Dr.Velmurugan Paramasivam

Position: Associate Professor

Faculty: Faculty of Mechanical and Industrial Engineering

Program: Department of Automotive Engineering

Office: Tana Building-06

Email: drvelmuruganp@bdu.edu.et
Phone: +251962166871

EDUCATIONAL QUALIFICATION:

Degree/ Examination	Year of Passing	Name of the Institution/ University	CGPA
Ph.D (Vehicle Dynamics and mechanical Vibration)	2013	National Institute of Technology, Tiruchirappalli, India	Highly Recommended
M.E (Engineering Design)	2008	College of Engineering Guindy, Anna University, Chennai, India	First class
B.Tech (Mechanical Engineering)	2005	National Institute of Technology, Tiruchirappalli, India	First class

TEACHING & RESEARCH EXPERIENCE:

Institute/University	Designation	Department	Period	
			From & to	Total. Exp
Bahir Dar Institute of Technology, Bahir Dar University, Bahir Dar, Ethiopia. P.o.Box: 26	Asso. Professor	Faculty of Mechanical and Industrial Engineering	15-9-23 to Till Date	-
Kakinada Institute of Technological sciences, Ramachandrapuram. A.P.Pin :533255	Professor &Head	Mechanical Engineering	05-8-21 to 4-8-2023	2 Year
Dilla University, Ethiopia	Ass. Professor	School of Mechanical and Automotive Engineering	01-11-15 to 31-07-21	5 year 9 month
RVS School of		Automobile	27- 06-13	2 Years 3

Engineering and Technology, Dindigul, India	Professor & Head	Engineering	To 15-10-15	Month
National Institute of Technology, Calicut, India	Adhoc Lecturer	Mechanical Engineering	03-09-12 To 10-05-13	8 Month
National Institute of Technology, Trichy, India	Half Time Teaching Associate (HTTA)	Mechanical Engineering	2-2-2009 to 31-8-2012	3 years 7 month
			Total no. of Experience	15 years 1 month

INDUSTRIAL EXPERIENCE:

Company Name: TATA Consultancy Services, Bangalore.India

Title: Flex plate stress and modal analysis of HVV6 LZ3, PV8 LH2, LF2, GMDAT B12D & EFlex P14xfr Engine programs.
Client: General Motor Powertrain.
Period: June 2008 to Jan 2009.
Position: Design and Analysis Engineer.

Responsibilities:

- IGES file import in hyper mesh and geometry clean up, Hex mesh is created using Hypermesh tool, Stress analysis in Abaqus, Modal analysis in Nastran, Post processing in Hyper mesh, Recommendation/conclusions for the design changes, Documentation/Report of the analysis work.

Project:

- To determine peak stresses for axial, misalignment, centrifugal and torque load case.
- To determine in winging flexing frequency using modal analysis.
- To determine the axial stiffness of the above mentioned flex plate.

Special Soft wares: **Hyper mesh, Abacus**

Company Name: M/s. GB Engineering Enterprises Pvt. Ltd., Trichy – 620 015, India

Period : 1-6- 2005 to 5-8-2006.
Designation : Mechanical Design & Detail Engineer.
Company Profile : ISO 9001:2000 accredited & ASME "S" and "U" stamp authorized leading manufacturer of Boiler, Boiler Components, Pressure Vessels and Heat Exchangers.

Job Responsibilities:

- Preparation and checking of fabrication and erection drawings for HRSG structure, Preparation of Material Indent for Drawings, Clarification of doubts to the shop people, Planning & Scheduling of Raw Material procurement, Identify, evaluate and recommend process improvements that will increase productivity & decrease cost, Engineering related production problems and resolutions are documented.

Projects Handled:

- Non Pressure Parts (Structural)
- M/s. RASLAFFAN, ANSALDO CALDAIE, ITALLY (3 BOILERS).Casings, Inlet & Outlet Ducts, Insulations, Guide Baffles, Side Baffles & Closures).

