

**Dr. R.KARTHIKEYAN**  
**LIST OF PUBLICATIONS**

**INTERNATIONAL JOURNALS**

- [1] **R. Karthikeyan**, V. Balasubramanian, (2010) Predictions of the optimized friction stir spot welding process parameters for joining AA2024 aluminum alloy using RSM. **International Journal of Advanced Manufacturing Technology**, Vol.51 pp 173-183. (Springer Publications)
- [2] **R.Karthikeyan**, V.Balasubramanian, (2012) Optimization and sensitivity analysis of friction stir spot welding process parameters for joining AA6061 aluminum alloy. **International Journal Manufacturing Research**. Vol.7(3) pp 257-272. (Inder Science Publications)
- [3] **R.Karthikeyan**, V.Balasubramanian, (2013) Statistical optimization and sensitivity analysis of friction stir spot welding process parameters for joining AA7075 aluminum alloy. **International Journal of Experimental Techniques**. Vol. 37 (2), pp 6-15 (Society for Experimental Mechanics Wiley-Blackwell)
- [4] **R.Karthikeyan**, V. Balasubramanian (2017) Optimization of Electrical Resistance Spot Welding and Comparison with Friction Stir Spot Welding of AA2024-T3 Aluminum Alloy Joints. **5th International Conference of Materials Processing and Characterization (ICMPC 2016) Materials Today: Proceedings** Volume 4, pp 1762 – 1771(Elsevier)
- [5] B.Ch. Nookaraju, P.S.V. KurmaRao, S. Naga Sarada, **R.Karthikeyan**, A.Vinay (2018) Optimization of process Parameters of Helical Grooved Heat Pipe Using Response Surface Methodology **6th International Conference of Materials Processing and Characterization (ICMPC 2017) Materials Today: Proceedings** 5 , 5262–5271.(Elsevier)
- [6] S. Ravisekhar, V.C. Das and D. Govardhan, **R.Karthikeyan** (2018) Effect of tool rotational speed on friction stir spot welded AA5052 – H38 aluminum alloy. **6th International Conference of Materials Processing and Characterization (ICMPC 2017) Materials Today: Proceedings** 5, 5536–5543 (Elsevier)
- [7] **R. Karthikeyan**, Kosaraju Satyanarayana, & Pujari Anil Kumar (2018) Application of Taguchi- Grey Method to optimize turning operations on EN24 with multiple performance characteristics. **7th International Conference of Materials Processing and Characterization (ICMPC 2018) Materials Today: Proceedings** 5, 17958–17967. (Elsevier)
- [8] **R. Karthikeyan**, V.Senthilkumar, M. Thilak, A.Nagadeepan (2018) Application of Grey Relational Analysis for Optimization of Kerf quality during CO<sub>2</sub> laser cutting of Mild Steel. **7th International Conference of Materials Processing and Characterization (ICMPC 2018) Materials Today: Proceedings** 5, 19209–19215. (Elsevier)
- [9] N. Sateesh, Kosaraju Satyanarayana, **R. Karthikeyan** (2108) Optimization of Machining Parameters in Turning of Al6063A-T6 using Taguchi-Grey Analysis. **7th International Conference of Materials Processing and Characterization (ICMPC 2018) Materials Today: Proceedings** 5, 19374–19379.(Elsevier)

