

**Dr.V. MOHANAVEL, M.Tech, Ph.D.,**

Associate Professor,

Department of Mechanical Engineering,

Chennai Institute of Technology, Chennai-600059, Tamilnadu, India.

Ph : 9043392344

Email ID : [mohanavel.phd@gmail.com](mailto:mohanavel.phd@gmail.com)

## **LIST OF PUBLICATIONS**

### **SCIENCE CITATION INDEXED (SCI) JOURNALS**

1. **V. Mohanavel, K. S. Ashraff Ali, S.Prasath, T.Sathish. "Microstructural and tribological characteristics of AA6351/Si<sub>3</sub>N<sub>4</sub> composites manufactured by stir casting" *Journal of Material Research and Technology*, 2020, Elsevier Science Direct Journal (USA), Science Citation Indexed Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 5.289.**
2. **V. Mohanavel, K. Rajan, M. Ravichandran. "Synthesis, characterization and properties of stir cast AA6351-Aluminium Nitride (AlN) composites" *Journal of Material Research*, 2016, 31 (24), pp, 3824-3831, Cambridge University Journal (USA), Science Citation Indexed Journal (SCI), Thomson Reuter Indexed Impact Factor 2019 – 2.5.**
3. **V. Mohanavel, M. Ravichandran. "Influence of AlN particles on microstructure, mechanical and tribological behavior in AA6351 aluminum alloy" *Material Research Express*, 2019, 6 (10), pp, 106557, IOP Publishing, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 1.9.**
4. **V. Mohanavel, M. Ravichandran. "Experimental investigation on mechanical properties of AA7075-AlN composites", *Materials Testing*, 2019, Vol 61 (6), pp, 554-558, Hanser Publication (Germany), Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.799.**
5. **Vinayagam Mohanavel, "Mechanical and microstructural characterization of AA7178-TiB<sub>2</sub> composites", *Materials Testing*, 2020, Vol 62 (2), pp, 146-150, Hanser Publication (Germany), Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.799.**
6. **Vinayagam Mohanavel "Synthesis and evaluation on mechanical properties of LM4/AlN alloy based composites" *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*, 2019, pp, 1-10, DOI: 10.1080/15567036.2019.1647313, Taylor and Francis Journal, Science Citation Indexed Journal (SCI), Thomson Reuter Indexed Impact Factor 2019 – 1.184.**

7. **V. Mohanavel**, M. Ravichandran. “Tribological and mechanical behaviour of composites fabricated via compo casting, stir casting and in situ casting – An overview”, **Journal of the Balkan Tribological Association**, 2019, Vol 25 (2), pp, 342-352, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.3.
8. B. Stalin, M. Ravichandran, **V. Mohanavel**, “Investigations on microstructure and mechanical properties of Mg-5wt.%Cu-TiB<sub>2</sub> composites produced via powder metallurgy route”, **Journal of Mining and Metallurgy, Section B: Metallurgy Publication**, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 1.134, (Accepted for Publication).
9. G.Veerappan, M.Ravichandran, **V.Mohanavel**, Characterization and properties of silicon carbide reinforced Ni-10Co-5Cr (Superalloy) matrix composite produced via powder metallurgy route, **Silicon**, 2020, pp, 1-12, DOI: 10.1007/s12633-020-00455-9, **Springer Journal**, Science Citation Indexed Journal (SCI), Thomson Reuter Indexed Impact Factor 2019 – 1.499.
10. M. Arumugam, O.S. Meenakshi, **Vinayagam Mohanavel**, “Influence of ZrB<sub>2</sub> on the microstructural characteristics of AA6082/ZrB<sub>2</sub> composites”, **Materials and Technology**, 2019, Vol 53 (3), pp, 327-332, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.8.
11. T. Sathish, **V. Mohanavel**. “IWF based optimization of porous insert configurations for heat transfer enhancement using CFD”, **Journal of Applied Fluid Mechanics**, 2018, Vol. 11, pp, 31-37, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.7
12. A. Radha, S. Suresh, G. Ramanan, **V. Mohanavel**, C. Emmyprema, “Processing and Characterization of Mechanical and Wear Behavior of Al7075 Reinforced With B<sub>4</sub>C and Nano Graphene Hybrid Composite”, **Material Research Express**, 6 (12), 1265c5, IOP Publishing, Science Citation Indexed Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 1.9.
13. **V. Mohanavel**, M. Ravichandran. ”Review on titanium diboride (TiB<sub>2</sub>) particles based aluminium matrix composites”, **Advanced Composite letters**, Sage Publication, Science Citation Index Expanded Journal (SCIE), Thomson Reuter Indexed Impact Factor 2019 – 0.555, (Under Review).

