

Name : **J. David Rajaselvam**
Designation : Assistant Professor
Department : Mechanical Engineering
Name of the organization : Karunya Institute of Technology and Sciences
Place : Coimbatore
Pincode : 641114
Mobile : 9442069380
Email : jdavidrajaselvam@karunya.edu
Area of Specialization : Composite Material, Mechanical Alloying

List of Publications for the last 5 years:

1. Jeganmohan, S., Sugoza, B., Kumar, M., & Selvam, D. R. (2020). Experimental investigation on the friction and wear characteristics of palm seed powder reinforced brake pad friction composites. *Journal of The Institution of Engineers (India): Series D*, 101(1), 61-69.
2. David Raja Selvam, J., Dinaharan, I., Rai, R. S., & Mashinini, P. M. (2019). Role of zirconium diboride particles on microstructure and wear behaviour of AA7075 in situ aluminium matrix composites at elevated temperature. *Tribology-Materials, Surfaces & Interfaces*, 13(4), 230-238.
3. Ruban, R., Selvam, J. D. R., & Rai, R. S. (2019). Experimental investigation and characterization of in situ synthesized sub micron ZrB₂-ZrC particles reinforced hybrid AA6061 aluminium composite. *Materials Research Express*, 6(10), 1050e1.
4. Dinaharan, I., Balakrishnan, M., Selvam, J. D. R., & Akinlabi, E. T. (2019). Microstructural characterization and tensile behavior of friction stir processed AA6061/Al₂Cu cast aluminum matrix composites. *Journal of Alloys and Compounds*, 781, 270-279.
5. Abraham, S. J., Dinaharan, I., Selvam, J. D. R., & Akinlabi, E. T. (2019). Microstructural characterization of vanadium particles reinforced AA6063 aluminum matrix composites via friction stir processing with improved tensile strength and appreciable ductility. *Composites Communications*, 12, 54-58.
6. David Raja Selvam, J., Dinaharan, I., Rai, R. S., & Mashinini, P. M. (2019). Dry sliding wear behaviour of in-situ fabricated TiC particulate reinforced AA6061 aluminium alloy. *Tribology-Materials, Surfaces & Interfaces*, 13(1), 1-11.
7. Abraham, S. J., Dinaharan, I., Selvam, J. D. R., & Akinlabi, E. T. (2019). Microstructural characterization and tensile behavior of rutile (TiO₂)-reinforced

AA6063 aluminum matrix composites prepared by friction stir processing. *Acta Metallurgica Sinica (English Letters)*, 32(1), 52-62.

8. Coe, N. (2019). *Revitalising Port Bell on Lake Victoria, Kampala, Uganda* (Doctoral dissertation, University of Johannesburg).
9. Selvam, J. D. R., Dinaharan, I., Rai, R. S., & Mashinini, P. M. (2019). Role of zirconium diboride particles on microstructure and wear behaviour of AA7075 in situ aluminium matrix composites at elevated temperature. *Tribol. Mater. Surf. Interfaces*, 1-9.
10. Philip, S. V., Selvam, J. D. R., Rai, R. S., & Mashinini, P. M. (2019). Microstructure Characterization of in-situ formed Al_2O_3 - TiB_2 AMCs particles on AA6061 aluminium matrix composites. *Materials Today: Proceedings*, 16, 574-578.
11. Pugazhenth, A., Dinaharan, I., Kanagaraj, G., & Selvam, J. D. R. (2018). Predicting the effect of machining parameters on turning characteristics of AA7075/ TiB_2 in situ aluminum matrix composites using empirical relationships. *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 40(12), 555.
12. Pugazhenth, A., Kanagaraj, G., Dinaharan, I., & Selvam, J. D. R. (2018). Turning characteristics of in situ formed TiB_2 ceramic particulate reinforced AA7075 aluminum matrix composites using polycrystalline diamond cutting tool. *Measurement*, 121, 39-46.
13. Mashinini, P. M., Dinaharan, I., Selvam, J. D. R., & Hattingh, D. G. (2018). Microstructure evolution and mechanical characterization of friction stir welded titanium alloy Ti-6Al-4V using lanthanated tungsten tool. *Materials Characterization*, 139, 328-336.
14. Selvam, J. D. R., Dinaharan, I., Philip, S. V., & Mashinini, P. M. (2018). Microstructure and mechanical characterization of in situ synthesized AA6061/(TiB_2 + Al_2O_3) hybrid aluminum matrix composites. *Journal of Alloys and Compounds*, 740, 529-535.
15. Gladston, J. A. K., Dinaharan, I., Sheriff, N. M., & Selvam, J. D. R. (2017). Dry sliding wear behavior of AA6061 aluminum alloy composites reinforced rice husk ash particulates produced using compocasting. *Journal of Asian Ceramic Societies*, 5(2), 127-135.
16. Selvam, J. D. R., & Dinaharan, I. (2017). In situ formation of ZrB_2 particulates and their influence on microstructure and tensile behavior of AA7075 aluminum matrix composites. *Engineering Science and Technology, an International Journal*, 20(1), 187-196.

