

NAME: Dr. H S Shivashankar

Affiliation: Associate Professor, Dept of Mechanical, SIT,
Tumkur

Contact: +91-99012 45082

Email: hssmed@sit.ac.in

Vidwan ID: **91155**

Scopus ID: 57214954895

OrcID: 0000-0001-5030-0261

Faculty ID: SIT0098



Education

	Degree	Year	Institute	Specialization
1	Ph.D.,	2011	VTU, Belgaum	CFD and FEM
2	M E	1998	UVCE, Bangalore	Machine Design
3	B E	1993	SIT, Tumkur	Mechanical Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	14-10-2011 to till date	Associate professor	Siddaganga Institute of Technology, Tumkur
2	18-03-2009 to 13-10-2011	Assistant Professor	Siddaganga Institute of Technology, Tumkur
3	14-10-1994 to 17-03-2009	Lecturer	Siddaganga Institute of Technology, Tumkur

(Please fill in reverse order. Current designation should be at the top)

Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

- Convener -ICRDME-2023
- Convener -ICRDME-2022
- Convenor -Manovagem2016
- Convener -Webinar on EV vehicle
- Faculty adviser - Team Adrenaline Racing
- Dept. ISO Coordinator
- NBA Criteria – 8, 9 & 10 Coordinator

- Design and Theory of machine Lab Coordinator

Affiliations of Professional organizations

- SAE India
- Associate Member of The Institute of Engineers India.

Courses Taught

Undergraduate Courses

- Fundamentals of Mechanical Engineering
- Engineering Graphics
- Machine Drawing
- Finite Element Methods
- Computer Graphics
- Artificial Intelligence
- Finite Element Analysis (Open elective)
- Strength of Materials
- Kinematics of Machine
- Dynamics of Machine
- Computer Aided Engineering Drawing
- Elements of Machine Design-1
- Elements of Machine Design-2

Postgraduate Courses

- Finite Element Method and Analysis
- Fracture Mechanics and Failure Analysis

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	Batluri Tilak Chandra	Development of Aluminium- Albite Metal Matrix Composite and Its Property Evaluation For Automotive Application	July-2018-VTU
2	S. Shivakumar	Analysis and Study of Hyperelastic Material for Sealing in Industrial/Automotive Applications	Jan 2020-VTU
3	Siddalinga Prasad T. S	Characterization and property evaluation of forged cutting tools for different industrial application	Dec 2022-VTU

Research Areas

- CFD
- FEM
- Tool design

Publications

Journals

1. 'Design and CFD Analysis of Single Stage, End Suction, Radial flow Centrifugal Pump for Mine Dewatering Application' by Swapnil Urankar, **H S Shivashankar** and Sourabh Gupta, IJREAS Volume 2, Issue 2 (February 2012) ISSN: 2249-3905
2. Study of Effect of Forging on Cutting Tool Properties, Bharath H S, T S Siddalingaprasad, **H S Shivashankar**, International Journal of mechanical Engineering and Technology (IJMET), Volume 5, Issue 9, September (2014), pp. 115-125
3. 'Effect of cold quenching on Mechanical properties of Al7075 – Albite particulate composite', Batluri Tilak Chandra, Sanjeevamurthy, **H. S. Shivashankar**, International Journal of Scientific and Research Publications, Volume 6, Issue 8, August 2016, ISSN 2250
4. 'Evaluation of Mechanical Properties on As-Cast And Heat Treated Al7075 Alloy Reinforced With Albite Particulate Composites' Batluri Tilak Chandra, Sanjeevamurthy, **H S Shivashankar**, (IJAER) 2016, Vol. No. 12, Issue No. III, September, e-ISSN: 2231-5152, p-ISSN: 2454-1796.
5. 'Corrosion Studies of Al7075 - Albite Particulate Metal Matrix Composites in Sodium Chloride Solution', Batluri Tilak Chandra, Sanjeevamurthy, **H S Shivashankar**, International Journal of Materials Science ISSN 0973-4589 Volume 11, Number 1 (2016), pp. 71-77
6. 'Effect of Artificial Ageing on Abrasive Wear and Corrosion Behaviour of Al7075 – Albite Composites', Batluri Tilak Chandra, Sanjeevamurthy, **H S Shivashankar**, International Journal of Innovative Research & Development, October, 2016 (Special Issue) Vol 5 Issue 11, pp. 212-217
7. 'A Comparative Study on Properties of Forged and Heat-Treated D Type Tool Steel', T S Siddalingaprasad and **H S Shivashankar**, International Journal of Engineering Sciences & Management (ICAMS): March 2017 106-112, ISSN 2277 – 5528, Impact Factor- 4.015,
8. Finite Element Analysis of Hyper Elastic Sealing Material', S Shivakumar, **H S Shivashankar** and D P Girish. International Journal of Research in Engineering, IT and Social Science, ISSN 2250-0588, Impact Factor: 6.565, December 2018, Page 184-187.