### **SCOPUS INDEXED JOURNALS**

1. **V. Mohanavel**, M. Ravichandran, S. Suresh Kumar. “Tribological and mechanical properties of Zirconium Di-boride (ZrB<sub>2</sub>) particles reinforced aluminium matrix composites”, **International Journal of Materials Today Proceedings**, Elsevier-Science Direct, 2020, Vol. 21, 862-864.
2. **V.Mohanavel**, M.Sundar, L.Pugazhendhi, K.Ranganathan, Thermal and mechanical properties of titanium matrix composites synthesized through solid state technique, **Materials Today Proceedings**, (2020) DOI : 10.1016/j.matpr.2020.05.469

3. **V.Mohanavel**, M.D. Vijayakumar, Investigation on mechanical characterization of titanium matrix composites produced through powder metallurgy, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.271
4. **V Mohanavel**, K Vijay, A Vigneswaran, S Srinath, S Gokulnath, Mechanical and tribological behaviour of AZ91/ZrSiO<sub>4</sub> composites, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.07.146
5. **V Mohanavel**, S Prasath, M Arunkumar, GM Pradeep, S Surendra Babu, Modeling and stress analysis of aluminium alloy based composite pressure vessel through ANSYS software, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.07.472
6. **V Mohanavel**, J Vairamuthu, A Jegan, T Sathish, K Rajesh, S Tamilselvam, Modelling and manufacturing of lightweight materials based stretcher cum wheelchair, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.720
7. **V Mohanavel**, C Kailasanathan, T Sathish, V Kannadhasan, S Vinoth Joe Marshal, K Sakthivel, Modeling and fabrication of automatic blackboard dust remover, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.487
8. **V.Mohanavel**, R.Iyankumar, M.Sundar, P.Kiran Kumar, L.Pugazhendhi, Modelling and finite element analysis of anti-roll bar using ANSYS software, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.322
9. **V Mohanavel**, T Vinoth, R Iyankumar, N Vinoth, Mechanical and corrosion behaviour of copper matrix composites fabricated by powder metallurgy process, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.203
10. **V. Mohanavel**, M. Ravichandran, S. Suresh Kumar, A. Praveen Kumar, Microstructure and mechanical characterization of AA7150/ZrO<sub>2</sub> composites manufactured by stir casting route, *Lecture Notes in Mechanical Engineering, Advances in lightweight materials and structures*, Springer, 2020, ISBN 78-981-15-7826-7
11. **V. Mohanavel**, M. Ravichandran, K. S. Ashraff Ali, A. Praveen Kumar, Mechanical properties of AA7050/Coconut shell ash composites manufactured via stir casting technique, *Lecture Notes in Mechanical Engineering, Advances in lightweight materials and structures*, Springer, 2020, ISBN 78-981-15-7826-7
12. **V. Mohanavel**, S. Suresh Kumar, P.Ganeshan, R.Vishnukumar, P. Gurusamy, Physical, mechanical and wear performance of graphite (Gr) particles incorporated aluminium matrix composites – An overview, 2020, *AIP Conference Proceedings*
13. **V. Mohanavel**, S. Suresh Kumar, V.Sivaraman, V.K.Girish, M. Ravichandran, Tungsten carbide particulate reinforced AA7050 aluminum alloy composites fabricated by liquid state processing, 2020, *AIP Conference Proceedings*.
14. S.Ravi, P.Gurusamy, **V.Mohanavel**, A review and assessment of effect of cutting fluids, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.054
15. **V.Mohanavel**, M.Ravichandran, S.Suresh Kumar, M.Melwin Jagadeesh Sridhar, S.Dineshkumar, M.M.Pavithra, Microstructural and tribological characterization of Al/Egg shell ash composites prepared by liquid metallurgy process, *Journal of Balkan Tribological Association*, 26 (2020) 319-326.
16. Jeffin sam george, A.Vasudevan, **V.Mohanavel**, Vibration analysis of interply hybrid composite for an aircraft wing structure, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.08.078
17. Kiran Raj, A.Vasudevan, **V.Mohanavel**, Fast Fourier Transform (FFT) Analysis on Different Inter-ply Configurations of Glass/Basalt/Aramid/Carbon Hybridized Composites for Aircraft Structures, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.08.079
18. B Navinkumar, KM Parammasivam, S Rajendran, **V.Mohanavel**, CFD analysis of horizontal axis wind turbine braking system using chordwise spacing, *Materials Today Proceedings*, (2020) DOI : 10.1016/j.matpr.2020.05.564
19. M. Jayaraj, A. Siddharthan, **V. Mohanavel**, “Investigation on the distribution and concentration of nylon 6,6 particles on the wear behaviour of electroless nickel phosphorus nylon composite coating”, *Journal of the Balkan Tribological Association*, 2020, 1 26 (1), pp, 110-122,