17. David Raja Selvam, J., Dinaharan, I., & Mashinini, P. M. (2017). High temperature sliding wear behavior of AA6061/fly ash aluminum matrix composites prepared using compocasting process. *Tribology-Materials, Surfaces & Interfaces*, 11(1), 39-46.
18. Lijay, K. J., Selvam, J. D. R., Dinaharan, I., & Vijay, S. J. (2016). Microstructure and mechanical properties characterization of AA6061/TiC aluminum matrix composites synthesized by in situ reaction of silicon carbide and potassium fluotitanate. *Transactions of Nonferrous Metals Society of China*, 26(7), 1791-1800.
19. DS, R. S. Study of Weldability and Metallurgical Characterization of Fly Ash Reinforced AA6061 Alloy.
20. Ruban, S. R., Wins, K. L. D., Selvam, J. D. R., & Richard, A. A. (2016). Effect of Dry Sliding Wear Behaviour of AA6061/ZrB₂/SiC Hybrid Composite. *International Journal of Vehicle Structures & Systems*, 8(2), 108.
21. Lijay, K. J., Selvam, J. D. R., Dinaharan, I., & Vijay, S. (2016). Characterization of microstructure and mechanical properties of AA6061/TiC aluminum matrix composites prepared by in-situ reaction of silicon carbide and potassium fluorotitanate. *Transactions of Nonferrous Metals Society of China*, (7), 8.
22. Lijay, K. J., Selvam, J., Dinaharan, I., & Vijay, S. J. (2016). Microstructure and mechanical characterization of aa6061/tic in situ aluminium matrix composites synthesized by in situ reaction of silicon carbide and potassium fluotitanate.
23. Selvam, J., Smart, D. S., & Dinaharan, I. (2016). Influence of fly ash particles on dry sliding wear behavior of AA6061 aluminum alloy.
24. Gladston, J. A. K., Sheriff, N. M., Dinaharan, I., & Selvam, J. D. R. (2015). Production and characterization of rich husk ash particulate reinforced AA6061 aluminum alloy composites by compocasting. *Transactions of Nonferrous Metals Society of China*, 25(3), 683-691.
25. Gladston, J. A. K., Sheriff, N. M., Dinaharan, I., & Selvam, J. D. R. (2015). Preparation and Characterization of Rice Husk Ash Reinforced AA6061 Aluminum Alloy by Composite Casting. *Transactions of Nonferrous Metals Society of China*, (3), 2.
26. Ruban, S. R., Win, L. D., Selvam, J. D. R., & Kiran, S. (2015). Fabrication and characterization of insitu formed ZrB₂ and SiC particulate reinforced A6061 matrix composites. *Int. J. Applied Engineering Research*, 10(85), 537-542.