9. 'Design Validation and Optimization of Stress Cone Part Through Finite Element Analysis', S Shivakumar, **H S Shivashankar** and D P Girish, Journal of Applied Science and Computations, ISSN 1076-5131, Volume VI, Issue 1, January/2019.
10. "Study the Hardness Behaviour of Heat-Treated Aluminium 7075 – Aluminium Nitride Particulate Composite", Annapoorna T L 1, Batluri Tilak Chandra2 , SanjeevaMurthy3, **H S Shivashankar**, ISSN: 2096-3246 Volume 54, Issue 02, November, 2022
11. "The Study of Sand Abresive Wera Behaviour of Forged Al7075-Aln Composites" Annapoorna T L, Batluri Tilak Chandra, Sanjeeva Murthy, **H S Shivashankar** ISSN: 1005-3026, Journal of Northeastern University Volume 25 Issue 04, 2022
12. 'Optimization of machining conditions with D type cutting tools using Taguchi technique' T.S. Siddaligaprasad, **H.S. Shivashankar**, T.M. Chandrashekharaiiah, Basavaraj Ganiger. Materials Today: Proceedings 52 (2022) 2087–2094, December 2021
13. 'Study the Hardness Behaviour of Heat-Treated Aluminium 7075-Aluminium Nitride Particulate Composite', Annapoorna T.L.;Chandra B.T.;Murthy S, **H S Shivashankar.**, Journal of Mines, Metals and Fuels, **Volume 71, Year 2023, Pages 131-136**
14. 'Study of Tribological Behaviour of T6 Heat Treated Al7075-AIN Metal Matrix Composites' Annapoorna T.L., Chandra B.T, **H S Shivashankar**, Journal of Mines, Metals and Fuels, **Volume 71, Year 2023, Pages 137-143**

Conference papers

1. 'Study on Effect of forging on tool steel materials' T S Siddalingaprasad and **H S Shivashankar**, National conference held at Nagarjuna college of engineering, Bangalore on 13 June2014
2. 'Forging Effect on High Carbon and High Chromium Steel as a Single Point Cutting Tool' Bharath H S and **H S Shivashankar**, International conference
3. 'Influence of Glass fiber orientation on FE results for GF material models', S Shivakumar1 and **H S Shivashankar**, IOP Conf. Series: Materials Science and Engineering 149 (2016) 012146 doi:10.1088/1757-899X/149/1/012146 (Date 15-16 July 2016).
4. 'Effect of heat treatment on hardness of Al7075-Albite particulate composites' International Conference on Advanced Materials, Manufacturing, Management and Thermal sciences (AMMMT – 2016) September 23rd and 24th, 2016.
5. 'Effect of Heat Treatment on hardness of Al7075-Albite particulate composites' Batluri Tilak Chandra, Sanjeevamurthy, **H S Shivashankar**, Material Today, Proceedings 4 (2017) 10786-10791, Elsevier Publication.
6. "Optimization of machining conditions with D type cutting tools using Taguchi technique", T.S. Siddaligaprasad, **H S Shivashankar**, T.M. Chandrashekharaiiah, Basavaraj Ganiger. Volume 52, Part 3, 2022, Pages 2087-2094.

7. 'Evaluation of high temperature characteristics and tool life of high carbon and high chromium steel as a single point cutting tool' Bharath H.S and **Shivashankar H.S.** Materials Today: Proceedings, **Volume 4**, **Year 2017**, **Pages 10591-10595**, DOI:10.1016/j.matpr.2017.06.425

Patents

- "A Composition to Manufacture Packaging and Paper Based Material and a method there of" Indian Patent Filed during 2024-25.