20. **V.Mohanavel**, S.Prasath, K Yoganandam, Belachew Girma Tesemma, S.Suresh Kumar, Optimization of Wear Parameters of aluminium composites (AA7150/10wt%WC) employing Taguchi Approach, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.08.356
21. **V.Mohanavel**, K. Yoganandam, V. Naveen Kumar, A. Chandrashekar, S.Prasath, Evaluation of tribological behaviour of AA7178/Gr composites using Taguchi optimization technique, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.08.346
22. J.Rajaparthiban, M. Ravichandran, B. Stalin, P.Ramesh Kumar, **V. Mohanavel**, Machining of EN31 Steel Using Carbide Insert–A Statistical Approach, Materials Today Proceedings, 22 (2020) 2559-2564.
23. K Siva Nagu, K Yoganandam, **V Mohanavel**, R Deepak Joel Johnson, Mechanical properties of a natural fiber reinforced with polylactic acid–Review, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.03.511
24. Rajala Ashok Reddy, K Yoganandam, **V Mohanavel**, Effect of chemical treatment on natural fiber for use in fiber reinforced composites–Review, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.03.511
25. K.Yoganandam, **V.Mohanavel**, J.Vairamuthu, V.Kannadhasan, Mechanical properties of titanium matrix composites fabricated via powder metallurgy method, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.04.569
26. N Nagabhooshanam, R Nishanth, R Leo Bright Singh, N Austin, **V Mohanavel**, Optimization of shrinkage porosity in AlSi5Cu1Mg alloy using response surface methodology, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.03.580
27. S.Sivaraj, S.Nagendharan, **V.Mohanavel**, Experimental investigation on wheel natural frequency performance using modal analysis in free and loaded condition, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.04.546
28. A.Yoganandhan, S.D.Subhash, J.Hebinson Jothi, **V.Mohanavel**, Fundamentals and development of self-driving cars, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.04.736
29. S.Ravi, **V.Mohanavel**, D.Dinesh, D.S.Anuradha, Investigational explorations on operation and emission features of CI engine supplemented by Methyl Propanol and CycloPentyl Ether mixtures, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.04.735
30. R.Iyankumar, **V.Mohanavel**, N.Vinoth, T.Vinoth, Modeling and assessment of pump impeller, Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.04.379
31. N.Vinoth, **V.Mohanavel**, Analysis and Comparison of Aluminium Matrix Composite in Pressure Vessel, International Journal of Emerging Technologies, 11 (2020) 278-280.
32. K.S. Ashraff Ali, R. Ravichandran, S. Mohan Raj, M. Raman, **V. Mohanavel**, Bobbin friction stir welding of Al-12%TiB<sub>2</sub> in-situ metal matrix composites: Investigations on mechanical and metallurgical aspects, Journal of Balkan Tribological Association, 26 (2020) 123-134.
33. **V.Mohanavel**, K.Rajan, S. Suresh Kumar, P.Ganeshan, Proceedings of 2017 International Conference on Intelligent Computing and Control, IEEE Explorer (2018) 1-5.
34. A.Vasudevan, B.Navin kumar, Melvin Victor Depoures, T. Maridurai, **V.Mohanavel**, Tensile and flexural behaviour of glass fibre reinforced plastic -Aluminium hybrid laminate manufactured by vacuum resin transfer moulding technique (VARTM), Materials Today Proceedings, (2020) DOI : 10.1016/j.matpr.2020.07.573
35. K.Raja, V. Srinivasa Raman, R. Parthasarathi, K. Ranjitkumar, **V.Mohanavel**, Performance analysis of deebiodiesel blends in diesel engine, International Journal of Ambient Energy, Taylor and Francis, 2019, DOI: 10.1080/01430750.2019.1670262, In Indexing by ESCI & Scopus.
36. G.Vijayanand, A. Augustine, V. Ananda Natarajan, V. Srinivasa Raman, **V.Mohanavel**, D.Christopher, Emission reduction technique on existing diesel engines using renewable fuels, International Journal of Ambient Energy, Taylor and Francis, 2019, DOI: 10.1080/01430750.2019.1694583, Indexing by ESCI & Scopus.

