

Dr S Prashantha

Assistant Professor, Dept of Mechanical Engineering, SIT

Contact:9448728954

Email: sprashantha@sit.ac.in

Vidwan ID: 91167

Scopus ID: 57132624900

OrcID: 0000-0003-3851-3314

Faculty ID: SIT0159



Education

	Degree	Year	Institute	Specialization
1	Ph.D	2016	JNTUA, Anantapur	Advanced Materials-SMA's
2	M.Tech.,	2006	UBDT College Of Engineering, Davanagere	Machine Design
3	B.E.,	1999	B.I.E.T, Davanagere	Mechanical

Professional Experience

	Date (from-to)	Designation	Organization
1	2011-Till date	Asst. Professor	SIT, Tumkur
2	2005 -2006	Project Trainee	ISRO, Bangalore
3	2003-2004	Lecturer	SIT, Tumkur
4	1999-2003	Lecturer	HMSIT, Tumkur

Positions held

- Associate NCC officer 5/4 coy, Army Wing . SIT, Tumkur [Lieutenant rank by Indian army (NCC/06110/29 dated 23/08/2008)].
- Working as ISO 9001:2015 Coordinator.
- Editorial board member for International Journal of Material Science and Applications.
- Faculty advisor for SUPRA-SAEINDIA college team

Affiliations of Professional organizations

- Life member of AICTE, New Delhi

- Life member The Institution of Engineers (India), Kolkata

Awards and Honors

- Award of Excellence in “Use of ICT in Education for Online and Blended Learning (MHRD)”.
- Best Paper award in International Conference (ICAMEES-2018).
- Awarded with Dale Carnegie & Mission 10 x certificates from Wipro- Mission 10 x programmes.
- Got the achievement award in eight sessions at ZEAL Attitudinal Workshop.
- Got the outstanding Performance Award in eight sessions at ZEAL Attitudinal Workshop.
- Chaired session in Three International Conferences.

Courses Taught

Undergraduate Courses

- | | |
|-------------------------------|----------------------------------|
| 1. Metal Forming Process | 2. Mechatronics |
| 3. Engg. Materials | 4. Kinematics of Machines |
| 5. Hydraulics & Pneumatics | 6. Industrial Engg. & Ergonomics |
| 7. Engg. System Design | 8. Operations Research |
| 9. Metal Forming Process | 10. Mechatronics |
| 11. Organisational Behaviour | 12. Design of Machine Elements-I |
| 13. Smart Materials & Systems | 14. Mechanical Vibrations |
| 15. Non Traditional Machining | 16. Samskrutika Kannada |

Postgraduate Courses

- Phase Transformation in Metals & Alloys
- Materials Synthesis and characterization Lab

Research Guidance

Sl. no	Name of the Scholar	Title	Year of completion
1	Dr. Naresh H	Synthesis and Investigation of Self-Healing Cu-Al-Mn SMAs Reinforced with Al metal matrix Composites	2024
2	Pradeep Kumar B C	Development of Efficient Reactor for Bio Diesel Production and Performance Study of CI engine using Bio Diesel	--

Research Areas

- Shape Memory Alloys,

- Hybrid Composites
- Shape Memory Composites
- Corrosion of Materials

Sponsored Projects

Ongoing Projects:

1. **Title:** Development of 2014Al-Cu coated Alumina Particulate Composites produced by novel two-step vortex method for Fork Hinge of Rudder
Funding Agency: VGST
Amount: 23.75 Lakhs
Duration: 3 Years
Role: Co-PI
2. **Title:** Thermomechanical Processing of FeMnAlNi Shape Memory alloy for Space Applications
Funding Agency: VTU, Belagavi
Amount: 8 Lakhs
Duration: 2 Years
Role: Co-PI

Completed Projects:

1. **Title:** Upgrading The Material Synthesis & Material Testing Lab
(Ref.No.8024/RIFD/MOD-299(Pvt.)/Policy-III/2011-12 Dated 16.03.2012)
Funding Agency: AICTE, New Delhi
Amount: 8 Lakhs
Duration: 1 Year
Role: -
2. **Title:** Preparation, Analysis of Physical Properties & Performance of Bio-Diesel in CI Engine (Ref. No 31S456)
Funding Agency: KSCST, Bangalore
Amount: 4 thousand
Duration: 1 Year
Role: Mentor
3. **Title:** Grain Separation from raw harvest using Suction Method (Ref. No 30S766)
Funding Agency: KSCST, Bangalore
Amount: 4 thousand
Duration: 1 Year
Role: Mentor

Publications

Journals

- Prashanth S , Bharath V, V Auradi , Manjunath Vatnalmath , Madeva Nagaral and Bharath Kumar S ,

Nagaraj Namdev, “Experimental Investigations of Mechanical Properties of Epoxy Composites Reinforced with Bamboo Fibres: The Effect of Sic Particulates and Carbon Fibres”, Academic Journal of Manufacturing Engineering, Volume 22, Issue 4, Year 2024, Pages 66 – 71.

- Prashantha S.;Omkaresh B.R., “Influence of Welding Parameters on Weld Timings, Temperature Variation and Mechanical Strength of Friction Stir Welded AA6061 and AA6082 Alloy”, Journal of Mines, Metals and Fuels, Volume 72, Year 2024, Pages 347-355.
- Naresh H.;Prashantha S.;Banapurmath N.R.;Umarfarooq M.A.;Vadlamudi C.;Krishnappa S. “Mechanical, fatigue, and superplasticity properties of Cu-Al-Mn, Cu-Al-Be-Mn shape memory alloy and their metal matrix composites”,AIMS Materials Science, Volume 11, Year 2024, Pages 129-149.
- Naresh H, Prashantha S, Santhosh N, Hasan Sh. Majdi,d Sameer Algburie and Abdul Razak Majed Alsubih, “Mechanical, fatigue and super plasticity properties of Cu–Al–Mn, Cu–Al–Be–Mn shape memory alloy and their metal matrix composites”, RSC Adv.,2024, 14, 31275–31290.
- Prashantha S, “Experimental Investigation on Fracture Toughness of Hydrogen Embrittled Cu-Al-Be Shape Memory Alloy”, Journal of Mines, Metals and Fuels, Volume 71, Year 2023, Pages 2089-2094.
- Roshith Kumar R.V.;Prashantha S.;Adarsh S.H.;Arun Kumara P.C, “A Review Article on FeMnAlNi Shape Memory Alloy”, Journal of Mines, Metals and Fuels, Volume 70, Year 2022, Pages 355-359.
- Arunakumara P.C.;Koti V.;Murthy N.;Pradeep Y.;Prashantha S.;Chandragowda M, “Design and Analysis of Robotic Arm for Serving Material in Automotive Industry”, International Journal of Vehicle Structures and Systems, Volume 14, Year 2022, Pages 215-218.

Conference Proceedings

- Naresh H. Prashantha S. Ramesha K. Santhosh N. Manjunatha M.C, “Investigation into the Mechanical, Fatigue and Superplastic Characteristics of Shape Memory Alloys (SMA) in Cu–Al–Mn, Cu–Al–Be–Mn, and Cu–Al–Fe–Mn Compositions and Their Composite Variants”, Springer Proceedings in Materials, Volume 60, Pages 407 – 422, 2024
- Praveen N.;Mallik U.S.;Shivaramu L.;Shivasiddaramaiah A.G.;Suresh R.;Prashantha S, “Synthesis and evaluation of machining characteristics of Cu-Al-Mn ternary shape memory alloys using CNC wire electric discharge machining”, AIP Conference Proceedings, Volume 2247, Year 2020
- Prashantha S.;Shivasiddaramaiah A.G.;Mallikarjun U.S, “Corrosion behaviour of Cu-Al-Be based shape memory alloy with and without coating”, Materials Today: Proceedings, Volume 17, Year 2019, Pages 147-154
- Shivasiddaramaiah A.G.;Mallik U.S.;Mahato R.;Shashishekar C.;Shivaramu L.;Prashantha S. “Evaluation of biocompatibility of Cu-Al-Be-Mn quaternary shape memory alloys using antibacterial test by agarwell diffusion method”, Materials Today: Proceedings, Volume 17, Year 2019, Pages 61-69
- Shivasiddaramaiah A.G.;Mallikarjun U.S.;Jeevan ;Prashantha S. “Synthesis and Evaluation of Fracture

