – Academics Professor Dept. of Mechanical Engineering St. Joseph Engineering College, Vamanjoor Mangalore- 575 028 Mob:9886396953 Email : dean.academics@sjec.ac.in sudheerm@sjec.ac.in



Dr. Sudheer M is a seasoned Mechanical Engineering Professor with over 20 years of teaching experience at St Joseph Engineering College Mangaluru. He combines academic excellence with practical insights, having spent 3 years in the Polymer Industry in Bengaluru. Dr. Sudheer has dedicated 16 years to groundbreaking research in the characterization of polymer composites, contributing significantly to the field through numerous publications and presentations. His work focuses on enhancing the performance and durability of composite materials, making him a respected authority in academic circles.

Sudheer M is a distinguished administrator with over two decades of exemplary service at St Joseph Engineering College Mangaluru. Known for his strategic vision and exceptional leadership, he has successfully managed organizational transformations. His expertise in policy development, resource management, and team building has consistently driven institutional growth and efficiency. Sudheer's collaborative approach and commitment to excellence have earned the respect of colleagues and stakeholders alike. His ability to navigate complex challenges and implement sustainable solutions underscores his reputation as a dynamic and effective leader in the field of administration.

Degree	University	Specialization	Year of passing	Class	Remarks
B.E	Mangalore	Industrial Production	1999	First Class	
	University			(62%)	
M. Tech	VTU Belgaum	Computer Integrated	2005	Distinction	Secured 2 <sup>nd</sup>
		Manufacturing		(84%)	Rank
Ph.D	VTU Belgaum	Tribology of Polymer	2014	Degree conferred during	
		Composites		May 2015	

# **Educational Qualification:**

Work Experience: Total 22 years of Work Experience

**Industrial Experience:** (About 3 Years) Worked as Quality Control Engineer at Karnataka Plascom Engineers Pvt. Ltd situated in Bangalore from September 1999 to July 2002.

**Teaching Experience: (20 Years)** Presently working as Dean – Academics and Professor in the Department of Mechanical Engineering at St. Joseph Engineering College Mangalore. Faculty from August 2005 to till date.

Served as Member of Governing Council of St Joseph Engineering College Mangalore from 2015-18.

Appointed as the Dean – Student Welfare at St Joseph Engineering College, Mangaluru for a term of 3 years with effect from May 2017.

Served as Dean – Research and Development from 01 Aug 2021 to 21 Nov 2022.

Presently serving as Dean – Academics from 07 Nov 2022 onwards to till date. Serving as Member of Board of Studies (BoS) VTU Belagavi from 2022-2025.

## Research Papers Presented/Published:

# International journals: 19

[1]. **M. Sudheer**, K. M. Subbaya, Dayananda Jawali, Thirumaleshwara Bhat, "Mechanical Properties of Potassium Titanate Whisker Reinforced Epoxy Resin Composites", *Journal of Minerals & Materials Characterization & Engineering*, Vol. 11, No.2 pp.193-211, 2012.

[2]. **M. Sudheer**, Ravikantha Prabhu, K. Raju, Thirumaleshwara Bhat "Optimization of Dry Sliding Wear Performance of Ceramic Whisker Filled Epoxy Composites Using Taguchi Approach", *Advances in Tribology*, Volume 2012, Article ID 431903, 9 pages, (**Indexed by scopus**).

[3]. **M. Sudheer,** G. Vignesh Shanbhag, Prashanth Kumar and Shashiraj Somayaji, "Finite Element Analysis of Thermal Characteristics of Annular Fins With Different Profiles", *ARPN Journal of Engineering and Applied Sciences* (ISSN 1819-6608), Vol. 7, No. 6, June 2012, pp. 750-759. (**Indexed by scopus**)

[4]. **M. Sudheer**, Ravikantha Prabhu, K. Raju, and Thirumaleshwara Bhat, "Modeling and Analysis for Wear Performance in Dry Sliding of Epoxy/Glass/PTW Composites Using Full Factorial Techniques," *ISRN Tribology*, vol. 2013, Article ID 624813, 11 pages, 2013.

[5]. **M. Sudheer**, N. Karthik Madhyastha, M. Kewin Amanna, B. Jonthan, and K. Mayur Jayaprakash, "Mechanical and Abrasive Wear Behavior of Metal Sulphide Lubricant Filled Epoxy Composites," *ISRN Polymer Science*, vol. 2013, Article ID 242450, 8 pages, 2013.