37. K.Rajan, K.R. Senthil Kumar, M. Rajaram Narayanan, **V.Mohanavel**, “Impact of nozzle opening pressure on the performance and emission behaviors of CI engine using Yellow Oleander Biodiesel”, International Journal of Ambient Energy, Taylor and Francis, 2019, DOI: 10.1080/01430750.2019.1611642, Indexing by ESCI & Scopus.
38. K.Rajan, M. Rajaram Narayanan, S. Suresh Kumar, R. Parthasarathi, **V. Mohanavel**, A detailed study on improving the properties and performance aspects of biodiesel”, International Journal of Ambient Energy, Taylor and Francis, 2020, DOI: 10.1080/01430750.2019.1725634, **Indexing by ESCI & Scopus**.
39. KS Ashraff Ali, C Ramakrishnan, R Parthasarathi, **V.Mohanavel**, “Emission examination of lemongrass biodiesel and novel nanoparticle blends in research diesel engine”, International Journal of Ambient Energy, Taylor and Francis, 2020, DOI: 10.1080/01430750.2020.1722235, **Indexing by ESCI & Scopus**.
40. K.Rajan, M. Rajaram Narayanan, KS Ashraff Ali, **V.Mohanavel**, “Analysis on the properties and emission characteristics of corn biodiesel subjected to improved transesterification”, International Journal of Ambient Energy, Taylor and Francis, 2020, DOI: 10.1080/01430750.2020.1719888, **Indexing by ESCI & Scopus**.
41. KS Ashraff Ali, R Nirmal Kumar, ZA Amjath, **V.Mohanavel**, “Emission investigation on the effect of ultrasonic irradiation in neat biodiesel fuelled engine”, International Journal of Ambient Energy, Taylor and Francis, 2020, DOI: 10.1080/01430750.2020.1722233, **Indexing by ESCI & Scopus**.
42. **V. Mohanavel**, M.Samuel Jacob, M.Nishok Raaj, T.Michael Benjamin, Mechanical properties of polymer matrix composites prepared through hand lay-up route, International journal of Advanced Science and Technology, 2020, 29(9), 6586-6591.
43. R.Naveenkumar, S.Rajaram, P.C.Santhosh Kumar, S.Divakaran, M.Ravichandran, **V.Mohanavel**, Experimental analysis of automatic hot air vent-out system in vehicle chamber using solar energy, Journal of Critical Review, 2020, 7, 1851-1857.
44. **V. Mohanavel**, K. Rajan, M. Ravichandran, S. Suresh Kumar. M. Balamurugan, C. Jayasekar. “Physical and tribological behaviour of dual particles reinforced metal matrix composites”, Lecture Notes in Mechanical Engineering, **Springer, 2019**, 339-347.
45. **Mohanavel Vinayagam**, G. Balamurugan, G. Vijayanand, M. Mohamed Abdul Hafeez, “Emission study of alcohol-biodiesel propelled compression ignition engine”, International Journal of Ambient Energy, Taylor and Francis, 2019, DOI: 10.1080/01430750.2019.1586764, **Indexing by ESCI & Scopus**.
46. **Mohanavel Vinayagam**, S. Suresh Kumar, M.M. Ravikumar, S. Mahendiran, T. Raja, “Feasibility and emission study on employing MgO nanoparticle as oxygenated additive in neat biodiesel”, International Journal of Ambient Energy, Taylor and Francis, 2019, DOI: 10.1080/01430750.2019.1611659, **Indexing by ESCI & Scopus**.
47. **V. Mohanavel**, K. Rajan, P.V. Senthil and S. Arul. “Mechanical behaviour of hybrid composite (AA6351+Al<sub>2</sub>O<sub>3</sub>+Gr) fabricated by stir casting method”, International Journal of Materials Today Proceedings, Elsevier Science Direct, 2017, Vol. 4(2A), pp. 3093-3101.
48. **V. Mohanavel**, K. Rajan, S. Arul and P.V. Senthil. “Production, Microstructure and Mechanical behavior of AA6351/TiB<sub>2</sub> composite synthesized by direct melt reaction method”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2017, Vol. 4(2A), pp. 3315-3324.
49. **V. Mohanavel**, S. Suresh Kumar, T. Sathish, K.T. Anand. “Effect of ZrB<sub>2</sub> content on mechanical and microstructural characterization of AA6063 aluminum matrix composites”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5, pp. 13601-13605.
50. **V. Mohanavel**, K. Rajan, S. Suresh Kumar, S. Udishkumar, C. Jayasekar. “Effect of silicon carbide reinforcement on mechanical and physical properties of aluminium matrix composites”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5, pp. 2938-2944.
51. **V. Mohanavel**, M. Ravichandran, S. Suresh Kumar. “Optimization of tungsten inert gas welding parameters to attain maximum impact strength in AA6061 alloy joints using Taguchi technique”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5, pp. 25112-25120.
52. **V. Mohanavel**, M. Naveen Kumar, K. Magesh Kumar, C. Jayasekar, N. Dineshbabu and S. Udishkumar. “Mechanical behavior of in situ ZrB<sub>2</sub>/AA2014 composite produced by the exothermic salt-metal reaction

