## **List of Publications**

- 1. M Pravin Kumar, R Varahamoorthi, K Gnanamurugan "Modelling and optimization of process parameters to obtain maximum tensile strength for laser butt welding of 316L austenitic stainless steel sheets" Materials Today: Proceedings, 2020/3/23.
- 2. S Vimalraj, R Varahamoorthi, A Umesh Bala, R Karthikeyan "Modeling and optimizing the laser parameters for corrosion resistance in 316 SS laser hardfaced surface using tungsten carbide" Materials Today: Proceedings, 2020/3/20.
- 3. M Mahalingam, R Varahamoorthi "Investigation on tool wear rate of brass tool during machining of Monel 400 alloy using electric discharge machine" Materials Today: Proceedings, 2020/3/17.
- S Vimalraj, R Varahamoorthi, A Umesh Bala "Optimizing the input parameters for improvement of corrosion resistance in the laser hardfacing technique" Materials Today: Proceedings, 2020/2/4.
- 5. Balachandran Gobalakrishnan, P. Ramadoss Lakshminarayanan and Raju Varahamoorthi, Effect of TiB2 particle addition on the mechanical properties of Al/TiB2 in situ formed metal matrix composites, Materials Testing, 60 (12), 2018, pp. 1221-1224
- **6.** Gobalakrishnan, B.; Lakshminarayanan, P. R.; Varahamoorthi, R, "Mechanical Properties of Al 6061/TiB2 In-Situ Formed Metal Matrix Composites", Journal of Advanced Microscopy Research, 13 (1), 2018, pp. 125-130.
- 7. A.Umesh Bala, **R.Varahamoorthi**, "Detection of Surface Defects Using Image Processing Approach for Laser Hardfaced Inconel- 625 Surfaces", Journal of Applied Science and Computations, 5 (7), 2018, 96-104.
- 8. A.Umesh Bala, **R.Varahamoorthi**, "Selection of an Intelligent Scheme to Perform the Segmentation Process for Image Processing Technique", International Journal for Research in Engineering Application & Management, 4 (4), 2018, 78-82.
- 9. A.Umesh Bala, **R.Varahamoorthi**, "Microstructure and Surface Morphology Characterization of Laser Hardfaced INCONEL-625 Exposed to Dry Sliding Wear", Journal of Advanced Microscopy Research, 13 (2), 2018, 239-243.
- 10. A.Umesh Bala, **R.Varahamoorthi**, "An Image Processing Approach for Detection of Surface Defects in Laser Hardfaced Stellite-6 Surfaces", International Journal of Scientific Research in Science, Engineering and Technology, 4 (1), 2018, 10 17.

- 11. A.Umesh Bala, **R.Varahamoorthi**, "Optimizing the Co 2 Laser Parameters to Attain the Minimum Wear Rate in Cobalt Based Hardfaced Surfaces", International Journal of Scientific Research in Science, Engineering and Technology, 4 (1), 2018, 1 9.
- 12. A.Umesh Bala, **R.Varahamoorthi**, "Modelling and Optimizing the Laser Parameters to Attain the Minimum Wear Rate in Nickel Based (Inconel- 625) Hardfaced Surfaces", International Journal of Emerging Technology in Engineering Research, 5 (12), 2017, 110-118.
- 13. A.Umesh Bala, **R.Varahamoorthi**, "Optimizing The Laser Parameters to Attain the Maximum Hardness in Cobalt Based (Stellite 6) Hardfaced Surfaces", International Journal of Advance Engineering and Research Development, 4 (11), 2017, 959-968.
- 14. B.Gopalakrishnan, P.R.Lakshminarayanan, R.Varahamoorthi, "Combined Effect of TiB Particle Addition and Heat Treatment on Mechanical Properties of Al6061/TiB 2 In-Situ Formed MMCs", Journal of Advanced Microscopy Research, 12 (3), 2017, 1 -5.
- 15. K.J.Sabareesaan, J.Jaya, **R.Varahamoorthi**, "Performance analysis of various filters for noise removal in EDM electrode surface crack images", International Journal Of Applied Sciences And Management, 3 (1), 2017, 317-328.
- 16. P.Senthil Kumar, P.R.Lakshminarayanan, **R.Varahamoorthi**, "Effect Of Pouring Temperature On The Tib2 In Cast Al/ Tib 2 Mmc And Prediction Of Distribution Pattern By Commercial Simulation Software", Advances in Natural and Applied Sciences, 11 (4), 2017, 321-331.
- 17. P.Senthil Kumar, P.R.Lakshminarayanan, **R.Varahamoorthi**, "Effect of Holding Time of the Al/TiB Melt at the Pouring Temperature on the Formation and Size of TiB 2 Particles Formed", Journal of Advanced Microscopy Research, 11 (2), 2016, 1 5.
- 18. P.Senthil Kumar, P.R.Lakshminarayanan, **R.Varahamoorthi**, "Effect of cooling rate and other factors on size and pattern of distribution of TiB 2 particles formed during solidification of the Al- TiB 2 melt for various pouring temperatures", International Research Journal of Engineering and Technology, 3 (6), 2016, 1 5.
- 19. P.Senthil Kumar, P.R.Lakshminarayanan, **R.Varahamoorthi**, "Effect of pouring temperature and holding time on hardness at various locations of Al/TiB MMC cast ingot", International Journal of Latest Engineering Research and Applications, 1 (8), 2016, 30-41.
- 20. K.J.Sabareesaan, **R.Varahamoorthi**, Habeeb Al Ani, J.Jaya, "MRR Prediction Model for Electrical Discharge Machining of INCONEL X750 by Response Surface Methodology Using MINITAB Software", European Journal of Advances in Engineering and Technology, 2 (2), 2015, 29-33.
- 21. K.J.Sabareesaan, **R.Varahamoorthi**, Habeeb Al Ani, J.Jaya, "An Image processing approach for detection of surface cracks in EDM machined aerospace super alloy Inconel X 750", European Journal of Advances in Engineering and Technology, 2 (9), 2015, 39-44.
- 22. K.J.Sabareesaan, **R.Varahamoorthi**, Habeeb Al Ani, J.Jaya, "Response Surface Methodology For Optimizing EDM Process Parameters In Machining Of

- Inconel X750 Using Copper Electrode", International Journal of Applied Engineering Research, 10 (2), 2015, 5151-5163.
- 23. K.J.Sabareesaan, **R.Varahamoorthi**, Habeeb Al Ani, J.Jaya, A Inteligent Channeling Aproach for Detection of Cracks in Metal surfaces European Journal of Advances in Engineering and Technology 2 7 Jul-15 1 to 7
- 24. K.J.Sabareesaan, **R.Varahamoorthi**, Habeeb Al Ani, "Analysis of the Effect of Process parameters in Electric Discharge Machining of Inconel X750 using brass Electrode", International Journal of Engineering Research & Technology, 3 (9), 2014, 1180-1184.

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