[6]. **M. Sudheer**, K.H. Vishwanathan, K. Raju, and Thirumaleshwara Bhat, "Effect of potassium titanate whiskers on the performance of vacuum molded glass/epoxy composites", *Journal of Reinforced Plastics and Composites*, Vol. 32, No. 16, 2013 pp. 1177-1187. (2016 Impact factor 1.086)

[7]. **M. Sudheer**, Ravikantha Prabhu, Kandavalli Raju, and Thirumaleshwara Bhat, "Effect of filler content on the performance of Epoxy/PTW composites", Advances in Materials Science and Engineering, vol. 2014, Article ID 970468, 11 Pages, 2014, doi:10.1155/2014/970468. (Indexed by scopus). (2016 Impact factor 1.299)

[8]. **M. Sudheer**, K. Hemanth, K. Raju, Thirumaleshwara Bhat, "Enhanced mechanical and wear performance of epoxy/glass composites with PTW/Graphite hybrid fillers", *Procedia Materials Science*, Volume 6, 2014, pp. 975-987. (Elsevier, Indexed by Scopus).

[9]. **M. Sudheer,** Ashwin Shetty, Shashiraj Somayaji, "Finite Element Investigations of Temperature Distribution in Fins with Circular Perforations", American Journal of Materials Science 2015, 5(3C): 157-161.

[10]. **M. Sudheer,** Pradyoth K. R, Shashiraj Somayaji, "Analytical and Numerical Validation of Epoxy/Glass Structural Composites for Elastic Models", American Journal of Materials Science 2015, 5(3C): 162-168.

[11]. **M. Sudheer**, "Thermomechanical Properties of Epoxy/PTW Composites", Journal of Mechanical Engineering and Automation 2016, 6(5A): 18-21.

[12]. **M. Sudheer**, "Study of Wear Behaviour of Recycled Metal Powder Filled Epoxy Composites Using Factorial Analysis", American Journal of Materials Science 2016, 6(4A): 82-87.

[13]. **M Sudheer,** "Evaluation of abrasive wear behavior of dual ceramic whisker reinforced epoxy composites", Materials Discovery, 6, 2016, pp. 17-27. (Elsevier, Indexed by Scopus).

[14]. Vikas G., **Sudheer M**, "A Review on Properties of Basalt Fiber Reinforced Polymer Composites", American Journal of Materials Science 2017, 7(5): 156-165.

[15]. Bilal Ahmad, Mahammad Ashfaq, Anton Joy, Zuzarte Aaron Carlos, **Sudheer M** "Fabrication and Characterization of an Eco-friendly Biodegradable Epoxy/Chitosan Composites", American Journal of Materials Science 2017, 7(5): 166-169.

[16]. Ravikiran Kamath. B, **Sudheer. M**, "On tribological behavior of synthetic fiber reinforced polymer composites modified with fillers: a review", International Journal of Mechanical and Production Engineering Research and Development, Vol. 9, Issue 5, Oct 2019, 71-80. (Indexed by Scopus)

[17]. Bhavith K, Prashanth Pai M, **Sudheer M**, Ramachandra C G, Maruthi Prashanth B H and Kiran Kumar B, "The Effect of Metal Filler on the Mechanical Performance of Epoxy Resin Composites", Engineering Proceedings, 2023, 59 (200), 1-12. (**Indexed by Scopus**)

[18]. Sawan Shetty, Raviraj Shetty, Rajesh Nayak, Adithya Hegde, Uday Kumar Shetty S. V. and **Sudheer M**. "DOE coupled MLP-ANN for optimization of thrust force and torque during drilling of CCFRP composite laminates", Cogent Engineering, 2024, Vol 1, No.1, 2319397. (**Taylor and Francis, Indexed by Scopus).** 

[19]. B. Ravikiran Kamath, **M. Sudheer**, Vidyasagar Shetty, Deepak Kothari and Thrivikram Prabhu, "Fabrication and mechanical testing of glass fiber reinforced epoxy matrix composites modified with powdered metallic fillers", Journal of Mines, Metals and Fuels, 2024, 72(2): 103-109. (**Indexed by Scopus**).

#### National journals: 02

[1]. Sudheer M, Sandesh Kubanooraya, Raju K and Thirumaleshwara Bhat, "Abrasive wear performance of Epoxy/Glass/PTW composites", Annual Research Journal, NMAM Institute of Technology, Vol. 3, 2013, pp. 36-42.