INTERNATIONAL CERTIFICATION PROGRAM

Title : International certification for Mechanical design
Concern : **solid works**
Certificate number : C-E9TDFQ79PB
Date of certification : January 23, 2018

SOFTWARE SKILL SET

- Operating System : Windows
- CAD Tools : Auto Cad, Catia V5, Pro- E wildfire, Uni Graphics
- CAE Tools : Hypermesh, Abacus, Adams, Nastran , Mat lab

PROJECT WORK:

Degree	Research/ Project Topic	Centre	Period	Objectives
Ph.D	Some studies on whole body vibration of tractor semi-trailer drivers	Technical Centre, Ashok Leyland, Chennai , Tamil Nadu	Feb 2009 to May 2012	• To measure whole body vibration exposure from cabin tractor semitrailer. • To optimize whole body vibration and human comfort analysis for tractor semitrailer. • To develop a mathematical model for tractor semitrailer. • Validation of experimental and MATLAB simulation for tractor semi-trailer
M.E	Stress Analysis of Flexplate	Gm Power Train, Tata Consultancy Services (TCS), Bangalore	Jan 2008 to May 2008	• To evaluate the effect of design changes on the flexplate stresses under various loading conditions. • Design Changes in thickness, form, lightening hole sizes and lightening hole position on the flexplate.
B.Tech	Performance and Emission analysis on a direct injection Diesel Engine using Bio Diesel from Rice Bran Oil.	Mechanical Engineering, National Institute of Technology, Tiruchirappalli	Jan 2005 to May 2005	• To Performance and Emission analysis on a direct injection Diesel Engine using Bio-Diesel from Rice Bran Oil.

.

FUNDED RESEARCH:

MAJOR COMPLETED PROJECTS

Sponsoring Authority : **Adama Agricultural Machinery industry,** Adama, Ethiopia
Title of Project : "Design of self-propelled Centre pivot irrigation system.

Duration : JULY 2016 TO JUN 2017 (1 YEAR)
Total Project Outlay : **ETB-3436796 ($ 1,00,000)**

Ph.D GUIDANCE:

Student Name **:** K.Vignesh

Title **:** Experimental studies and numerical analysis of resistance spot weld growth on duplex stainless steel sheets

Institute **:** College of Engineering Guindy, Anna University Chennai

Role : Co-Advisor

Status : completed

RESEARCH AREAS OF INTEREST

- Whole body vibration
- Vehicle dynamics
- Ergonomics Study
- Biomechanics
- Ride comfort analysis
- Human factors
- Automotive chassis
- Structural analysis
- Failure and stress analysis
- Optimization techniques
- Advanced Welding Process- Laser, Friction, Resistance, Arc

SUBJECT HANDLED:

- Vehicle dynamics
- Automotive chassis
- Machine Drawing
- Design of machine elements
- Design of transmission elements
- Mechanical vibration
- Kinematics of machinery
- Dynamics of machinery
- Strength of Materials
- Finite Element Method
- Advanced Finite Element Analysis
- Engineering Graphics
- Welding Technology
- Advanced Finite Element Analysis

PROFESSIONAL ACTIVITIES:

Reviewer for:

- Journal of Sustainable cities and society
- Journal of human factors and ergonomics in manufacturing & service industries
- Journal of Experimental Techniques
- Journal of Vibration and Control
- Journal of Low Frequency Noise, Vibration and Active Control

PROFESSIONAL MEMBERSHIP

- Indian Society for Technical Education (ISTE) -LM 103506
- Society of Automobile Engineer India (SAE INDIA)

PUBLICATIONS:

1. Abdu Mohammed Seid, Solomon Alemneh Adimass, Waleligne Molla Salilew,Vignesh Krishnan, Velmurugan Paramasivam, Birhanu Adisie(2025) Recent Progress on the Physical, Thermal, and Mechanical Properties of Expanded Polystyrene Waste–Based Composites, International Journal of Polymer Science 2025 DOI: 10.1155/ijps/9285040
2. Solomon Alemneh Adimass, Ermias Gebrekidan Koricho, **Velmurugan Paramasivam** ,and Vignesh Krishnan (2024), Experimental and Numerical Studies on the Vibration of Hybrid Composite with an Edge Crack, Journal of Engineering, Volume 2024, Article ID 5281868, 18 pages.https://doi.org/10.1155/2024/5281868.
3. Vignesh Krishnan, **Velmurugan Paramasivam** (2024), Optimization of dissimilar ASS-DSS spot welded joints on tensile shear fracture load, ISIJ International, Vol. 64 (2024), No. 8, pp. 1–11. https://doi.org/10.2355/isijinternational.ISIJINT-2024-011.

