

National Institute of Technology, Tiruchirappalli:
Performa for CV of Faculty/ Staff Members

Curriculum Vitae



Brief Profile:

Dr. Mallikarjuna currently serves as an Assistant Professor at the Department of Production Engineering, National Institute of Technology Tiruchirappalli (NITT), Tamil Nadu, India.

Interests:

Additive Manufacturing, Numerical Modeling and Simulation of Additive Manufacturing Processes, Titanium Aluminide, Characterization, Residual Stress, Powders for Metal Additive Manufacturing, Reverse Engineering

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| 1. Name: | Dr. Mallikarjuna |
| 2. Designation: | Assistant Professor |
| 3. Office Address: | Room No.- 124, Ground Floor, OJAS Building, National Institute of Technology Tiruchirappalli, Tamil Nadu-620015 |
| 4. Telephone (Direct) (Optional): | |
| Telephone: | Extn (Optional): |
| Mobile (Optional): | +91 8310405141 |
| 5. Email (Primary): mallik@nitt.edu | Email (Secondary): mallubalichakra@gmail.com |
| 6. Field(s) of Specialization: | Research Areas: Additive Manufacturing, Process Modelling of Metal Additive Manufacturing Processes, Powders for Metal Additive Manufacturing, Residual Stresses, Titanium Alloys, Reverse Engineering, Laser Surface Melting |

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7. Employment Profile

Job Title	Employer	From	To
Assistant Professor (6000 AGP)	National Institute of Technology Tiruchirappalli	October 2022	Present
Assistant Professor (7000 AGP)	Amrita Vishwa Vidyapeetham, Coimbatore	August 2019	October 2022
Application Engineer	Cycloid System Pvt Ltd	September 2013	July 2014

8. Academic Qualifications (From Highest Degree to High School):

Examination	Board / University	Year	Division/ Grade	Subjects
Doctor of Philosophy	National Institute of Technology Karnataka (NITK) India	2020	-	Mechanical Engineering
Master of Technology	Visvesvaraya Technological University, Belagavi, India	2013	First Class with Distinction	Computer Integrated Manufacturing
Bachelor of Engineering	Visvesvaraya Technological University, Belagavi, India	2011	First Class with Distinction	Mechanical Engineering
Diploma	Board of Technical Examinations, Bengaluru, India	2008	First Class	Mechanical Engineering (Gen)

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Orientation Programme Coordinator	Amrita Vishwa Vidyapeetham	February 2022	March 2022
Advisor	Amrita Vishwa Vidyapeetham (UG students)	August 2020	July 2022
Faculty coordinator	Amrita Vishwa Vidyapeetham (For Industrial Visit: 70 UG Students-Shakti Auto Components, Tiruppur, Tamil Nadu)	7 th May 2022	7 th May 2022
Faculty coordinator	Amrita Vishwa Vidyapeetham (For Industrial Visit: 17 PG students, TIFAC-	16 th August	16 th August 2022

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CORE-LAB PSG-Tech, Coimbatore, Tamil Nadu	2022	
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10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Reviewer	National Innovation Foundation-India (NIF) Autonomous Body of Department of Science and Technology, GoI	13 th October 2022	31 st October 2022
Paper-Setter	Jain University Bengaluru	October 2019	October 2019
Paper-Setter	Sri Krishna College of Engineering and Technology	May 2022	May 2022
Paper-Setter	Department of Mechanical Engineering, Nitte Meenakshi Institute of Technology, Yelahanka, Bengaluru	Dec 2022	Dec 2022

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2012	36 th Series Student Project Programme	Karnataka State Council for Science and Technology (KSCST)

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2014	Full Time PhD Scholarship	MHRD Govt of India	July 2014	June 2019

13. Details of Academic Work

(i) Curriculum Development

(ii) Courses taught at Postgraduate and Undergraduate levels

The following courses are taught at the UG and PG level as a course mentor and faculty according to the Outcome-based education (OBE) standards.

Theory Courses

Engineering Drawing

Manufacturing Process-I

Lab Courses

Manufacturing Practice

Finite Element Method Lab

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Manufacturing Process-II

Manufacturing Process Lab

Mechanics of Solids

Additive Manufacturing Lab

Engineering Graphics CAD

Additive Manufacturing

(iii) Projects guided at Postgraduate level

(iv) Other contribution(s)

- **Manuscript Peer-Reviewer**

- Materials Research Express,
- Engineering Research Express,
- Surface Topography,
- Journal of Physics,
- Measurement Science,
- Australian Journal of Mechanical Engineering

- **Guest Lecture**

- Arranged a Guest Lecture on Metal Additive Manufacturing at Amrita Vishwa Vidyapeetham, **Coimbatore, 19-12-2019**