[2]. Sudheer M, "Implementation of Taguchi Design for Dry Friction Coefficient of Epoxy Composites", Annual Research Journal, NMAM Institute of Technology, Vol. 4, 2014, pp. 24-29.

# International conferences: 08

[1]. **M. Sudheer**, R Shankara Reddy and K S Shivakumar Aradhya, "Evaluation of Apparent Elastic Moduli for Muite/Alumina Ceramic Matrix Composites Using Finite Element Method, Proceedings of 50<sup>th</sup> Congress of ISTAM, December 14-17, 2005, IIT, Kharagpur.pp.192-199.

[2]. **Sudheer M** and Thirumaleshwara Bhat, "Validation of Analytical Methods to Evaluate Elastic Properties of Mulite/Alumina Ceramic Matrix Composites Using Finite Element Method", Presented in International Conference on Advances in Manufacturing Engineering held during 24-26 October 2007 at MIT Manipal.

[3]. **Sudheer M**, K M Subbaya, Thirumaleshwara Bhat, "Processing and characterization of potassium titanate whisker reinforced epoxy based polymer matrix composites", Proceedings of the Joint International Conference on Advanced Materials (ICAM-2011), 19-20<sup>th</sup> Aug 2011, BTLIT, Bangalore pp. 111-116.

[4]. **Sudheer.M**, Ravikantha Prabhu, Raju K, Thirumaleshwara Bhat,"Dry Sliding Wear behavior of Potassium Titanate Whisker Reinforced Epoxy Based Polymer Matrix Composites", Presented at International Multi-component Polymer Conference (IMPC-2012), 23-25<sup>th</sup> March 2012, Mahatma Gandhi University, Kottayam, Kerala.

[5]. **Sudheer M**, Sandesh Kubanooraya, Raju K, Thirumaleshwara Bhat, "Abrasive Wear Performance of Epoxy/Glass/PTW Composites", Proceedings of International Conference in Emerging Trends in Engineering (ICETE 2013),15-16<sup>th</sup> May 2013, NMAMIT Nitte, Excel India Publishers (ISBN: 978-93-82880-29-5), New Delhi, pp.123-127.

This paper has won the "Best Paper Award" in Mechanical Engineering stream.

[6]. Suhas U, Balakrishna S.S, **Sudheer M**, "Processing and characterization of grey cast iron-epoxy polymer composites", Proceedings of International Conference on Mechanical and Industrial Engineering", (ICMIE) Bangalore, 02-June -2013, pp. 25-29.

[7]. **M. Sudheer**, K. Hemanth, K. Raju, Thirumaleshwara Bhat, "Enhanced mechanical and wear performance of epoxy/glass composites with PTW/Graphite hybrid fillers", 3rd International Conference on Materials Processing and Characterisation (ICMPC 2014), Gokaraju Rangaraju Institute of Engineering and Technology (GRIET), Hyderabad, 8-9<sup>th</sup> March 2014.

[8]. Sudheer M, " Dry sliding wear behavior of cast iron powder filled epoxy composites", Presented in International Conference on Emerging Trends in Mechanical Engineering on 11<sup>th</sup> August 2018 at SJEC Mangaluru.

#### National conferences: 09

[1]. **Sudheer M**, Thirumaleshwara Bhat, "Friction and Wear of Polymer Composites: A Review", A National Conference on Advances in Mechanical Engineering (AIM-2011), MIT Manipal January 2011.

[2]. **Sudheer.M**, Ravikantha Prabhu, Raju K, Thirumaleshwara Bhat," Effect of Ceramic Micro-Whiskers on Tribo-Performance of Epoxy Resin Composites – A Taguchi Approach", National Conference on Emerging Trends in Materials for Advanced Technology (NETMAT), at KVGCE Sullia ,Mar 20-21, 2012.

[3]. **Sudheer.M**, Ravikantha Prabhu, Raju K, Thirumaleshwara Bhat, "Hybrid effect of ceramic whiskers and graphite flakes on mechanical and dry sliding performance of epoxy composites", National Conference on Challenges in Research and Technology in Coming Decades (CRT-2013) at SDMIT, Ujire, Sept 27-28, 2013.

[4]. **M. Sudheer,** Ashwin Shetty, Shashiraj Somayaji, "Finite Element Investigations of Temperature Distribution in Fins with Circular Perforations", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2015), SJEC, Mangaluru, Aug 8, 2015.

[5]. **M. Sudheer,** Pradyoth K. R, Shashiraj Somayaji, "Analytical and Numerical Validation of Epoxy/Glass Structural Composites for Elastic Models", ", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2015), SJEC, Mangaluru, Aug 8, 2015.