- [10] Uday Mahesh Chavan, **R.Karthikeyan**, (2018), Experimental Investigation for Optimum Process Parameters on MRR and Surface Finish of Titanium Alloy Grade 5 using Wire Cut EDM Machine. **International Journal for Research in Engineering Application & Management**. pp 60-65
- [11] **Karthikeyan R**, Kavati Venkateswarlu, Syed Yousufuddin, A Punitha, (2019) Regression and Taguchi – gray analysis for multi response optimization of alternative fuel operated diesel engine with EGR. **Energy Sources, Part A: Recovery, Utilization, and Environmental Effects**, <https://doi.org/10.1080/15567036.2019.1683101> (Taylor & Francis)
- [12] **R.Karthikeyan**, K. Naveen Babu, R. Karthikeyan, A. Punitha (2019) An integrated ANN – PSO approach to optimize the material removal rate and surface roughness of wire cut EDM on INCONEL 750, **Materials Today: Proceedings** 19, 501–505. (Elsevier)
- [13] D.Manish chowdary, **R.Karthikeyan** (2019), Optimization of Process Parameters in MIG Welding of Two Dissimilar Materials. **International Journal of Innovative Technology and Exploring Engineering**, Volume-9 Issue-1, pp. 1549-1553. DOI: 10.35940/ijitee.L3443.119119
- [14] V. Praveena, **R. Karthikeyan**, D. Eswaraiah (2019) Performance evaluation of heat exchanger shell and tube with distinct fin configurations. **1st International Conference on Manufacturing, Material Science and Engineering (ICMMSE-2019)**. AIP Conf. Proc. 2200, 020061-1–020061-13; <https://doi.org/10.1063/1.5141231>
- [15] K. Prashanth Reddy, Bhramara Panitapu, Ramesh Chilukuri, **R. Karthikeyan**, A. Kalyan Kumar (2019) Optimization of Heat Transfer Coefficient for Al<sub>2</sub>O<sub>3</sub> (75%) – CuO (25%) / Water Hybrid Nanofluid using Taguchi. **International Journal of Engineering and Advanced Technology (IJEAT)**, Volume-9 Issue-2 pp. 2440-2444, DOI: 10.35940/ijeat.B3925.129219
- [16] Sunil Kumar Reddy K, Kannan M, **Karthikeyan R**, Althati Sripad, P.K.Jain (2020) Investigation of Thermal and Mechanical Properties of Al7020/SiC/Graphite Hybrid Metal Matrix Composites. 10<sup>th</sup> **International Conference of Materials Processing and Characterization (ICMPC 2020) Materials Today: (Elsevier) Proceedings** 26, 2746-2753.
- [17] Sunil Kumar Reddy K, Kannan M, **Karthikeyan R**, Laxman B (2020) Evaluation of Thermal and Mechanical properties of Al7475Alloy Reinforced with SiC and Graphite, 10<sup>th</sup> **International Conference of Materials Processing and Characterization (ICMPC 2020) Materials Today: (Elsevier) Proceedings** 26, 2691-2696.
- [18] S.Vimalraj, R.Varahamoorthi, A.Umesh Bala, **R.Karthikeyan** (2020), Modelling and Optimizing the laser Parameters for Corrosion Resistance in 316 SS Laser Hardfaced surface using Tungsten Carbide. 10<sup>th</sup> **International Conference of Materials Processing and Characterization (ICMPC 2020) Materials Today: (Elsevier) Proceedings**. 26, Part 2, 2485-2490.
- [19] B Ch Nookaraju, Mohammed Sohail, **R Karthikeyan**, Experimental Investigation and Optimization of Process Parameters of Hybrid Wick Heat Pipe Using with RSM Historical Data Design, **Materials Today: Proceedings (Communicated, Accepted for publication)**
- [20] **R.Karthikeyan**, V.Senthil Kumar, A.Punitha, Uday Mahesh Chavan (2020) An Integrated ANN – GA Approach to Maximize the Material Removal Rate and to Minimize the Surface Roughness of Wire Cut EDM on Titanium Alloy. **Advances in Materials and Processing Technologies**. doi: 10.1080/2374068X.2020.1793267. (Taylor & Francis Publications)

- [21] S. Ravi Sekhar, D. Govardhan, S.R Koteswar Rao, **R. Karthikeyan**, Ram Subbiah Influence of Process Parameters on Physical And Mechanical Parameters of Friction Surfaced Deposits on Low Carbon Steel, **2<sup>nd</sup> International Conference on Sustainable Energy and Design Aspects in Manufacturing Technology**. E3S Web of Conferences 184, 01005 (ICMED2020) <https://doi.org/10.1051/e3sconf/202018401005>.
- [22] S. Sravan Sashank, S. Rajakumar, **R. Karthikeyan**, D.S.Nagaraju Weldability, Properties and Microstructure of Nickel Based Super Alloys: a review, **2<sup>nd</sup> International Conference on Sustainable Energy and Design Aspects in Manufacturing Technology** E3S Web of Conferences 184, 01040 (ICMED2020) <https://doi.org/10.1051/e3sconf/202018401040>
- [23] Sunil Kumar Reddy K, Kannan M, **Karthikeyan R**, Prashanth S, A Review on Mechanical and Thermal Properties of Aluminum Metal Matrix Composites **2<sup>nd</sup> International Conference on Sustainable Energy and Design Aspects in Manufacturing Technology**. E3S Web of Conferences 184, 01033 (ICMED2020) <https://doi.org/10.1051/e3sconf/202018401033>
- [24] S. Prashanth, M. Kannan, R. Karthikeyan, and K. Sunil Kumar Reddy, A Review on Optimization of Process Parameters of EDM on Aluminum Metal Matrix Composites Using Various Optimization Techniques, **Advances in Lightweight Materials and Structures, Proceedings of ICALMS 2020**, Pages 513-520

