Dr. BHARATH H S

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Education

	Degree	Year	Institute	Specialization
1	Ph.D.	2021	NITK, Surathkal	Additive Manufacturing
2	M.Tech	2014	VTU, Belagavi	Manufacturing Science and Engineering
3	BE	2012	VTU, Belagavi	Mechanical Engineering

Professional Experience

	Date (from-to)	Designation	Organization
1	July 2015 to Till Date	Assistant Professor	Siddaganga Institute of Technology, Tumkur
2	July 2014 – July 2015	Assistant Professor	Channabasaveshwara Institute of Technology, Gubbi, Tumkur

Positions held

1. Ideation and Skill Development Lab Coordinator
2. Dept. Industrial Visit Coordinator
3. Dept. ISO Coordinator
4. Dept. Academic Audit Coordinator
5. Dept. Sports Coordinator
6. NBA Criteria – 8, 9 & 10 Coordinator
7. NAAC Criteria – 1 Coordinator
8. Dept. Strategic Plan – 2.01 coordinator

Affiliations of Professional organizations

1. Associate Member of **The Institute of Engineers India.**

Awards and Honors

1. **Best Paper Award** for the paper "Renewable energy resource using principle of Archimedean screw".

Courses Taught

Undergraduate Courses

Sl.No.	Name of the Subject
1	Manufacturing Process – II (UG)
2	Computer Integrated Manufacturing (UG)
3	Non-Traditional Machining (UG)
4	Metal Casting & Joining Process (UG)
5	Industrial Engineering & Ergonomics (UG)
6	Rapid Prototyping & MEMS (UG)
7	Machine Tools & Machining Process (UG)
8	Metal Cutting & Forming Process (UG)
9	CAD/CAM & CIM (UG)
10	Smart Materials & MEMS (UG)
11	Rapid Prototyping (UG)
12	Introduction Mechanical Engineering (UG)
13	Additive Manufacturing (UG)
14	Manufacturing Process
15	Universal Human Values (UG)
16	Computer Aided Engg. Drawing (UG)
17	Computer Aided Machine Drawing (UG)

Research Areas

1. 3D Printing,
2. Polymer composites,
3. Syntactic foams,
4. 3D Printed Sandwich composites,
5. FGMs,
6. Metal Cutting tools

Publications

Journals

1. B. V. Triveni, H. S. Lalithamba, **H. S. Bharath**, N. V. Kumar, G. K. Prashanth, (2024) Three-Dimensional Printed Integrated Electrochemical Devices for Various Applications– A Review, Chemistry Select, 9, e202402463.
2. **Bharath H S,** Akshay Sawardekar, Sunil Waddar, P Jeyaraj and Mrityunjay Doddamani (2021). "Effect of axial compression on dynamic response of concurrently printed sandwich." Composite Structures, 259: Art. No. 113223.

3. **Bharath H S**, Dilip Bonthu, Suhasini Gururaja, Pavana Prabhakar and Mrityunjay Doddamani (2021). “Flexural response of 3D printed sandwich composite.” Composite Structures, 259: Art. No. 113732.
4. **Bharath H S**, Dilip Bonthu, Pavana Prabhakar and Mrityunjay Doddamani (2020). “Three-dimensional printed lightweight composite foams.” ACS Omega, 5(35): p. 22536–22550.
5. **Bharath H S**, Akshay Sawardekar, Sunil Waddar, P Jeyaraj and Mrityunjay Doddamani (2020). “Mechanical behavior of 3D printed syntactic foam composites.” Composite Structures, 254: Art. No.112832.
6. Dilip Bonthu, **Bharath H S**, Suhasini Gururaja, Pavana Prabhakar and Mrityunjay Doddamani (2020) “3D printing of syntactic foam cored sandwich composite” Composite Part – C, Vol. 3, Art.No. 100068.
7. **Bharath, H S**., P. Prabhakar, S. Gururaja, and M. Doddamani. “Compressive Behavior of 3D Printed Foam”. in Proceedings of the American Society for Composites—Thirty-Fifth Technical Conference. 2020.
8. Bonthu Dileep, Rohith Prakash, **H.S. Bharath**, P. Jeyaraj, Mrityunjay Doddamani (November, 2021) “Dynamic behavior of concurrently printed functionally graded closed cell foams” Composite Structures, Volume 275, Art. No.114449, ISSN 0263-8223.
9. RajatNeelam, Shrirang Ambaji Kulkarni, **H.S.Bharath**, SatvasheelPowar, Mrityunjay Doddamani. “Mechanical response of additively manufactured foam: A machine learning approach” Results in Engineering, Volume 16, December 2022, 100801.
10. Bonthu, D., **H.S., Bharath**., Bekinal, Jeyaraj, P. and Doddamani, M. (2023), "Dynamic response of 3D printed functionally graded sandwich foams", Rapid Prototyping Journal, Vol. 29 No. 10, pp. 2257-2271.
11. **H. S. Bharath** and H.S. Shivashankar. (2017) “Evaluation of high temperature characteristics and tool life of high carbon and high chromium steel as a single point cutting tool” Materials Today: Proceedings, Volume 4, Issue 9, Pages 10591-10595, ISSN 2214-7853.
12. H. Naresh, S. Prashantha, and **H. S.Bharath**. (2017) “The Effect of Ternary Element Fe on mechanical properties in NITI Shape Memory Alloys” *International Journal of Engineering Sciences & Management*, Pages 127-136, ISSN 2277 – 5528.
13. H. Naresh, **H. S.Bharath** and S. Prashantha (2016) “The Influence of Alloying Constituent Fe on Mechanical Properties Of NiTi Based Shape Memory Alloys”

Materials Today: Proceedings, Volume 4, Issue 10, Pages 11251-11259, ISSN 2214-7853.

