DC Member from other university

DC Member 3: Dr.D.Arulkirubakaran

List of Publications for the last 5 years:

1. **Arulkirubakaran, D.,** V. Senthilkumar, and Vijay Kumawat. "Effect of micro-textured tools on machining of Ti–6Al–4V alloy: an experimental and numerical approach." International Journal of Refractory Metals and Hard Materials 54 (2016): 165-177. **(Elsevier, SCI, Impact Factor:3.047**).
2. **Arulkirubakaran, D.,** and V. Senthilkumar. "Performance of TiN and TiAlN coated micro-grooved tools during machining of Ti-6Al-4V alloy." International Journal of Refractory Metals and Hard Materials 62 (2017): 47-57. **(Elsevier, SCI, Impact Factor:3.047**).
3. Dinesh, S., V. Senthilkumar, P. Asokan, and **D. Arulkirubakaran**. "Effect of cryogenic cooling on machinability and surface quality of bio-degradable ZK60 Mg alloy." Materials & design 87 (2015): 1030-1036. **(Elsevier, SCI, Impact Factor:6.289**).
4. Manikandan, Natarajan, **D. Arulkirubakaran**, D. Palanisamy, and Ramesh Raju. "Influence of wire-EDM textured conventional tungsten carbide inserts in machining of aerospace materials (Ti–6Al–4V alloy)." Materials and Manufacturing Processes 34, no. 1 (2019): 103-111. **(Talyor & Francis, SCI, Impact Factor:3.069**).
5. Velmurugan, C., V. Senthilkumar, S. Dinesh, and **D. Arulkirubakaran**. "Machining of NiTi-shape memory alloys-A review." Machining Science and Technology 22, no. 3 (2018): 355-401. **(Talyor & Francis, SCI, Impact Factor:2.071**).
6. Senthilkumar, V., A. Balaji, and **D. Arulkirubakaran**. "Application of constitutive and neural network models for prediction of high temperature flow behavior of Al/Mg based nanocomposite." Transactions of Nonferrous Metals Society of China 23, no. 6 (2013): 1737-1750. **(Elsevier, SCI, Impact Factor:2.615**).
7. Manikandan, N., K. Balasubramanian, D. Palanisamy, P. M. Gopal, **D. Arulkirubakaran**, and J. S. Binoj. "Machinability Analysis and ANFIS modelling on Advanced Machining of Hybrid Metal Matrix Composites for Aerospace Applications." Materials and Manufacturing Processes 34, no. 16 (2019): 1866-1881. **(Talyor & Francis, SCI, Impact Factor:3.069**).
8. **Arulkirubakaran, D**., V. Senthilkumar, Vivek Lomesh Chilamwar, and P. Senthil. "Performance of surface textured tools during machining of Al-Cu/TiB2 composite." Measurement 137 (2019): 636-646. **(Elsevier, SCI, Impact Factor:3.364**).
9. **Arulkirubakaran, D**., V. Senthilkumar, and S. Dinesh. "Effect of textures on machining of Ti-6Al-4V alloy for coated and uncoated tools: A numerical comparison." The International Journal of Advanced Manufacturing Technology 93, no. 1-4 (2017): 347-360. **(Springer, SCI, Impact Factor:2.925**).