technique”, International Journal of Materials Today Proceedings, Elsevier Science Direct, 2017, Vol. 4(2A), pp. 3215-3221.

53. **V. Mohanavel**, K. Rajan and S. Sureshkumar, G. Vijayan, M.S. Vijayanand “Study on mechanical properties of graphite particulates reinforced aluminium matrix composite fabricated by stir casting technique”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5, pp. 2945-2950.
54. **V. Mohanavel**, K. Rajan, S. Suresh Kumar, A. Chockalingam, A. Roy, T. Adithiyaa “Mechanical and tribological characterization of stir-cast Al-SiCp composites”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5, pp. 1740-1746.
55. **V. Mohanavel**, K. Rajan, S. Suresh Kumar, T. Sathish, T. Adithiyaa, K. Mariyappan, “Microstructure and mechanical properties of hard ceramic particulate reinforced AA7075 alloy composites via liquid metallurgy route”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5 (13), pp. 26860-26865.
56. **V. Mohanavel**, S. Suresh Kumar, K. Mariyappan, P. Ganeshan, T. Adithiyaa, “Mechanical behavior of Al-matrix nanocomposites produced by stir casting technique”, International Journal of Materials Today Proceedings, Elsevier-Science Direct, 2018, Vol. 5 (13), pp. 26873-26877.
57. **V. Mohanavel**, R. Poongothai, S. Suresh Kumar, N.J. Lavanya, S. Gowrishankar, “Compression strength and tensile fracture analysis of aluminium matrix composites made via stir casting method”, International Journal of Recent Technology and Engineering, 2019, 8(1) 2815-2819.
58. **V. Mohanavel**, S.N. Sundar, R. Poongothai, S. Suresh Kumar, V. Sivaraman “Experimental and FEA evaluation of AA2014/TiC composites”, International Journal of Recent Technology and Engineering, 2019, 8(2) 5636-5639.
59. S. Mahendiran, R. Ramanujam, **V. Mohanavel**, M.M. Ravikumar, G. Madhan and P. Vinothkumar, Parametric optimization of friction welded 17-4 PH SS alloy using Taguchi techniques, Progress in Industrial Ecology – An International Journal, Inderscience Publication, 2018, Vol. 12 (1-2), 3-13.
60. **V. Mohanavel**, K. Rajan, S. Suresh Kumar. “Experimental investigation on mechanical and tribological properties of SiC particles reinforced aluminum matrix composites”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 459-464.
61. R. Praveenkumar, P.Periyasamy, **V. Mohanavel**, M.M. Ravikumar, “Mechanical and tribological behavior of Mg-matrix composites manufactured by stir casting technique”, International Journal of Vehicle Structures & Systems, 2019, DOI:10.4273/ijvss.11.6.05
62. **V. Mohanavel**, P.Periyasamy, M. Balamurugan, T. Sathish. “A review on mechanical and tribological behaviour of aluminium based metal matrix composites”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 473-478.
63. **V. Mohanavel**, A. Chockalingam, S. Suresh Kumar, R. Praveenkumar. “Characterization of mechanical properties of aluminium/fly ash composites fabricated through stir casting process”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 377-382.
64. R. Praveenkumar, P.Periyasamy, **V. Mohanavel**, “A review on magnesium matrix composites”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 447-450.
