

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

7. Employment Profile

Job Title	Employer	From	To
Assistant Professor	Kongu Engineering College	13-6-2011	20-12-2011
Teaching assistant [HTRA]	IIT Madras	21-12-2011	17-03-2016
Post-doctoral fellowship	IIT Madras	18-03-2016	31-05-2016
Assistant Professor	Kongu Engineering College	08-06-2016	19-05-2017
Assistant Professor (Selection Grade)	Amrita Vishwa Vidyapeetham, Amritapuri campus	03-07-2017	10-03-2020
Assistant Professor	NIT Trichy	06-05-2020	Till date

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

Examination	Board / University	Year	Division/ Grade	Subjects
Ph.D. Degree	IIT Madras	2016	9.25/10	Mechanical Engineering
Master's Degree	Anna University, Chennai	2011	First Class with Distinction	Manufacturing Engineering
Bachelor's Degree	Anna University, Chennai	2009	First Class	Mechanical Engineering
CLASS XII	State Board of Tamilnadu	2005	93.90 %	-
CLASS X	State Board of Tamilnadu	2003	92.80 %	-

9. Academic/Administrative Responsibilities within the University

Position	Faculty/Department/Centre/Institution	From	To
Staff Advisor	Department B.Tech. (Production Engineering)	June 2021	Till date
MIS Coordinator	Production Engineering	June 2020	Till date
SOP Coordinator	Production Engineering	June 2020	Till date
NBA Committee member	Production Engineering	June 2020	Till date

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

10. Academic/Administrative Responsibilities outside the University

Position	Institution	From	To
Doctoral Committee Member	Amrita Vishwa Vidyapeetham Amritapuri Campus	2019	Till date
Doctoral Committee Member	Amrita Vishwa Vidyapeetham Bengaluru Campus	2022	Till date

11. Awards, Associateships etc.

Year of Award	Name of the Award	Awarding Organization
2017	Institute Research award	IIT Madras

12. Fellowships

Year of Award	Name of the Fellowship	Awarding Organization	From (Month/Year)	To (Month/Year)
2016	Post-doctoral fellowship	IIT Madras	18-03-2016	31-5-2016

13. Details of Academic Work

- (i) Curriculum Development
- (ii) Courses taught at Postgraduate and Undergraduate levels

Post Graduate Level

- Manufacturing management

Undergraduate Level

- Introduction to Production Engineering
- Kinematics and dynamics of machines
- Production drawing and cost estimation
- Engineering Graphics

(iii) Projects guided at Postgraduate level

S. No	Project title	Name	Course	Year
1	Experimental investigation into mechanical behavior of 3D printed pure nylon	Bandi Karthick	Manufacturing Technology	2022
2	Experimental investigation of flexural and impact behaviour of PETG polymer composite under solar	Dandaveni Shashi Kumar	Manufacturing Technology	2022

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

	irradiation			
3	Experimental investigation into impact behaviour of 3D printed nylon carbon fiber composite	Siddhesh Pravin salve	Manufacturing Technology	2022
4	Modeling and experimental investigation of tensile and flexural behaviour of 3D Printed components	Bandi Karthick	Manufacturing Technology	2021
5	Influence of FDM process parameters and heat treatment on compressive strength of 3D printed parts	Dandaveni Shashi Kumar	Manufacturing Technology	2021
6	3D Finite Element Analysis of screw threads under repeated transverse loading and multi axial loading	Siddhesh Pravin salve	Manufacturing Technology	2021

(iv) Other contribution(s)

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)

Date (s)	Title of Activity	Level of Event (International/ National/ Local)	Role (Participant/ Speaker/ Chairperson, Paper presenter, Any other)	Event Organized by	Venue
2011	Processing and applications of composite materials	National	Participant	IIT Madras	IIT Madras
2013	Thermal spray coating and Technologies for Industrial applications	National	Participant	IIT Madras	IIT Madras

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

2016	Techniques in Multiscale modeling	National	Participant	IIT Madras	IIT Madras
2017	Modeling, simulation & experimental approaches of unconventional manufacturing techniques	National	Participant	IIT Madras	IIT Madras
2017	Precision measurements in modern manufacturing	National	Participant	IIT Madras	IIT Madras
2018	Additive Manufacturing	National	Participant	IIT Kanpur	IIT Kanpur
2019	Recent advancement in high-speed machining technology and part inspection	National	Participant	IIT Madras	IIT Madras
2020	Key challenges and road ahead to additive manufacturing	National	Participant	IIT Madras	IIT Madras
2021	E-Content Development	National	Participant	NIT Trichy	NIT Trichy

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
High-performance coatings on cutting tools for industrial applications	21-03-2017	Kongu Engineering college
Research challenges in micro manufacturing process	31-10-2018	Amrita Vishwa Vidyapeetham Amritapuri
Online Teaching Through MS Team and Assessment Tools for Evaluation	31-08-2021	NIT Trichy

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

Research challenges in micromanufacturing and measurement	12-07-2021	Marian Engg. College, Trivandrum, Kerala
Introduction to Micromachining	23-07-2021	Sri Ramakrishna Engineering College, Coimbatore
Laser micro processing for biomedical applications	16-03-2021	Coimbatore Institute of Technology, Tamilnadu