10. Palanisamy, D., K. Balasubramanian, N. Manikandan, **D. Arulkirubakaran**, and R. Ramesh. "Machinability analysis of high strength materials with Cryo-Treated textured tungsten carbide inserts." Materials and Manufacturing Processes 34, no. 5 (2019): 502-510. **(Talyor & Francis, SCI, Impact Factor:3.069**).
11. Prince, R. Malkiya Rasalin, N. Selvakumar, **D. Arulkirubakaran**, S. Christopher Ezhil Singh, T. Ramkumar, and R. Monish Kumar. "Surface structural features and wear analysis of a multilayer Ti6Al4V-B4C thin film coated AISI 1040 steel." Materials Research Express 7, no. 1 (2020): 016436. **(IOP Science, SCI, Impact Factor:1.929**).
12. James Dhilip, Jafrey Daniel, J. Jeevan, D. Arulkirubakaran, and M. Ramesh. "Investigation and optimization of parameters for hard turning of OHNS steel." Materials and Manufacturing Processes (2020): 1-7. **(Talyor & Francis, SCI, Impact Factor:3.069**).
13. Prince, R. Malkiya Rasalin, N. Selvakumar, D. Arulkirubakaran, S. Christopher Ezhil Singh, M. Chrispin Das, C. Prabha, Praveen Kumar Bannaravuri, RB Jeen Robert, and I. Living Prephet. "TG/DTA studies on the oxidation and thermal behaviour of Ti-6Al-4V-B4C coatings obtained by magnetron sputtering." Journal of Applied Research and Technology 18, no. 3 (2020). **(Scopus indexed journal**).
14. Palanisamy, D., A. Devaraju, N. Manikandan, K. Balasubramanian, and **D. Arulkirubakaran**. "Experimental investigation and optimization of process parameters in EDM of aluminium metal matrix composites." Materials Today: Proceedings 22 (2020): 525-530. **(Scopus indexed journal**).
15. Velmurugan, C., V. Senthilkumar, S. Dinesh, and **D. Arulkirubakaran**. "Review on phase transformation behavior of NiTi shape memory alloys." Materials Today: Proceedings 5, no. 6 (2018): 14597-14606. **(Scopus indexed journal**).
16. Raju, Ramesh, N. Manikandan, D. Palanisamy, **D. Arulkirubakaran**, S. SambathKumar, and P. Bhanu Prakash. "Optimization of process parameters in electrical discharge machining of haste alloy C276 using Taguchi's method." Materials Today: Proceedings 5, no. 6 (2018): 14432-14439. **(Scopus indexed journal**).
17. Manikandan, N., Ramesh Raju, D. Palanisamy, **D. Arulkirubakaran** and Sambath Kumar. "Investigation on Ti6Al4V laser metal deposition using Taguchi based grey approach." Materials Today: Proceedings 5, no. 6 (2018): 14375-14383. **(Scopus indexed journal**).
18. **Arulkirubakaran, D**., V. Senthilkumar, S. Dinesh, C. Velmurugan, N. Manikandan, and Ramesh Raju. "Effect of textured tools on machining of Ti-6Al-4V alloy under lubricant condition." Materials Today: Proceedings 5, no. 6 (2018): 14230-14236.**(Scopus indexed journal**).

19. Palanisamy, D., A. Devaraju, N. Manikandan, and **D. Arulkirubakaran**. "Performance evaluation of cryo-treated tungsten carbide inserts in machining PH stainless steel." Materials Today: Proceedings 22 (2020): 487-491. **(Scopus indexed journal**).
20. Palanisamy, D., A. Devaraju**, D. Arulkirubakaran**, and N. Manikandan. "Experimental investigation on surface integrity during machining of AISI 420 steel with tungsten carbide insert." Materials Today: Proceedings 22 (2020): 992-997. **(Scopus indexed journal**).
21. Gnanarathinam, A., D. Palanisamy, N. Manikandan, A. Devaraju, and **D. Arulkirubakaran**. "Comparison of corrosion behavior on laser welded austenitic stainless steel." Materials Today: Proceedings (2020). Accepted Manuscript.**(Scopus indexed journal**).
22. Sriram, D., G. Jayaprakash, **D. Arulkirubakaran**, M. Prabu, and A. Ajithkumar. "Laser turning of alumina (Al2O3) ceramic by Nd: YAG laser technique." Materials Today: Proceedings (2020). Accepted Manuscript.**(Scopus indexed journal**).
23. Palanisamy, D., N. Manikandan, R. Ramesh, A. Devaraju, and **D. ArulKirubakaran**. "Development of neural network models for wire electrical discharge machining of Haste alloy." Materials Today: Proceedings (2020).Accepted Manuscript.**(Scopus indexed journal**).
24. Prince, R. Malkiya Rasalin, **D. Arulkirubakaran**, V. Naveen, J. Allan Paulraj, and S. Arokkia Julius Raja. "Effect of Load and Sliding Distance on Tribological Properties of Aisi 1040 Steel by Magnetron Sputtered Ti-6Al-4V Coating." In IOP Conference Series: Materials Science and Engineering, vol. 923, no. 1, p. 012028. IOP Publishing, 2020. .**(Scopus indexed journal**).
25. Palanisamy, D., N. Manikandan, R. Ramesh, J. S. Binoj, and **D. Arulkirubakaran**. "Development of Grey-ANFIS Model for Wire Electrical Discharge Machining of Al-GNP Composites." Materials Today: Proceedings (2020).Accepted Manuscript. **(Scopus indexed journal**).
26. Palanisamy, D., N. Manikandan, R. Ramesh, M. Kathirvelan, and **D. Arulkirubakaran.** "Machinability Analysis and Optimization of Wire-EDM Textured Conventional Tungsten Carbide Inserts in Machining of 17–4 PH Stainless Steel." Materials Today: Proceedings (2020).Accepted Manuscript.**(Scopus indexed journal**).
27. Kumar, S. Ujjaini, N. Manikandan, J. S. Binoj, P. Thejasree, S. Shajahan, and **D. Arulkirubakaran**. "Multi objective optimization of wire-electrical discharge machining of stellite using Taguchi–Grey approach." Materials Today: Proceedings (2020). Accepted Manuscript.**(Scopus indexed journal**).

