

Name: Dr. H. Suresh Hebbar Atawale

Designation: Professor

Qualification: *Ph.D., (IIT Delhi, 1999), Tribology of Composite Materials*

M.E. (Indian Institute of Science, Bangalore, 1987), Machine Design

B.E. (Mysore University, 1981) Mechanical Engineering

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Courses taught:

Kinematics and Dynamics of Machinery, Machine Design, Machine Drawing, Mechanical Measurements, Materials Science and Metallurgy, Fracture Mechanics, Finite Elements Method, Technology of Composite Materials, Metal Removal Processes, Theory of Material Forming Processes, Failure of Materials in Mechanical Design , Tribology in Machine Design, Materials in Tribological Applications.

Research Interests:

Kinematic Synthesis, Fracture Mechanics, Ergonomics, Processing and Tribology of Composite Materials, Machinability, Metal Forming, Biomaterials, Biotribology.

Research Publications:

International Journals 12 National Journals 01
International Conference 12 National Conference 08

Publications in International Journals:

- 1 D. Srinivasa Rao, H Suresh Hebbar and M. Komaraiah, Surface Hardening of High – Strength Low Alloy Steels (HSLA) Dual-Phase Steels by Ball Burnishing Using Factorial Design, International Journal of Materials and Manufacturing Processes, Volume 22, No.7, September 2007, 825-829
- 2 D. Srinivasa Rao , H. Suresh Hebbar , M. Komaraiah and U. N. Kempaiah, Investigations on the Effect of Ball Burnishing Parameters on Surface Hardness and Wear Resistance of HSLA Dual-Phase Steels, International Journal of Materials and Manufacturing Processes, Volume 23, No. 3, March 2008, 295- 302
- 3 D. Srinivasa Rao , H. Suresh Hebbar , M. Komaraiah and U. N. Kempaiah, Studies on the effect of ball burnishing parameters on surface hardness of HSLA dual phase steels using factorial design, Transactions of Indian Institute of Metals – An International Journal of Minerals, Metals and Materials Engineering, Volume 61, Issue 2, April 2008, pp 187-192
- 4 D. Srinivasa Rao , H. Suresh Hebbar , M. Komaraiah and U. N. Kempaiah, Investigations on the effect of ball burnishing parameters on surface roughness and corrosion resistance of HSLA dual-phase steels, East African Journal Of Sciences (EAJS), An International and Multi-disciplinary Journal , Volume 2, pp 164-169
- 5 Sudheer Reddy, H.Suresh Hebbar and P G Mukunda, Structure and Mechanical Properties of SiC_p Reinforced and Al₂O_{3p} Reinforced Al-Si alloy Composites, International Journal of Materials Sciences, Volume 5, Number 2 (2010), pp. 217–231.
- 6 Sudheer Reddy, H.Suresh Hebbar and P G Mukunda, Wear and Machinability Studies of SiC_p Reinforced and Al₂O_{3p} Reinforced Al-Si Alloy Composites, International Review of Mechanical Engineering, Volume 4, Number 1 (2010), pp. 28-34.
- 7 Ravi Mishra, Anilkumar H.C., and Suresh Hebbar H, Tribological Characterization of Fly Ash Reinforced Aluminium Alloy (Al 6061) Composites, International Journal of Natural and Engineering Sciences 4 (1) (2010) pp 77-82.
- 8 Anilkumar H.C., Hebbar H.S. and Ravishankar K.S., Mechanical Properties of Fly Ash Reinforced Aluminium Alloy (Al6061) Composites, International Journal of Mechanical and Materials Engineering, 6 (1) (2011), pp 41-45.

- 9 Anil Kumar H.C, N.K.Udayashankar , Sudheendra P and H.S.Hebbar , Microstructural and Tribological Characterisation of Tin Coated Aluminium Alloy (6061), International Journal of Mechanical Engineering , Volume 1, Issue 1, (2012), pp 73-78.
- 10 Anilkumar H.C. and H. Suresh Hebbar , Effect of Particle Size of Fly ash on Mechanical and Tribological Properties of Aluminium alloy (Al6061) Composites and Their Correlations, International Journal of Mechanic Systems Engineering , Volume 3, Issue 1, (2013), pp 6-13.
11. Sanjeev N K, Vinayak Malik, H. Suresh Hebbar. “Verification of Johnson-Cook Material Model Constants of AA2024-T3 for use in Finite Element Simulation of Friction Stir Welding and its Utilization in Severe Plastic Deformation Process Modelling”, International Journal of Research in Engineering and Technology (IJRET), Vol-03, Iss-06, (2014), pp. 98-10.
12. Sanjeev N K, Vinayak Malik, H. Suresh Hebbar. “Effect of Coefficient of Friction in Finite Element Modeling of Friction Stir Welding and its Importance in Manufacturing Process Modeling Applications”, Volume-3, Issue-4, August 2014, pp. 755-762, ISSN 2277–8442, doi:10.6088/ijaser.030400001.

PhD Guidance :

Sl. No.	Name of Student	Thesis Title	Date of PhD degree awarded
1	D.Srinivas Rao	Characterization of Mechanical and Tribological Properties of Dual Phase Steels Suitable for Burnishing Process Using Experimental Methods	01-11-2010
2	Sudheer Reddy J.	Characterization of Stir Cast Silicon Carbide Particulate and Aluminum Oxide Particulate Reinforced Aluminum-Silicon Alloy Composites	08-07-2011
3	Anil Kumar H.C.	Mechanical and Tribological Characterization of Fly Ash Reinforced Aluminium Alloy 6061 Composites	02-12-2011

Photograph:

