

11. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received

S.No	Name of Award	Awarding Agency	Year
1	Best Oral Presentation Award	IMME19, National Institute of Technology, Tiruchirappalli	2019
2	Best Paper award	IGMIGM 2015, Erode Sengunthar Engineering College, Perundurai, Erode.	2015
3	GATE Fellowship	IIT Kharagpur	2007-2009
4	Institute Fellowship for PhD	IIT Kharagpur	2009-2013

12. Publications (*List of papers published in SCI Journals, in year wise descending order*).

S.No.	Author(s)	Title	Name of Journal	Volum	Page	Year
1.	P Gupta, Karthik V, N Yedla	Elevated temperature compression behavior of Al-Cu50Zr50 nano-laminates	Transactions of the Indian Institute of Metals	73	1579-1585	2020
2.	Snehanshu Pal, Md. Meraj, Krishna Dutta, Ravindra Bhardwaj, Natraj Yedla, V. Karthik	Influence of Asymmetric Cyclic Loading on Structural Evolution and Deformation Behavior of Cu-5 at.% Zr Alloy: An Atomistic Simulation-Based Study	Journal of Materials Engineering and Performance	26	5197-5205	2017
3.	J Krishan, P Gupta, Karthik Vaduganathan, N Yedla	Superplastic Pd50Pt50 monocrystalline bimetallic alloy nanowire: a molecular dynamics simulation study	Metallurgical Research & Technology	114	302	2017
4.	V. Karthik, S. Sahoo, S.K. Pabi, S. Ghosh	On the phononic and electronic contribution to the enhanced thermal conductivity of water-based silver nanofluids	International Journal of Thermal Sciences	64	53-61	2013
5.	V. Karthik, S. Ghosh, S.K. Pabi	Effects of bulk stoichiometry and surface state of NiAl nano-dispersoid on the stability and heat transfer characteristics of water based nanofluid	Experimental Thermal and Fluid Science	48	156-162	2013
Publications in SCOPUS indexed Journals						
6.	M. Deepak Kumar, P.K.Palani, V. Karthik	Effect of welding parameters on joint strength of rotary friction welded UNS S31803 tubes	Materials Today: Proceedings https://doi.org/10.1016/j.matpr.2020.04.161	xx	xx	2020
7.	Aravinth Raj A, V Karthik, R Ramji, PG Venkatakrishnan	Synthesis and characterization of Ag and Al doped ZnO dispersed nanofluids for heat transfer applications	Materials Today: Proceedings	23(7)	2364-2367	2019
8.	PG Venkatakrishnan, V Karthik	Structural, morphological and mechanical properties of electroless Ni-B based alloy coatings	Materials Today: Proceedings	23(7)	2360-2363	2019

9.	S Chidambaram, Ashok Kamaraj, R Saravana Kumar and V Karthik	Shear Fracture and Industrial Overload Failure of Mechanical Fuse Shear Pin	IOP Conference Series: Materials Science and Engineering	377	012004	2018
10.	V Karthik, SK Pabi, SKR Chowdhury	Development of hydroxyapatite/polyvinyl alcohol bionanocomposite for prosthesis implants	IOP Conference Series: Materials Science and Engineering	314	012031	2018
11.	S Chidambaram, K Ashok, V Karthik, PG Venkatakrishnan	Microbiological corrosion of ASTM SA105 carbon steel pipe for industrial fire water usage	IOP Conference Series: Materials Science and Engineering	314	012027	2018
12.	S Dhanalakshmi, N Mohanasundararaju, PG Venkatakrishnan, V Karthik	Optimization of friction and wear behaviour of Al7075-Al2O3-B4C metal matrix composites using Taguchi method	IOP Conference Series: Materials Science and Engineering	314	012025	2018
13.	S Mithra, PG Venkatakrishnan, D Noorullah, V Karthik	Failure Analysis of Gold Dust defect in 430 grade Stainless Steel	IOP Conference Series: Materials Science and Engineering	314	012003	2018
14.	D Noorullah, SSM Nazirudeen, A Mukesh, V Karthik	Development of Closed Cell Metallic Foams for Automotive Crashworthiness	International Journal of Vehicle Structures & Systems	7	141	2015

Publications in other Journals

15.	K Shunmugesh, R Rajasekar, C Moganapriya, V Karthik	Optimization of Machining Force and Delamination Factor of GFRP in dry drilling process using Taguchi method	Advances in Natural and Applied Sciences	11	220-230	2017
16.	P Kumar, PG Venkatakrishnan, V Karthik	Effect of Welding Parameters on Mechanical Properties of Aluminium Thin Sheet Joints Produced by Ultrasonic Welding	Advances in Natural and Applied Sciences	11	90-95	2017
17.	Dhanalakshmi, S., P.G. Venkatakrishnan, V. Karthik, and N. Mohanasundararaju	Corrosion Studies of Stir Cast Hybrid Al7075-Al2O3 -B4C Metal Matrix Composites	Advances in Natural and Applied Sciences	10	279-283	2016
18.	Dhanalakshmi, S., P.G. Venkatakrishnan, V. Karthik, and N. Mohanasundararaju	Optimisation on Wear Process Parameters of Hybrid Metal Matrix Composite using Taguchi method	International Journal of Applied Engineering Research	10	219-224	2015
19.	Suresh Telu, V.Karthik, R. Mitra, S. K. Pabi	Effect of 10 at.% Nb addition on Sintering and High Temperature Oxidation of W _{0.5} Cr _{0.5} Alloy	Materials Science Forum,	710	308-313	2012

Publications in conference proceedings

1. Micro structural and Mechanical Properties of FSW Joints Between AA5086 and AA7075 Dissimilar Al Alloys, Rajesh Kannan Subbaraj, Ramesh S and **Karthik V**, World Conference on Innovations in Management, Science and Engineering (WCISE'19), 29-30th December 2019, Bangkok 10110, Thailand.
2. Effect of Composition on the Stacking Fault Energy of Copper-Nickel Alloys Using Molecular Dynamics Simulations, R Devi Janani, Sameer Aman Salman, Pavithra Priyadarshini and **Karthik V**, International Conference on Recent Trends in Metallurgy, Materials Science and Manufacturing (IMME 2019), December 28-29, 2019, National Institute of Technology, Tiruchirappalli.
3. Atomistic modelling of carbon nanotube networks and analysis of inter filler distance, Arun Kumar R, Sruthi S, Kiruthika A and **Karthik V**, International Conference on Recent Trends in Metallurgy, Materials Science and Manufacturing (IMME 2019), December 28-29, 2019, National Institute of Technology, Tiruchirappalli.
4. Synthesis and Characterization of Al and Ag Doped ZnO Dispersed Nano Fluids for Heat Transfer Applications, A. Aravinth Raj, R. Ramji, P.G. Venkatakrishnan, **V. Karthik**, International Conference on Materials and Spectroscopy (ICMS-2018), December 11-12, 2018, Saveetha Engineering College, Chennai.
5. Morphological and Hardness Evaluation of Electroless Ni-B-Zn Ternary Alloy Coatings, P.G. Venkatakrishnan, R. Ramji, **V. Karthik**, International Conference on Materials and Spectroscopy (ICMS-2018), December 11-12, 2018, Saveetha Engineering College, Chennai.
6. Failure Analysis of Gold Dust defect in 430 grade Stainless Steel, S Mithra, PG Venkatakrishnan, D Noorullah, **V Karthik**, International Conference on Advances in Metallurgy, Materials and Manufacturing (ICAMMM-2017), March 6-8, 2017, Salem, Tamilnadu
7. Microbiological corrosion of ASTM SA105 carbon steel pipe for industrial fire water usage International Conference on Advances in Metallurgy, S Chidambaram, K Ashok, **V Karthik**, PG Venkatakrishnan, Materials and Manufacturing (ICAMMM-2017), March 6-8, 2017, Salem, Tamilnadu
8. Ultrafine Silver Nanoparticles Dispersed Aqueous Colloidal Solution: A Solution for Enhanced Heat Transfer, **Karthik V.**, S. Ghosh, S.K. Pabi, NMD ATM Nanomaterials, Coimbatore (2015).
9. Experimental Study on Ultrasonic Welding of Aluminium Sheet to Copper Sheet by Vignesh. S, Venkatakrishnan P.G, **Karthik. V** in IIM NMD ATM, November 2015, Coimbatore
10. Parametric Optimization of Ultrasonic Metal Joining of Galvanized Iron and Stainless Steel Sheets by V. Gunaseelan, N. Balaji, Venkatakrishnan P.G., **V. Karthik**, in IIM NMD ATM, November 2015, Coimbatore
11. Effect of Alloying Elements on Case Depth and Compound Layer In Austenitic Nitro Carburizing Process For Wrought and PM Alloys by S. Govindaraj, K.R. Kiranraj, **V.Karthik**, Venkatakrishnan P.G., in IIM NMD ATM, November 2015, Coimbatore
12. Graphene Nanosheets Dispersed Aqueous Nanofluids For Heat Transfer Applications by Aravinth Raj A, Venkatakrishnan P.G., **V. Karthik**, in IIM NMD ATM, November 2015, Coimbatore
13. Parametric Optimization on Ultrasonic Metal welding of Al-Cu Joint by Kumar, P., Venkatakrishnan, P.G, **Karthik, V.**, International Conference on Advances in Materials, Manufacturing and Applications, April 9-11, 2015, Trichy, India.
14. Experimental analysis of residual stress in the various zones in gas welded EN-8 steel by Rajeshkannan, S., **Karthik, V.**, Manisekar, K., International Conference on Advances in Materials, Manufacturing and Applications, April 9-11, 2015, Trichy, India.
15. On the diffusion characteristics of copper at aluminium joints made using ultrasonic welding by Mujipur Rahaman A, Karthikeyan V, Venkatakrishnan P G, **Karthik V**, International Conference on Advances in Materials, Manufacturing and Applications, April 9-11, 2015, Trichy, India.
16. Characterization of ultrafine Ag dispersed nanofluids using High Resolution Transmission Electron Microscopy, Dynamic Light Scattering and UV-Vis Spectroscopy by Ghosh, S., **Karthik, V.**, Pabi, S. K., International Conference on Electron Microscopy, July 3-5, 2013, Kolkata, India