28. Raju, Ramesh, N. Manikandan, J. S. Binoj, D. Palanisamy, **D. Arulkirubakaran**, P. Thejasree, A. Pavan Kalyan, and G. Subhash Reddy. "Optimization and performance evaluation of PLA polymer material in situ carbon particles on structural properties." Materials Today: Proceedings (2020). Accepted Manuscript.**(Scopus indexed journal**).
29. **Arulkirubakaran, D**., Malkiya Ralsine Prince, D. Palanisamy, N. Manikandan, and R. Ramesh. "ECM Machining and Its Process Optimization for AISI 304 Steel." In Advances in Industrial Automation and Smart Manufacturing, pp. 357-365. Springer, Singapore.(2020). Accepted Manuscript.**(Scopus indexed journal**).
30. N Manikandan, Ramesh Raju, Palanisamy D, D Arulkirubakaran, S. Sambath kumar "Recent Strategies in Laser Based Machining for the Enhanced Service Life of Nickel Based Super Alloys" International Journal of Advanced Technology and Engineering Exploration,Vol.7(11)(2017):220-224. **(UGC approved).**
31. Madhava Selvan V, Ramesh Raju, N Manikandan, Palanisamy. D, Arulkirubakaran D " Recent Development of Laser Based Treatment on Titanium Alloys: From Coating to Treatment – A Review" International Journal of Engineering Research in Mechanical and Civil Engineering, Vol.2(3)(2017):505-512. **(UGC approved).**

32. N. Manikandan, RameshRaju, Palanisamy. D, D Arulkirubakaran "Experimental Investigations on Spark Erosion Machining of Haste Alloyc-276 Using Taguchi's Approach" Manufacturing Technology Today, CMTI Publication,Vol.16(11) (2017):1-20. **(UGC approved).**

33. Palanisamy D, Manikandan N, **Arulkirubakaran D**, Ramesh Raju " Comparison machining performance of Peak-Aged PH Stainless Steel with various inserts" International conference on Contemporary Design and Analysis of Manufacturing and Industrial Engineering Systems (CDAMIES 2018) held on 18 -20th January 2018 at National Institute of Technology, Trichy.
34. **D Arulkirubakaran**, V. Senthilkumar, D. Palanisamy, N Manikandan, Ramesh Raju,S. Dinesh and C. Velmurugan " Effect of coating and texturing on machining of Grade 5 Ti alloy using Semi-solid lubricant" International conference on Contemporary Design and Analysis of Manufacturing and Industrial Engineering Systems (CDAMIES 2018) held on 18 -20th January 2018 at National Institute of Technology, Trichy.
35. Velmurugan.C, Senthilkumar.V, Dinesh S **Arulkirubakaran D** "Study on phase transformation behavior of NiTi shape memory alloy " International conference of Advanced Functional Materials (ICAFM 2017) held on 3rdMay 2017 at Adhi College of Engineering and Technology, Chennai.

36. N.Manikandan, Ramesh Raju, Palanisamy D, **Arulkirubakaran D**, Sambathkumar S "Optimization of laser metal deposition process parameters using Taguchi based grey approach for Ti6Al4V alloy coating" International conference of Advanced Functional Materials (ICAFM 2017) held on 3rdMay 2017 at Adhi College of Engineering and Technology,Chennai.
37. Ramesh Raju, Manikandan N, Palanisamy D, **Arulkirubakaran D**, Sambathkumar S, Bhanu Prakash P" Investigations on Electrical Discharge Machining of Haste Alloy C276 Using Taguchi Approach" International conference of Advanced Functional Materials (ICAFM 2017) held on 3rdMay 2017 at Adhi College of Engineering and Technology, Chennai.
38. Velmurugan.C, Senthilkumar.V, Dinesh S, **Arulkirubakaran D** "Artificial neural network prediction of wire electrical discharge machining properties on sintered porus NiTi shape memory alloy" International conference on emerging trends in Materials and Manufacturing Engineering (IMME 2017) held on 10th Mar 2017 at National Institute of Technology,Trichy.
39. **Arulkirubakaran D**., Velmurugan.C, Senthilkumar.V, Senthil.P "Study of machining characteristics of titanium alloy (Ti-6Al-4V) during orthogonal cutting using textured tool", International conference on Productivity Efficiency and Competitiveness in Design and Manufacturing (PECDM 2016) held on 08th Jan 2016 at PSG College of Technology, Coimbatore.
40. **Arulkirubakaran D**., Senthilkumar.V, Ramya.C "Study of cutting forces and prediction of surface quality analysis using neural network model, support vector regression model by various textured tool condition for Ti-6Al-4V alloy", International conference on Productivity Efficiency and Competitiveness in Design and Manufacturing (PECDM 2016) held on 08th Jan 2016 at PSG College of Technology, Coimbatore.