65. R. Praveenkumar, P.Periyasamy, **V. Mohanavel**, Microstructure and mechanical properties of Mg/WC composites prepared by stir casting method, International Journal of Mechanical Engineering and Technology, 2018, Vol. 9(10), 1504-1511.
66. B. Stalin, M. Ravichandran, S. Arivukkaran, **V. Mohanavel**, “Weight loss corrosion studies of aluminium-LM4 reinforced with alumina silicate ( $\text{Al}_2\text{O}_3\text{SiO}_2$ ) particulates composites in sodium chloride (NaCl) solution”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 329-336.
67. S. Rudramoorthy, **V. Mohanavel**, S. Karthikeyan, T. Sathish, Investigation on structural and thermal analysis of disc brake with aluminium metal matrix composite“, International Journal of Mechanical and Production Engineering Research and Development, 2018, 431-440.

68. V. Ranjith Kumar, **V. Mohanavel**, O. Maniyarasu. “Cryogenic characterisation of chemically treated vetiver fibre-epoxy polymer composite”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 505-514.
69. V. Raja, P. Periyasamy, **V. Mohanavel**, “Experimental analysis of Al 6061 & EN 24 steel using friction welding process”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 555-563.
70. V. Raja, P. Periyasamy, **V. Mohanavel**, “Friction welding of dissimilar material – an overview”, International Journal of Mechanical and Production Engineering Research and Development, 2018, 564-570.
71. **V. Mohanavel**, “Mechanical and metallurgical characterization of AA7075-fly ash composites produced by liquid state method”, Journal of Chemical and Pharmaceutical Sciences, 2017, 10(2), pp. 217-220.
72. **V. Mohanavel**, K. Rajan and S. Karthikeyan and M. Naveen Kumar “An investigation on mechanical and tribological behaviour of dual particles reinforced Al matrix composites”, International Journal of Applied Mechanics and Materials, Trans Tech Publication, 2016, Vol. 852, pp. 422-427.
73. **V. Mohanavel**, K. Rajan and K.V. Senthilkumar. “Study on Mechanical properties of AA6351 alloy reinforced with Titanium di-boride (TiB<sub>2</sub>) composite by in situ casting method”, International Journal of Applied Mechanics and Materials, Trans Tech Publication, 2015, Vol. 787, pp. 583-587.
74. **V. Mohanavel**, E. Arun kumar, N. Devaraj and P. Kumar. “Investigating on mechanical behaviour of aluminium metal matrix Composite”, International Journal of Applied Engineering Research, 2015, Vol. 10(30), pp. 22918-22920.
75. **Vinayagam Mohanavel**, M. Karthick and D.L. Belginpaul, “Fabrication and development of aluminum alloy AA6063-Titanium carbide composite prepared by in situ method”, International Journal of Applied Engineering Research, 2015, Vol. 10(5), pp. 12475-12481.
76. **V. Mohanavel**, E. Arun kumar, N. Devaraj and P. Kumar. “Effect of boron carbide addition on impact behavior of AA6360/Al<sub>2</sub>O<sub>3</sub> hybrid composites fabricated by stir casting method”, International Journal of Applied Engineering Research, 2015, Vol. 10(57), pp. 341-344.