14. Details of Major R&D Projects

Title of Project	Funding Agency	Duration		Status
		From	To	Ongoing/ Completed

15. Number of PhDs guided

Name of the PhD Scholar	Title of PhD Thesis	Role (Supervisor/ Co-Supervisor)	Year of Award

16. Participation in Workshops/ Symposia/ Conferences/ Colloquia /Seminars/ Schools etc. (mentioning the role) (*Selected conferences and workshop)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
3 rd – 4 th May 2013	International conference on advanced materials,	International	Participant & Paper	Siddaganga Institute of	SIT, Tumkur,

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	manufacturing, management & thermal sciences (AMMMT-2013)		presenter	Technology	Karnataka, India
1-2 Sept. 2014	4th international Conference on Additive Manufacturing Technologies	International	Participant	AMSI	Nimhans Convention Center, Bangalore, India
6th -7th February, 2015	International Conference on Additive Manufacturing, 3D Printing & 3D Scanning	International	Participant	Vel Tech University	The Hilton, Guindy, Chennai
3-4 October 2015	17th ISME Conference on Advances in Mechanical Engineering Under the Sponsorship of Technical Education Quality Improvement Programme-II	National	Participant	Department of Mechanical Engineering Indian Institute of Technology Delhi Hauz Khas, New Delhi 110016, India	Indian Institute of Technology Delhi
30-31 st August 2016	NAFEMS International Conference on Engineering Modeling, Analysis, Simulation and 3D Printing	International	Participant & Paper presenter	NAFEMS	Nimhans Convention Center, Bangalore, India
16 th -18 th December 2016	6th International and 27th All India Manufacturing, Technology, Design and Research conference (AIMTDR 2016)	International	Participant & Paper presenter	COE Pune	COE Pune
11-14 November, 2017	71st Annual Technical Meeting and International Symposium on Lightweighting for Defence, Aerospace, and Transportation	International	Participant & presenter	BITS, Pilani- K K Birla Goa Campus, India	BITS, Pilani- K K Birla Goa Campus, India
March 16-17 th , 2018	International Conference on Digital Fabrication (ICDF 2018): 3D Printing, Industry 4.0 and beyond	International	Participant & presenter	Mechanical Engineering, IIT Hyderabad Campus	IIT Hyderabad Campus
16-17 th May 2018	All India Seminar on Residual Stress and Advanced NDE Techniques for Structural Integrity Assessment: Key Challenges & Remedies	National	Participant & presenter	National Design and Research Forum, The Institution of Engineers (India),	National Institute of Advanced Studies, IISC Campus, Bangalore

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				National Institute of Advanced Studies	
29 th Feb, 2012	One Day Workshop on Emerging Trends in Nanotechnology/Nanomaterials	National	Participant	Mechanical Engineering, M.S. Ramaiah Institute of Technology	M.S. Ramaiah Institute of Technology, Bangalore
16 th November 2014	One Day Workshop on Research methodology and Structural Equation Modeling	National	Participant	Department of Humanities, Social Sciences and Management	NITK, Surathkal
May 05 - 09 th , 2015	Five Day Short-Term Training Program (STTP) on 3D Printing Experience	National	Participant	Department of Mechanical Engineering, National Institute of Technology, Warangal	National Institute of Technology, Warangal
22 nd – 27 th June, 2015	Doctoral Workshop on Research into Design Centre for Product Design and Manufacturing	National	Participant	Centre for Product Design and Manufacturing	India Institute of Science
29 th -30 th August 2016	NAFEMS Conducted Workshop on 3D Printing and Advanced CAD for Product Development	National	Participant	NAFEMS	Dayanand Sagar University Bangalore, India
28 to 30 th September 2016	Three Day Workshop National Workshop on Advanced Materials and Manufacturing Organized	National	Participant	Mechanical Engineering, National Institute of Technology Karnataka, Surathkal	at National Institute of Technology Karnataka, Surathkal, Mangalore, Karnataka, India
27 th February 2017	One Day Workshop on Simulation of Manufacturing Processes Sponsored by TEQIP-II	National	Participant	Mechanical Engineering, National Institute of Technology Karnataka, Surathkal	National Institute of Technology Karnataka, Surathkal, Mangalore, Karnataka, India
March 09-	Three Day National Workshop	National	Participant	Mechanical	National

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11 th , 2017	on Laser Processing of Materials organized on Sponsored by TEQIP-II			Engineering, National Institute of Technology Karnataka, Surathkal	Institute of Technology Karnataka, Surathkal, Karnataka, India
21 st & 22 nd March 2018	Indo-Australian Workshop on Advances in Materials and Additive Manufacturing (AM ²),	National	Participant	Research Park, IIT Madras	Research Park, IIT Madras, Chennai
09 – 13 th Nov 2020	AICTE Training and Learning (ATAL) Academy Online FDP on " ADDITIVE MANUFACTURING"	National	Participant	Noida Institute of Engineering & Technology.	Noida Institute of Engineering & Technology.

17. Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized (as Chairman/ Organizing Secretary/ Convenor / Co-Convenor)

Title of Activity	Level of Event (International/ National/ Local)	Date (s)	Role	Venue

18. Invited Talks delivered

Topic	Date	Inviting Organization
Guest Lecture on Welding Techniques	18-04-2020 to 21-04-2020	Sridattha Group of Institutions Sheriguda, Hyderabad, India
One Wek lecture Series on Advanced Materials and Applications in Mechanical Engineering	24-12-2022	Department of Mechanical Engineering PES Institute of Technology and Management NH 206, Sagara Road, Shivamogga - 577 204, Karnataka, India

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KTU Sponsored Faculty Development Program on Artificial Intelligence and Machine Learning in Manufacturing 18th -20th January 2023	19-01-2023 & 20-01-2023	Department of Mechanical Engineering Adi Shankara Institute of Engineering and Technology Vidya Bharathi Nagar, Mattoor, Kalady, Ernakulam, Kerala 683574, India
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19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Associate member	Indian Engineers Institute (IEI)	AM147064-5

20. Academic Foreign Visits

Country	Duration of Visit	Programme

21. Publications

(A) Refereed Research Journals:

Author(s)	Title of Paper	Journal	Volume (No.)	Page numbers	Year	Impact Factor of the Journal (Optional)
Ganesan Narendran, B Mallikarjuna , B K Nagesha & N Gnanasekaran	Experimental investigation on additive manufactured single and curved double layered microchannel heat sink with nanofluids	Heat and Mass Transfer	59	1-22	2013	
Mallikarjuna B , Edward W. Reutzel	Reclamation of Intermetallic Titanium Aluminide Aero-engine Components Using Directed Energy Deposition	Manufacturing Review	9	21	2022	

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Chiniwar, Dundesh S., Harsha Alva, Vijay Raghav Varada, Mallikarjuna B, and Shivashankar Hiremath	Technology Investigation of Automatic Bed Levelling System for Fused Deposition Modelling 3D Printer Machine	International Journal of Modern Manufacturing Technologies	15	23-32	2022	
Jayanth N., Senthil P, and Mallikarjuna B	Experimental investigation on the application of FDM 3D printed conductive ABS-CB composite in EMI shielding	Radiation Physics and Chemistry	198	110263	2022	
Mallikarjuna B, Srikanth Bontha, Prasad Krishna, Vamsi Krishna Balla	Characterization and thermal analysis of laser metal deposited γ -TiAl thin walls	Journal of Materials Research and Technology	15	6231- 6243	2021	
Mallikarjuna B, Srikanth Bontha, Prasad Krishna, Vamsi Krishna Balla	Prediction and validation of residual stresses generated during laser metal deposition of γ - Titanium aluminide thin wall structures	Materials Research Express	6	106550	2019	
Mallikarjuna B, Srikanth Bontha, Prasad Krishna, Vamsi Krishna Balla	Laser Surface Melting of γ - TiAl Alloy: An Experimental and Numerical Modeling Study	Materials Research Express	6	046543	2019	

(B) Conferences/Workshops/Symposia Proceedings

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Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page numbers	Conference Theme	Venue	Year
Mallikarjuna B, Jayachristiyan K.G	Innovative Modeling and Rapid Prototyping of Turbocharger Impeller	International Conference on Advanced Materials, Manufacturing, Management & Thermal Sciences (ISBN: 13 978-81-926304-0-3)		International Conference on Advanced Materials, Manufacturing, Management & Thermal Sciences	Tumkur, India	2013
Barsha Hazarika, Mallikarjuna B, Prasad Krishna, Vamsi Krishna Balla, Srikanth Bontha	Numerical Modelling of Laser Additive Manufacturing Processes	NAFEMS India Regional Conference		NAFEMS India Regional Conference	Bengaluru, India	2016
Mallikarjuna B, Prasad Krishna, Vamsi Krishna Balla, Mitun Das and Srikanth Bontha	Understanding Thermal Behavior in Laser Processing of Titanium Aluminide (TiAl) Alloys	International & 27th All India Manufacturing Technology, Design and Research Conference (ISBN-978-93-86256-27-0)		International & 27th All India Manufacturing Technology, Design and Research Conference	Pune, India	2016

(C) Books & Monographs

Author(s)	Title of Book/Monograph	Name of Publishers	Year of Publication	ISSN/ISBN Number