[6]. **M. Sudheer**, "Thermomechanical Properties of Epoxy/PTW Composites", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2016), SJEC, Mangaluru, Aug 6, 2016.

[7]. **M. Sudheer**, "Study of Wear Behaviour of Recycled Metal Powder Filled Epoxy Composites Using Factorial Analysis", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2016), SJEC, Mangaluru, Aug 6, 2016.

[8]. Vikas G., **Sudheer M**, "A Review on Properties of Basalt Fiber Reinforced Polymer Composites", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2017), SJEC, Mangaluru, Aug 5, 2017.

[9]. Bilal Ahmad, Mahammad Ashfaq, Anton Joy, Zuzarte Aaron Carlos, **Sudheer M** "Fabrication and Characterization of an Eco-friendly Biodegradable Epoxy/Chitosan Composites", National Conference in Emerging Trends in Mechanical Engineering (eTIME-2017), SJEC, Mangaluru, Aug 5, 2017.

# **Reviewed research articles for following** 13 Journals:

Journal of Polymer Engineering, Recent Patents in Mechanical Engineering, International Journal of Material Science, Emerging Materials Research, Journal of Composite Materials. American Journal of Materials Science, Journal of Mechanical Engineering and Automation, Indian Journal of Engineering and Materials Sciences, International Journal of Nano Technology, Polymer-Plastics Technology and Engineering, Materials Engineering and Performance, Polymer Engineering and Science and Journal of Testing and Evaluation.

#### Interaction with outside world:

1. Evaluator for a state level inter collegiate student technical fest ENVISION-10, held at Srinivas Institute of Technology, Mangalore on 26<sup>th</sup> Feb 2010.

2. Delivered a lecture on "Computer Aided Engineering and its Applications" for UG and PG students of Mechanical Engineering on 30<sup>th</sup> Oct 2012 (2-4 pm) at Alva's institute of Engineering and Technology, Moodbidri.

3. Contributed as Judge during EXPRO 2014 (Final year students' project exhibition and competition) held at NMAM Institute of Technology Nitte on 19<sup>th</sup> April 2014.

4. Chaired the session of Technical paper presentation in Chakravyuh-15, National level techno-cultural fest held at Alva's institute of Engineering and Technology, Moodbidri on 13<sup>th</sup> April 2015.

5. Served as Judge for Project exhibition "Innovation -2015" held on 15<sup>th</sup> May 2015 at Mangalore Institute of Technology & Engineering Moodbidri.

6. Member of Board of Examiner (BOE, 2015-16) for M.Tech in Machine Design at NMAMIT, Nitte

7. Delivered a technical talk on "Composites and their innovative applications" for Mechanical Engineering students at KVGCE Sullia on 06 Feb 2016.

8. Served /Serving Doctoral Committee Member as domain expert (Research Advisory Committee member) for many VTU Belagavi PhD students since from year 2017.

9. Delivered a technical talk on "Applications of Finite Element Method in Mechanical Engineering" on 07 September 2018 at YIT Moodbidri.

10. Participated as Session Chair in 8<sup>th</sup> International Conference on Emerging Trends in Engineering held at NMAMIT Nitte during 14<sup>th</sup> and 15<sup>th</sup> May 2018.

11. (List to be continued).

### Workshops/Seminars Attended:

1. AICTE sponsored Two weeks Staff Development Program (SDP) on Advanced Manufacturing Technique (AMT) conducted by Mechanical Engineering Department, PES College of Engineering Mandya during 09-02-2004 to 20-02-2004.

2. AICTE – ISTE sponsored Short Term Training Program (STTP) on Biomass Power – Current Scenario and Future Projection conducted by Mechanical Engineering Department, PES College of Engineering Mandya during 15-04-2004 to 26-04-2004.

3. Two-Day Workshop on Smart Materials and Structures (SMAS-2006) conducted by Department of Mechanical Engineering, BMS College of Engineering Bangalore on 7<sup>th</sup> and 8<sup>th</sup> September 2006.

4. DST New Delhi sponsored Faculty Development Program (FDP) conducted by NITK-STEP Surathkal from 24<sup>th</sup> July 2006 to 4<sup>th</sup> August 2006.

5. AICTE sponsored Two weeks Staff Development Program (SDP) on Applied Computational Methods in Mechanical Engineering Design organized by Department of Mechanical and Manufacturing Engineering, MIT Manipal during June 18-29, 2007.

