

EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY

(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)

Rajampet, Annamayya District, A.P - 516126, INDIA

Faculty Profile

Basic Information:

NAME : Dr. A. Hemantha Kumar

DESIGNATION : Professor

DEPARTMENT : Mechanical Engineering

DATE OF BIRTH : **09-08-1974**

DATE OF JOINING : 02-09-2002

EMAIL ID : ahk@aitsrajampet.ac.in

EMPLOYEE ID : AITS031001



Academic Profile:

Qualification	Name of the Board/University	YEAR
Ph.D	Rayalaseema University	2017
M.Tech	S.V.U College of Engineering S.V university, Tirupati	2000
B.Tech	S.V.U College of Engineering S.V university, Tirupati	1998

Research Details:

1. Areas of Specialization :		Industrial & production Engineering
2. No. of Publications :		32
3. Awards Received :		-
4. Research Guidance		
	No. of PhD Guided:	-
	No. of M.Tech. Guided:	8
	No. of B.Tech. Guided:	25
5. Details of Professional Membership:		ISTE, IAENG
6. Subjects Ta	aught :	1. Optimization Techniques
, 0		2. Kinematics of Machinery
		3. Dynamics of Machinery
		4. Management Science
		5. Engineering Graphics
		6. Engineering Mechanics
		7. Operations Research
		8. Fluid Mechanics and Hydraulic Machinery



EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY

(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)
Rajampet, Annamayya District, A.P - 516126, INDIA

Publication Details:

Title		Publisher	Published Year
1.	Mechanical Responses of Bio-Inspired 3D-Printed Concrete Structures: Improving Performance with Nature-Inspired Design	Springer, ICIDDM 2k25 Conference	2025
2.	Enhancing Remote Sensing Image Fusion with Deep Learning Attention Fusion Residual Approach	Discover Applied Sciences (Springer), Online Publication	2025
3.	Monte Carlo Tree Search Algorithm for Strategic Planning in Humanoid Robotics	IEEE Xplore, ICC-ROBINS, DOI: 10.1109/ICC- ROBINS60238.2024.10533937	2024
4.	Deploying Healthcare Monitoring System for Elderly Patient Care using IoT & Neural Network Techniques	IEEE Xplore, AIC Conference, DOI: 10.1109/AIC61668.2024.10731003	2024
5.	Simultaneous Scheduling of Machine and Tools without Tool Delay using Crow Search Algorithm	Institute of Engineers Maharashtra, RAMMML-2022	2022
6.	Flexural and Impact Characterization of Polymer Laminated Composites Reinforced with Bi-Woven Glass Fibers	Journal of Optoelectronics Laser, Vol. 41, Issue 3, ISSN: 1005-00862	2022
7.	Design of Collaborative Robots for Arc Welding Applications Using Motosim Software	Neuro Quantology, Vol. 20, Issue 11, pp. 4044–4052, DOI: 10.14704/Nq.2022.20.11.Nq66407	2022
8.	Polymer Laminated Composites Reinforced with Bi-Woven Glass Fibers: Subjected to Tensile and Compression Loading	International Journal of Scientific Technology & Research, Vol. 9, Issue 2, pp. 6280–6284	2020
9.	Mixed Stream of Viscoelastic Liquid through a Porous Medium Situated in a Vertical Channel with Permeable Walls	IJRTE, Vol. 8, Issue 5, pp. 17–21	2020
10	. Free Convection Flow through a Porous Medium in the Third Grade Vertical Channel	IJAST, Vol. 29, No. 6, pp. 4825– 4831	2020
11	Flexural Analysis of Smart Structural Composite Laminates Using a New Higher Order Theory	IJMPERD, Vol. 9, Issue 2, pp. 311– 320	2019
12	Design and Fabrication of Low Cost Ball Milling Machine for Producing Nano Particles	International Journal of Engineering Research, Vol. 8, Issue 4, pp. 119–112	2019
13	Optimization of EDM Process Parameters in Machining through Hole Making of 17-4 PH Stainless Steel using Grey Taguchi Technique	International Journal of Engineering Research, Vol. 8, Issue 4, pp. 104–109	2019



EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY

(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)
Rajampet, Annamayya District, A.P – 516126, INDIA

14. Design and Fabrication of Motorised Staircase Climbing Trolley	International Journal of Applied Engineering Research, Vol. 13, Issue 17, pp. 13380–13385	2018
15. Impact of Thermal in Stokes Second Problem for Unsteady Second Grade Fluid Flow	IJRA Tech, Vol. 6, No. 9, pp. 2420– 2425	2018
16. Heat Transfer Effect on Oscillatory Flow of Jeffrey Fluid through Porous Medium in Tube	IJASRM, Vol. 3, Issue 12, pp. 149– 153	2018
17. Design and Fabrication of 1800° Wheel Rotation Vehicle	Journal of Engineering Technologies and Innovative Research, Vol. 6, Issue 5	2018
18. Optimization of Process Parameters on Surface Roughness & MRR on AISI1042 with Coated Tools	I-Manager's Journal of Mechanical Engineering, Vol. 7, No. 2	2017
19. Comparison of Optimum Cutting Parameters in Machining Die-Steel (EN-31)	Manufacturing Technology Today	2017
20. Investigation of Optimum Cutting Parameters for End Milling of H13 Die Steel	IJRA Tech, ISSN: 2321-9637	2017
21. Parametric Analysis of Optimum Cutting Parameters for AISI 1042 using PVD Tool	Manufacturing Technology Today, CMTI	2016
22. Optimization Process Parameters and Dielectric Fluid on Machining EN 31 using TOPSIS	IJERA, Vol. 6, Issue 9, pp. 13–18	2016
23. Comparison of Optimum Cutting Parameters in Machining Die Steel (EN 31)	IJSRD, Vol. 4, Issue 7, pp. 517–523	2016
24. Determination of Optimum Parameters in EDM on Die Steel by Taguchi and GRA	ICICA 2016 (Springer)	2016
25. Comparison of Optimum Cutting Parameters in Machining Die Steel (EN 31)	Manufacturing Technology Today	2016
26. Comparison of Optimum Cutting Parameters for AISI 1042 in Turning Operation by GA and PSS	Applied Mechanics and Materials, Vols. 813–814, pp. 285–291	2015
27. Experimental Investigation and Analysis of Cutting Parameters for AISI1042 using CVD Tool	IJ Applied Engineering Research, Vol. 10, No. 17, pp. 38061–38065	2015
28. Experimental Investigation of EDM Process Parameters on Stainless Steel & En41B	ELSEVIER Procedia Engineering 97, pp. 1551–1564	2014



EXCELLENCE IN EDUCATION; SERVICE TO SOCIETY
(ESTD, UNDER AP PRIVATE UNIVERSITIES (ESTABLISHMENT AND REGULATION) ACT, 2016)
Rajampet, Annamayya District, A.P - 516126, INDIA

Patent Details:

Title of Patent	Submitted/Published/Awarded	
Application Date Status Fuzzy Logic and Deep Learning Approaches Enhancing Industry 4.0 Implementation In Manufacturing and Control Sector	Published	