Conference Proceedings

1. "Dynamic Impact Resistance of Composite Sandwich Panels with 3-D Printed Polymer Syntactic Foam Cores". in Proceedings of the American Society for Composites—Thirty-Sixth Technical Conference. September 20th & 22nd 2021.
2. "Compressive behavior of 3D printed foam." Proceedings of the American Society for Composites - 35th Annual Technical Conference, September 14-16, 2020, NJ, USA.
3. "Investigation of Mechanical Properties of Aluminium 6061/ Red Mud MMC with different weight fractions" at International Conference on Advanced Technologies in Engineering, Management and Sciences – ICATEMS'17 during 16th & 17th November 2017 at Madanapalle, India.
4. "Study on Effect of Forging & Heat Treatment on Tool Steel Materials" at International Conference on Research Trends in Engineering, Science & Technology-2017 organized by Institute of Engineering Research, held at Trivandrum, Kerala.
5. "The Effect of Ternary Element Fe on mechanical properties in NiTi Shape Memory Alloys" held at Malnad College of Engineering Hassan, Karnataka, India during March 3rd to 5th 2017
6. "The Influence of Alloying Constituent Fe on Mechanical properties of NiTi Based Shape Memory Alloys" at International conference on Advanced Materials, Manufacturing, Management and Thermal Science (AMMMT 2016) September 23-24, 2016 held at SIT, Tumakuru.
7. "Estimation of High Temperature Characteristics and Tool Life of High Carbon and High Chromium Steel" at International Conference on Recent Trends in Engineering and Material Science-2016 at Jaipur University, Jaipur, Rajasthan; to be published in Elsevier Journal
8. 'Forging Effect on High Carbon and High Chromium Steel as a Single Point Cutting Tool' at sixth International joint conference on Advances in Engineering and Technology-2015, organized by Institute of Doctors, Scientists and Engineers at Cochin, Kerala; to be published in TATA McGraw-Hill Education
9. 'Study on Effect of Forging on Tool Steels Materials' at International conference held at Nagarjuna Institute of Technology Bangalore in 2014
10. 'Study of Cutting Tool Properties on Forged Tool Steels' at International conference held at Vidya Vardhaka College of Engineering, Mysore in 2014.

Book Chapters

1. **Bharath H S**, Balu Patil and Mrityunjay Doddamani, "3D Printing of GMB based Syntactic Foams" Lightweight and Sustainable Composite - Preparation, Properties and Applications, Woodhead Publishing, 2023, Pages 97-116, ISBN: 978-0-323-95189-0

Books

1. Doddamani, M., **Bharath, H.S**., Prabhakar, P., Gururaja, S. (2023). Material Systems and Methods. In: 3D Printing of Composites. Materials Horizons: From Nature to Nanomaterials. Springer, Singapore. Print ISBN: 978-981-99-1729-7. Online ISBN: 978-981-99-1730-3.

Guest Lecturers

1. Delivered a lecture on "Additive Manufacturing of Syntactic Foam Sandwich Composite" at Department of Technical Education, Government of Kerala sponsored FDP organized by Government Engineering College, Waynad.

Trainings Attended

1. Undergone training program conducted on Basic Hydraulics and Pneumatics organized by VTU-Bosch Rexroth Centre of Competence in Automation Technology, Mysore.
2. Undergone Industrial training at Mann and Hummel Filters Pvt. Ltd, Tumkur.
3. Under gone Industrial training at Fitwel Tools & Forgings Pvt. Ltd, Tumkur
4. Attended MISSION 10X training program conducted by Wipro.

Workshops/Guest lectures organized

1. Organized a guest lecture on "CAE/CFD APPLICATIONS IN PRODUCT DESIGN" by CTO, Altair Engineering, Bangalore for Mechanical Engineering students on 8/12/2021 at SIT, Tumkur.
2. Organized a guest lecture on "ENTREPRENEURSHIP AND STARTUPS" by Mr. Vireendra Kadham, CEO, Deltasys E-Forming, Belagavi for Mechanical Engineering students on 8/12/2021 at SIT, Tumkur.
3. Organized a guest lecture on "CAMPUS TO CORPORATE PLUS" by Mr. Shridhar Kubsad, Senior Manager, A&Z Groups Ltd. for Mechanical Engineering students on 17/12/2021 at SIT, Tumkur.

4. Organized a guest lecture on “CAREER GUIDANCE” by Dr. Shivaprasad C G, Deputy General Manager, HAL, Bangalore for 1st year Mechanical Engineering students on 01/12/2022 at SIT, Tumkur.
5. Organized a One Week Faculty Development Program on Introduction & Hands-on Training on Python Programming & IOT at IDEA lab SIT Tumkur from 17th to 21st September 2024