

CENTRE FOR RESEARCH



ANNA UNIVERSITY, CHENNAI – 600 025

LIST OF PUBLICATIONS OF DC MEMBER



Name of the Scholar : Pradeep Kumar S L

Programme : Ph.D. (PT)

Research Topic : Design and Construction of Shock Tunnel Capable of Generating Shockwaves for Engineering Applications.

Name of the Supervisor: Dr. J. Maniraj / 2420222

Name of the Member : Dr. K. Leo Dev Wins

S.No	Title	Year of Publication
1	Anil Raj, K. Leo Dev Wins, Kiran Easow George, A.S Varadarajan, Experimental investigation of soyabean oil based cutting fluid during turning of hardened AISI 4340 steel with Minimal Fluid Application, International Journal of Applied Mechanics and Materials Vols. 813-814 (2015) pp 337-341.	2015
2	S. Rajesh Ruban, Leo Dev Wins, J. David Raja Selvam, Sandeep Kiran, Fabrication and characterization of in-situ formed ZrB ₂ and SiC particulate reinforced A6061 matrix composites, International Journal of Applied Engineering Research, Vol 10, N0. 85, (2015), pp. 537 – 542.	2015
3	Anil Raj, K. Leo Dev Wins and A. S. Varadarajan, “Review on hard machining with Minimal cutting fluid application”, International Journal of current engineering and technology, Vol. 5(6), pp. 3717-3722, May-Dec 2015.	2015
4	R. Deepak Joel Johnson, K. Leo Dev Wins, ‘Investigation of Flank wear on Minimal Cutting Fluid Application during turning of OHNS steel’, IOSR Journal of Mechanical and Civil Engineering, Volume 12, Issue 5 Ver. V (Sep. - Oct. 2015), PP 58-62.	2015
5	Anil Raj, M. Dev Anand, K. Leo Dev Wins and A. S. Varadarajan, “ANFIS based Model for Surface Roughness Prediction for Hard Turning with Minimal Cutting Fluid Application”, Indian Journal of science and technology, Vol 9(13), pp. 90562- 90567, April 2016.	2016
6	Anil Raj, K. Leo Dev Wins, M. Dev Anand and A. S. Varadarajan, “Performance Evaluation of Vegetable Oil based Cutting Fluid during Hard Turning of AISI	2016

	4340 Steel with Minimal Cutting Fluid Application”, Indian Journal of science and technology, Vol 9(13), pp. 90583- 90588, April 2016.	
7	Anil Raj, K. Leo Dev Wins and A. S. Varadarajan, “Optimization of fluid application parameters during hard turning of AISI H13 tool steel using minimal cutting fluid application”, International Journal of Research in Mechanical Engineering, Vol. 4(3), pp. 190-196, May-June 2016.	2016
8	Anil Raj, K. Leo Dev Wins and A. S. Varadarajan, “Cutting parameters optimization during hard turning of AISI H13 tool steel”, International Journal of Research in Mechanical Engineering, Vol. 4(3), pp. 33-38, May-June 2016.	2016
9	Vipin Gopan, Leo Dev Wins K, “Measurement of Grinding Wheel Loading Using Thresholding Technique”, International Journal of Research in Mechanical Engineering, Vol. 4(3), pp. 227-232, May-June 2016.	2016
10	Vipin Gopan, Leo Dev Wins K, Quantitative Analysis of Grinding Wheel Loading Using Image Processing, Procedia Technology, 25 (2016) 885 – 891.	2016
11	Rajesh Ruban, S., Leo Dev Wins, K., David Raja Selvam, J., Arun Richard, A. Effect of dry sliding wear behaviour of AA6061/ZrB ₂ /SiC Hybrid Composite, International Journal of Vehicle Structures and Systems, 8(2), pp. 108-111, 2016.	2016
12	Anil Raj, K Leo Dev Wins and A S Varadarajan, “Comparison of surface roughness and chip characteristics obtained under different modes of lubrication during hard turning of AISI H13 tool work steel”, IOP Conf. Series: Materials Science and Engineering 149, 012017, (2016).	2016
13	Anil Raj, K Leo Dev Wins and A S Varadarajan, “Evaluation of the performance during hard turning of OHNS steel with minimal cutting fluid application and its comparison with minimum quantity lubrication” IOP Conf. Series: Materials Science and Engineering 149, 012021, (2016).	2016
14	S.Rajesh Ruban, K. Leo Dev Wins, Krishnaraj, Development and comparison of tensile strength, surface micro hardness and microstructure of AA6061/ZrB ₂ and AA6061/ZrB ₂ /SiC aluminum metal matrix composite, International Journal of Pure and Applied Mathematics, Volume 118 No. 11 2018, 517-523.	2018
15	S. Rajesh Ruban , K. Leo Dev Wins, M. Mahendra Boopathi and A. Arun Richard “Evaluation of mechanical properties of Al-6061 reinforced with ZrB ₂ –SiC hybrid metal matrix composites” “International Journal of Mechanical Engineering & Technology (IJMET), Volume 9, Issue 2, February 2018, pp. 88–94; ISSN Print: 0976-6340.	2018
16	Vipin Gopan, Leo Dev Wins. K, Arun Surendran, Image processing based tailor-made software package for the condition monitoring of grinding wheel,	2018