#### **NATIONAL JOURNALS**

- [25] **K.Venkateswaralu**, R.Karthikeyan (2017) A Review on Improvement of Emissions in Homogeneous Charge Compression Ignition (HCCI) Diesel Engines with Multiple Injection Strategies. National conference on Recent Advances in Mechanical Engineering (NCRAME 17)
- [26] M.Praneeth, A. Anitha Lakshmi, **R.Karthikeyan** (2017) Effect of welding parameters on friction stir welded AL64430 and PURE COPPER. 5th International conference on Science, Technology & Management (ICSTM – 2017), IJETS, Volume 4, Issue 11, November 2017, ISSN 2394 – 3386

#### **CONFERENCES**

- [27] **R. Karthikeyan**, V. Balasubramanian (2008) Effect of Tool rotational speed and dwell time on lap shear strength of friction stir spot welded AA2024 aluminum alloy. International Symposium on Joining of metals organized by Indian welding society (IWS) Trichy. Proceedings Vol. 2 pp. 23-30.
- [28] **R.Karthikeyan**, V.Balasubramanian (2009) Friction stir spot welding of aluminum alloys” National Workshop on Environmentally Cleaner Welding Process organized by Indian Welding Society (IWS) Annamalai University, Proceedings pp. 121 -128.
- [29] **R.Karthikeyan**, V.Balasubramanian (2009) Effect of process parameters on Friction Stir Spot Welded Aluminum Alloy, National conference on Recent advances in Welding. Organized by PESIT and IWS, Bangalore. Proceedings pp. 2.84-2.90.
- [30] **R. Karthikeyan**, V. Balasubramanian (2010) Optimization and sensitivity analysis of friction stir spot welding process parameters for joining AA6061 aluminum alloy, International conference on Innovative Processes for Materials Joining & Surfacing organized by Indian welding society (IWS) Mumbai. Proceedings pp. 407-416.

- [31] **R. Karthikeyan**, V. Balasubramanian (2011) Effect of Friction Stir Spot Welding process parameters on strength and failure modes of A6061-T6 aluminum alloy joints, International Conference on Advances in Cutting, Welding and Surfacing (CWS 2011) organized by Indian Welding Society, Coimbatore, Proceedings pp. y1-y8.
- [32] **R.Karthikeyan**, V. Balasubramanian (2012) Effect of Tool Rotational Speed on Joint Characteristics of Friction Stir Spot Welded A6061-T6 aluminum alloy. International Symposium on Joining of metals organized by Indian welding society (IWS) Trichy. Proceedings Vol. 2 pp. 31-40.
- [33] **R.Karthikeyan**, V. Balasubramanian (2016) Optimization of Electrical Resistance Spot Welding and Comparison with Friction Stir Spot Welding of AA2024-T3 Aluminum Alloy Joints. 5th International Conference of Materials Processing and Characterization (ICMPC 2016).
- [34] K.Venkateswaralu, **R.Karthikeyan** (2017) A Review on Improvement of Emissions in Homogeneous Charge Compression Ignition (HCCI) Diesel Engines with Multiple Injection Strategies. National conference on Recent Advances in Mechanical Engineering (NCRAME 17).
- [35] M.Praneeth, A. Anitha Lakshmi, **R.Karthikeyan** (2017) Effect of welding parameters on friction stir welded AL64430 and PURE COPPER. 5th International conference on Science, Technology & Management (ICSTM – 2017),
- [36] SwapnaSunkara, **R.Karthikeyan**, N.Sateesh (2018) Analysis Of Mechanical Properties Of Polymer Based Nano Fly Ash Composite. Journal of Innovations in Mechanical Engineering. ISBN 978-93-85100-86-4
- [37] **R. Karthikeyan**, Kosaraju Satyanarayana, Pujari Anil Kumar (2018) Application of Taguchi- Grey Method to optimize turning operations on EN24 with multiple performance characteristics. 7th International Conference of Materials Processing and Characterization (ICMPC 2018)
- [38] **R. Karthikeyan**, V.Senthilkumar, M. Thilak, A.Nagadeepan (2018) Application of Grey Relational Analysis for Optimization of Kerf quality during CO<sub>2</sub> laser cutting of Mild Steel. 7th International Conference of Materials Processing and Characterization (ICMPC 2018)