6. VTU organized training on 'Computer Aided Modeling and Analysis Laboratory' held at MCE, Hassan during 4-8<sup>th</sup> Feb. 2009.

7. A workshop on 'Common NDT Techniques' organized by mechanical engineering department at SJEC Mangalore from 15-16, May 2009.

8. A workshop on 'Research Methodologies and Report Writing' organized by VTU Belgaum, held at GIT Belgaum during 25-26<sup>th</sup> May 2009.

9. AICTE-ISTE sponsored workshop on 'Advances in CNC Machine Tool Design and Research' held at NITK Surathkal during 13-17<sup>th</sup> July 2009.

10. A training program on 'CIM and Automation Lab' held at NMAMIT Nitte, 15-17<sup>th</sup> Sept 2009.

11. Three day workshop on "Condition monitoring and maintenance of machinery" held at NMAMIT Nitte, 5-7<sup>th</sup> June 2014.

12. One day workshop on "Conduction of PG mechanical engineering labs" held on 10<sup>th</sup> Oct 2014 at VTU regional office Bangalore.

13.One day workshop on "Mission Make in India: Synergy with Technical Education System" held on 3rd Oct 2015 at NITK, Surathkal.

13. Two-day workshop on "Plagiarism" held on 16<sup>th</sup> and 17<sup>th</sup> Oct 2015 at VTU-Regional Office, Bangalore.

14. Workshop on OBE and New SAR, Integra – 2016 held on 21st January 2016 at St Joseph Engineering College, Mangaluru.

15. Attended a course on "Hybrid Composites: Manufacturing, Mechanics and Materials" from 18-22 December 2016 at National Institute of Technology Karnataka, Surathkal.

16. Participated in the two day workshop on "Condition Monitoring" from 9- 10 January 2017 at St. Joseph Engineering College, Mangaluru.

17. Participated in the two day workshop on "Quality Assurance in Engineering Education through OBE" from 30-31 January 2017 at St. Joseph Engineering College, Mangaluru.

18. Attended two days training on "ATAL Tinkering Labs" held at Shubhodaya Vidyalaya, Mangalore on 08 and 09<sup>th</sup> June 2018.

19. Attended FEEL TEACHER program organized by CLHRD Mangalore from 02-04 July 2018 at SJEC Mangalore.

20. Participated in a GIAN course on "Dynamic Response of Advanced Composites" held at NITK, Surathkal during 10-14 Dec 2018.

21. Attended Faculty Development Program on "Applications of Finite Element Method in Mechanical & Civil Engineering" held from 07-11 January 2019 at SJEC Mangaluru.22. (List to be continued).

#### **Other Related Information:**

1. Undergone 8 weeks *Industrial Training* as a part of M.Tech Studies at Bosch India Pvt. Ltd Bangalore with case studies on Pre-stroke in Diesel Fuel Injection Pumps and Calibration of Dial Guages during June and July 2004.

2. M.Tech *Project Work* on Composite Materials carried out at Gas Turbine Research Establishment (GTRE) Bangalore during October 2004 - May 2005.

3. Effectively imparted training on *Computer Implementation in Professional Work*. A one week computer training program carried out for the benefits of teaching, non-teaching and administrative staffs of St. Joseph Engineering College Mangalore.

4. Conducted an in-house training on using ANSYS 10.0 for Linear Static Stress Analysis for Staffs of Mechanical Engineering Department during September 2005.

5. Successfully completed NPTEL online course on "Outcome based pedagogic principles for effective teaching" held during Sept-Nov 2018 securing ELITE grade.

6. (List to be continued).

#### Membership:

Life Member of Indian Society for Technical Education (ISTE). LM 47191.

Life member of Tribology Society of India (TSI). LM 5164

Life Member of Indian society for Advancement of Materials and Processing Engineering

(ISAMPE) L-1639

#### Subjects Taught at UG Level:

Computer Aided Engineering Drawing, Computer Aided Machine Drawing, Strength/Mechanics of Materials, Design of Machine Elements, CAD/CAM/CIM, Manufacturing Process-III, Non-Destructive Testing, Finite Element Method, Composite Materials, Automation and Robotics, Materials Testing Lab, Computational Analysis (ANSYS) Lab. CIM & Automation lab, Design lab etc.

# Subjects Taught at PG Level:

Finite Element Analysis, Advanced Materials Technology etc.

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Dr Sudheer M Date: 26 June 2024