### **PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES**

1. **V. Mohanavel**, M. Ravichandran, S. Suresh Kumar, “Optimization of tungsten inert gas welding parameters to attain maximum impact strength in AA6061 alloy joints using Taguchi Technique”, **International Conference on Advances in Materials and Manufacturing Applications (ICONAMMA-2017)**, Amritha University, Bangalore, Karnataka, held during 17<sup>th</sup> and 19<sup>th</sup> Sep 2017.
2. **V. Mohanavel**, “Effect of ZrB<sub>2</sub> content on mechanical and microstructural characterization of AA6063 aluminum matrix composites”, **International conference on Materials, Manufacturing and Modelling (ICMMM-2017)**, VIT University, Vellore, held during 9<sup>th</sup> and 11<sup>th</sup> March 2017.
3. **V. Mohanavel**, K. Rajan. “Effect of AlN particles on the mechanical properties of Al-Zn-Mg-Cu/AlN composites”, **International Union of Materials Research Societies – 3rd International Conference of Young Researchers on Advanced Materials (IUMRS-ICYRAM 2016)**, Indian Institute of Science (IISc) Bengaluru, Karnataka, held during 11<sup>th</sup> to 15<sup>th</sup> Dec 2016.
4. **V. Mohanavel**, K. Rajan and S. Sureshkumar. “Microstructure and mechanical properties of hard ceramic particulate reinforced AA7075 alloy composites via liquid metallurgy route”, **International conference on Advances in Materials and Manufacturing (ICAMM-2016)**, Osmania University, Hyderabad, Telangana, held during 8<sup>th</sup> to 10<sup>th</sup> Dec 2016.
5. **V. Mohanavel**, K. Rajan. “Mechanical and tribological characterization of stir-cast Al-SiCp composites”, **International Conference on Processing of Materials, Minerals and Energy (PMME-2016)**, Pace Institute of Technology & Sciences, Ongole, Andhra Pradesh, held during 29<sup>th</sup> and 30<sup>th</sup> July 2016.
6. **V. Mohanavel**, K. Rajan and S. Sureshkumar. “Effect of silicon carbide reinforcement on mechanical and physical properties of aluminium matrix composites”, **International conference on Advanced Materials and**

Applications (ICAMA-2016), **BMS College of Engineering, Bengaluru, Karnataka**, held during 15<sup>th</sup> to 17<sup>th</sup> June 2016.