19. Membership of Learned Societies

Type of Membership (Ordinary Member/ Honorary Member / Life Member)	Organization	Membership No. with date
Life Associate Member	Institution of Engineers India	AM1952628, 2-11-2020

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
Mishra, P. K., P. Kalidas and T. Jagadesh	Hole geometry and surface integrity assessment in drilling of Inconel 718 using laser texture filled solid lubricant tools	Industrial Lubrication and Tribology	73	1267-1274	2021
Nijin J R and T Jagadesh	Numerical simulation of the influence of tool geometry on energy consumption during micro turning of titanium alloy	Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical	236	1411-1420	2021

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

		Engineering			
T. Jagadesh and G.L. Samuel	Influence of deep cryogenic treatment and in-situ cryogenic micro turning of Ti-6Al-4V on cutting forces, surface integrity and chip morphology	International Journal of Precision Technology	8	312-334	2019
T. Jagadesh and G.L. Samuel	Finite Element Simulations of Micro Turning of Ti-6Al-4V using PCD and Coated Carbide tools	Journal of Institute of Engineers, Series C	98	5-15	2016
T. Jagadesh and G.L. Samuel	Mechanistic and Finite Element Model for Prediction of Cutting Forces during Micro-Turning of Titanium Alloy	Machining Science and Technology, An International Journal	19	593-629	2015
T. Jagadesh and G.L. Samuel	Investigations into Cutting Forces and Surface Roughness in Micro Turning of Titanium Alloy Using Coated Carbide Tool	Procedia Materials Science	5	2450-2457	2014
Pardha Saradhi V, Shashank V, Sai teja P, Anbarasu G, Bharat A, T. Jagadesh	Prediction of surface roughness and material removal rate in laser assisted turning of aluminium oxide using fuzzy logic	Materials Today: Proceedings	5	20343-50	2018
Shashank V, Pardha saradhi V, Jagadesh T	Modeling of Laser assisted machining process using Artificial Neural Network	Journal of Physics: Conference Series	1172	1-10	2019
Shashank V, Varma CVM, Chaudhari D, Sasank VS,	Prediction of micro abrasive intermittent jet machining process using adaptive neuro-fuzzy	AIP Conference Proceedings	2134	1-10	2019

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

Jagadesh T	inference system				
Harshith N, Devendra Y, Jagadesh T	Investigations into surface integrity and cylindricity error during peck drilling of aerospace alloy using graphite, MOS ₂ and blasocut lubricant	Materials Today: Proceedings	18	3091-8	2019
Sandeep reddy AV, Ajay kumar S, Jagadesh T	The Influence of graphite, MOS ₂ and Blasocut lubricant on hole and chip geometry during peck drilling of aerospace alloy	Materials Today: Proceedings	24	690-7	2020
Suresh N, Ganesh S, Jagadesh T	Investigations into edge radius and point angle on energy consumption during micro drilling of titanium alloy	Materials Today: Proceedings	26	586-91	2020
Dheeraj N, Sanjay S, Kiran Bhargav K, Jagadesh T.	Investigations into solid lubricant filled textured tools on hole geometry and surface integrity during drilling of aluminium alloy	Materials Today: Proceedings	26	991-7	2020
Nirmal K, Jagadesh T	Numerical simulations of friction stir welding of dual phase titanium alloy for aerospace applications	Materials Today: Proceedings	46	4702-8	2021
Ram MP, Narasimhan SV, Vikraman RV, Jagadesh T	Development of a 4-speed automated manual transmission for automobile applications	Materials Today: Proceedings	46	4387-94	2021

(B) Conferences/Workshops/Symposia Proceedings

Author(s)	Title of Abstract/ Paper	Title of the Proceedings	Page num bers	Conference Theme	Venue	Year
Jagadesh, T., G.L.	Finite element simulation for prediction	Proceedings of 10 th International	301- 304	New products and technology	IIT Madras	2017

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

Samuel	of cutting forces during in-situ cryogenic micro turning of titanium alloy	Conference On Precision, Meso, Micro And Nano Engineering		developments in the area of strategic, automotive, aerospace, electronics, and bio-medical industries require complex features on products, product miniaturization		
Jagadesh, T., G.L. Samuel	Investigations into cutting forces, surface roughness, and chip morphology during micro turning of cryogenically treated titanium alloy	Advances in materials and processing technologies conference		Advances in materials and processing technologies conference	Universidad Carlos III de, Madrid, Spain	2015
Jagadesh, T., G.L. Samuel	Finite Element Modeling for Prediction of Cutting Forces during Micro Turning of Titanium Alloy	5th International and 26th All India Manufacturing Technology, Design and Research Conference		Enhancing Manufacturing Through Newer Scientific Concepts	IIT Guwahati	2014
Jagadesh, T., A. Rajadurai	Study on composites made by Powder Metallurgy using Microwave Sintering	National conference on recent trends in Mechanical Engineering			GKM college of Engineering and Technology, Chennai	2011

(C) Books chapter

Author(s)	Title of Book Chapter	Name of Publishers	Year of Publication	ISSN/ISBN Number
TK Naveen, T Jagadesh	Experimental Investigations into Performance Evaluation of Thermosyphon Solar Heating System Using Modified PCM Modules	Springer, Singapore	2019	