Behaviour of Cu-Al-Be-Mn Quaternary Shape Memory Alloy”, Materials Today: Proceedings, Volume 5, Year 2018, Pages 24457-24465

- Shivasiddaramaiah A.G.;Mallikarjun U.S.;Praveen N.;Prashantha S.;Anupama C, “Evaluation of Biocompatibility of Cu-Al-Be-Mn Quaternary Shape Memory Alloy”, Materials Today: Proceedings, Volume 5, Year 2018, Pages 24799-24808
- Nagaveene, V. M.;Ningappa, C.;Prashantha, S.;Ananda Kumari, R, “Thermoluminescence studies in ternary alkali halide mixed crystals (KCl) 0.9-x (KBr) x (NaI) 0.1 doped with lithium sulphate”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 11260-11264
- Naresh H.;Bharath H.S.;Prashantha S. “The Influence of Alloying Constituent Fe on Mechanical Properties of NiTi Based Shape Memory Alloys”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 11251-11259
- Prashantha S.;Veerasha R.B.;Shashidhara S.M.;Mallikarjun U.S.;Shivasiddaramaiah A.G. “A Study on Machining Characteristics of Al6061-Sic Metal Matrix Composite through Wire - Cut Electro Discharge Machining”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 10779-10785
- Shivaramu L.;Shivasiddaramaiah A.G.;Mallik U.S.;Prashantha S, “Effect of Ageing on Damping Characteristics of Cu-Al-Be-Mn Quaternary Shape Memory Alloys”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 11314-11317
- Shivasiddaramaiah A.G.;Mallik U.S.;Krishnakanth C.;Prashantha S. “Evaluation of Shape Memory Effect and Wear Characteristics of Cu-Al-Be-Mn Quaternary Shape Memory Alloys”, Materials Today Proceedings, Volume 4, Year 2017, Pages 10099-10103
- Prashantha S.;Shashidhara S.M.;Mallikarjun U.S.;Shivasiddaramaiah A.G,” Evaluation of Shape Memory Effect and Wear Properties of Cu-Al-Be Shape Memory Alloys”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 10123-10127
- Shivasiddaramaiah A.G.;Mallik U.S.;Jayanth V.;Prashantha S, “Evaluation of Shape memory effect and Pseudo elastic effect of Cu-Al-Be-Mn Quaternary shape memory alloys”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 10109-10112
- Shivasiddaramaiah A.G.;Mallikarjun U.S.;Shivaramu L.;Prashantha S. “Damping Characteristics of Cu-Al-Be-Mn Quaternary Shape Memory Alloys”, Materials Today: Proceedings, Volume 4, Year 2017, Pages 8948-8953
- Prashantha S.;Mallikarjun U.;Shashidhara S, “Preparation and characterization of Cu-Al-Be shape memory alloys with Cr as grain refining additive”, Applied Mechanics and Materials, Volume 592-594, Year 2014, Pages 700-704

Editor/ Reviewer of Journal

- Editorial board member for International Journal of Material Science and Applications
- Reviewer of Journals

Invited Lectures, talks and workshops

- Resource person for short term training programme on “Computer Aided Engg. Graphics” conducted for Polytechnic Lecturers at Govt. Polytechnic, Tumkur

- Delivered Lecture on “Shape Memory Alloy” in One week FDP Programme on “Research Issues & Challenges in Mechanical Engg.” at BNMIT, Bangalore