17. Multi-scale mathematical model for estimation of thermal conductivity enhancement in nanofluids by **Karthik, V.**, Pabi, S. K., Ghosh, S., NMD ATM, Science & Technology of materials, Jamshedpur (2012).
18. Thermal Conductivity of Ethylene Glycol Based Nickel Aluminide Dispersed Nanofluids. **V. Karthik**, S.K. Pabi and S. Ghosh, International Conference on Advances in Materials and Materials Processing (ICAMMP-2011), 9-11th December, 2011, Indian Institute of Technology, Kharagpur
19. Multi-scale stochastic-molecular dynamics approach to estimate thermal conductivity of nanofluids by Ghosh, S., Ghosh, M. M., **Karthik, V.**, Pabi, S. K., NMD ATM, Hyderabad (2011).
20. Development of Bionanocomposite for prosthesis implants by **Karthik, V.**, Pabi, S. K., Roy Chowdhury, S.K., 63rd NMD ATM, Salt Lake, Kolkatta, Symposium C (2009).

Other details

13. Detail of patents : NIL

14. Books/Reports/Chapters/General articles etc. : NIL

15. List of funded projects :

S.No.	Project Title	Funding Agency	Role	Amount (INR)
1.	Development of Nanostructured Titanium implants with Bioactive and Antibacterial composite coatings for Dental and Maxillofacial Applications	DST-RSF	Co-PI	94,03,920.00
2.	Development and Technology Transfer of Durni Coatings on Half-Shell	Loesche Energy Systems India Private Limited, Chennai	Co-PI	11,04,000.00

16. i-10 index : 03