7. **V. Mohanavel**, “Review on Zirconium Di-boride ( $ZrB_2$ ) particles based aluminium matrix composites”, **International Conference on Innovative Design, Analysis and Development Practices in Aerospace and Automotive Engineering (IDAD-2018), Vel Tech University, Chennai**, held during 23<sup>rd</sup> and 24<sup>th</sup> Feb 2018.
8. **V. Mohanavel**, K. Rajan and S. Karthikeyan and M. Naveen Kumar “An investigation on mechanical and tribological behaviour of dual particles reinforced Al matrix composites”, **International conference on Mechanical Engineering Design (ICMED-2016), SSN College of Engineering, Kalavakkam, Chennai, Tamilnadu**, held during 25<sup>th</sup> and 26<sup>th</sup> April 2016.
9. **V. Mohanavel**, K. Rajan, S. Arul and P.V. Senthil. “Production, Microstructure and Mechanical behavior of AA6351/ $TiB_2$  composite synthesized by direct melt reaction method”, **5<sup>th</sup> International conference on Material Processing and Characterization (ICMPC-2016), Gokaraju Rangaraju Institute of Engineering and Technology, Hyderabad, Telangana**, held during 12<sup>th</sup> and 13<sup>th</sup> March 2016.
10. **V. Mohanavel**, K. Rajan, S. Arul and P.V. Senthil. “A probe on processing, microstructural characterization and mechanical behavior of AA7075(Al-Zn-Mg-Cu)/Aln stir cast composite”, **International conference on Mechanical, Materials and Manufacturing Systems (ICMMMS-2016), Sri Sairam Engineering College, West Tambaram, Chennai, Tamilnadu**, held during 24<sup>th</sup> and 25<sup>th</sup> February 2016.
11. **V. Mohanavel**, M. Naveen Kumar, K. Magesh Kumar, C. Jayasekar, N. Dineshbabu and S. Udishkumar. “A comparative work on die casting and squeeze casting techniques of A319 cast aluminium alloy”, **11<sup>th</sup> International conference Science, Engineering and Technology, (SET-2015), VIT University, Vellore, Tamilnadu**, held during 3<sup>th</sup> and 4<sup>th</sup> November 2015.
12. **V. Mohanavel**, K. Rajan and K.V. Senthilkumar. “ Study on Mechanical properties of AA6351 alloy reinforced with Titanium di-boride ( $TiB_2$ ) composite by in situ casting method”, **International conference on Sustainable Energy Resources, Materials and Technologies (ISERMAT-2015), SSN College of Engineering, Kalavakkam, Chennai, Tamilnadu**, held during 8<sup>th</sup> and 9<sup>th</sup> January 2015.
13. **V. Mohanavel** and Fredrick Gyanaraj, “Design & Development of off-road vehicle handling by active tubular stablizer bar for enhancing yaw stability, **International Conference on Advances in Mechanical and Energy Engineering (ICAMEE-2013), Dr.M.G.R Educational and Research Institute University, Chennai, Tamilnadu**, held during 4<sup>th</sup> and 5<sup>th</sup> April 2013.

### **PAPERS PUBLISHED IN NATIONAL CONFERENCES**

1. **V. Mohanavel** and K. Rajan, “Study on Mechanical Behaviour of Micron-sized Hard Ceramic Particles Reinforced Metal Matrix Composites”, National Conference on Advances in Material Characterization (NCAMC 2016) conducted by **Dept of Metallurgical Engg, PSG College of Technology, Coimbatore, Tamilnadu**, held during 20<sup>th</sup> May 2016.
2. **V. Mohanavel** and K. Rajan, “Evaluation of Mechanical Behaviour of Hard Ceramic Particles Reinforced Aluminum Matrix Composites”, Third National Conference on “Energy Efficient Mechanical System Design and Manufacturing” (EMSDM 2016) conducted by **Dept of Mechanical Engg, PSG College of Technology, Coimbatore, Tamilnadu**, held during 22<sup>nd</sup> April 2016.
3. **V. Mohanavel** and K. Rajan, “Production and characterization of SiCp reinforced aluminum matrix composites using stir casting method”, National Conference on Automation, Robotics and Mechatronic Systems (NCARMS-2016), **Madras Institute of Technology, Anna University, Chennai, Tamilnadu**, held during 25<sup>th</sup> and 26<sup>th</sup> March 2016.
4. **V. Mohanavel** “Influence of nano  $B_4C$  particles on mechanical properties of AA6351 aluminium matrix composites produced by stir casting”, 3<sup>rd</sup> National Conference on Emerging Trends in Mechanical Engineering (NCETIME 2017) conducted by **Dept of Mechanical Engg, Sathyabama University, Chennai, Tamilnadu**, held during 6<sup>th</sup> and 7<sup>th</sup> April 2017.