	International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), 2249-8001, Vol. 8, Issue 3, Jun 2018, 825-834.	
17	Vipin Gopan, Leo Dev Wins. K, Arun Surendran, 'Integrated ANN-GA Approach For Predictive Modeling And Optimization Of Grinding Parameters With Surface Roughness As The Response', Materials Today, <u>Volume 5, Issue 5, Part 2</u> , 2018, Pages 12133-12141.	2018
18	D. S. Ebenezer Jacob Dhas, C. Velmurugan, K. Leo Dev Wins, 'Investigations on the Effect of Tungsten Carbide and Graphite Reinforcements during Spark Erosion Machining of Aluminium Alloy (AA 5052) Hybrid Composite, <u>Silicon</u> , pp 1-13. (Springer).	2018
19	D.S. Ebenezer Jacob Dhas, C. Velmurugan, K. Leo Dev Wins, K.P. BoopathiRaja, Effect of tungsten carbide, silicon carbide and graphite particulates on the mechanical and microstructural characteristics of AA 5052 hybrid composites, Ceramics International, <u>Volume 45, Issue 1</u> , January 2019, Pages 614-621.	2019
20	B. Anuja Beatrice, E. Kirubakaran, K. Leo Dev Wins, Vipin Gopan, P. Ranjit Jeba Thangaiah, Artificial Neural Network and Particle Swarm Optimization hybrid intelligence for predicting cutting force during hard turning of H13 tool steel with minimal cutting fluid application, International Journal of Mechanical and Production Engineering Research and Development (IJMPERD), Volume : 8-4, Pages : 923-932. Issue Date: 2018-08-31	2018
21	Vipin Gopan, Leo Dev Wins K, Arun Surendran, An Experimental Study on the Prediction of Grinding Wheel Dressing Intervals by Relating Wheel Loading and Surface Roughness, International Journal of Abrasive Technology (In press).	
22	Leo Dev Wins K, Anuja Beatrice B, Ebenezer Jacob Dhas D S, Anita Sofia VS, Artificial Neural Network and Genetic Algorithm based Models for Predicting Cutting force in Turning of Hardened H13 Steel, Lecture Notes in Mechanical Engineering (Accepted for publication).	
23	Anil Raj, K. Leo Dev Wins, M. Dev Anand, Optimization of Cutting Parameters in Hard Turning of OHNS Steel, International Journal of Recent Technology and Engineering (IJRTE) ISSN: 2277-3878, Volume-8, Issue-2S3, July 2019	2019
24	Rajesh Ruban S, Leo Dev Wins K, J David Raja Selvam and Rajakumar S Rai, Experimental investigation and characterization of in situ synthesized sub micron ZrB ₂ -ZrC particles reinforced hybrid AA6061 aluminium composite, <u>Materials Research Express</u> , <u>Volume 6</u> , Number 10, 1-10.	
25	Sivakumar, S., Velmurugan, C., Ebenezer Jacob Dhas, D. S., Brusly Solomon, A & Leo Dev Wins, K. (2020). Effect of Nano cupric oxide coating on the forced convection performance of a mixed-mode flat plate solar dryer. Renewable energy, 155C, 1165-1172. (SCI/Scopus/Impact factor: 5.439)	2020
26	Gopan, V. Wins, K.L.D. Evangeline, G. Surendran, A., 'Experimental Investigation for the Multi-objective Optimization of Machining Parameters on AISI D2 Steel Using Particle Swarm Optimization Coupled with Artificial Neural	2020

	Network', Journal of Advanced Manufacturing Systems Volume 19, Issue 3, 1 September 2020, Pages 589-606.	
27	K. Leo Dev Wins, B. Anuja Beatrice, D. S. Ebenezer Jacob Dhas, and V. S. Anita Sofia, 'Artificial Neural Network and Genetic Algorithm-Based Models for Predicting Cutting Force in Turning of Hardened H13 Steel', Trends in manufacturing and engineering management, Lecture notes in mechanical engineering, 627 to 636, ISBN 978-981-15-4745-4 (eBook) Springer Nature Singapore Pte Ltd. 2021.	2020