4. Dega Nagaraju, C. Chiranjeevi, Y. Rajasekhar, Senthil Kumaran Selvaraj, Utkarsh Chadha, R. Nagalakshmi, Velmurugan Paramasivam Semantic Approach for Evaluation of Energy Storage Technologies under Fuzzy Environment Advances in Fuzzy Systems 2022-1149503(1):1-11. DOI: 10.1155/2022/1149503.
5. Utkarsh Chadha , Preetam Bhardwaj , Senthil Kumaran Selvaraj Prashant Sonar ,and Velmurugan Paramasivam (2022), Current Trends and Future Perspectives of Nanomaterials in Food Packaging Application, Volume 2022, Article ID 2745416, https://doi.org/10.1155/2022/2745416
6. Amogh Gyaneshwar , Senthil Kumaran Selvaraj, Turusha Ghimire, Saumya Jayanti Mishra, Shaily Gupta, Utkarsh Chadha , Manikandan Manoharan and Velmurugan Paramasivam (2022), A Survey of Applications of MFC and Recent Progress of Artificial Intelligence and Machine Learning Techniques and Applications, with competing fuel cells, Eng. Res. Express 4 (2022) 022001. https://doi.org/10.1088/2631-8695/ac5fd9
7. Addisalem Adefris Legesse , Dawit Desalegn, Senthil Kumaran Selvaraj , **Velmurugan Paramasivam** and Utkarsh Chadha (2022), Experimental Investigation of Sorghum Stalk and Sugarcane Bagasse Hybrid Composite for Particleboard, Advances in Materials Science and Engineering, Volume 2022, Article ID 1844004, https://doi.org/10.1155/2022/1844004
8. Utkarsh Chadha , Senthil Kumaran Selvaraj , Abhishek Krishna Ravinuthala and Velmurugan Paramasivam (2022), Bioinspired Techniques in Freeze Casting: A Survey of Processes, Current Advances, and Future Directions, International Journal of Polymer Science, Volume 2022, Article ID 9169046. https://doi.org/10.1155/2022/9169046.
9. Utkarsh Chadha , Senthil Kumaran Selvaraj , Hridya Ashokan , Sai P. Hariharan , V. Mathew Paul , Vishal Venkatarangan , and **Velmurugan Paramasivam,** (2022) Complex Nanomaterials in Catalysis for Chemically Significant Applications: From Synthesis and Hydrocarbon Processing to Renewable Energy Applications, Advances in Materials Science and Engineering, Volume 2022, Article ID 1552334. https://doi.org/10.1155/2022/1552334
10. Utkarsh Chadha , Senthil Kumaran Selvaraj , Harshita Pant , Anisha Arora , and **Velmurugan Paramasivam** (2022), Phase Change Materials in Metal Casting Processes: A Critical Review and Future Possibilities, Advances in Materials Science and Engineering, Volume 2022, Article ID 7520308, https://doi.org/10.1155/2022/7520308.
11. B. Karthikeyan , Senthil Kumaran Selvaraj , G. Dhinakaran, G. Sundaramali , Natarajan Muthuswamy, and **Velmurugan Paramasivam** (2022), A Comparative Analysis by Experimental Investigations on Normal and Ground Ultrafine Mineral Admixtures in Arresting Permeation in High-Strength Concrete, Advances in Civil Engineering, Volume 2022, Article ID 3831580, https://doi.org/10.1155/2022/3831580.
12. Senthil Kumaran Selvaraj , Aditya Raj , R. Rishikesh Mahadevan , Utkarsh Chadha , and **Velmurugan Paramasivam** ,(2022), A Review on Machine Learning Models in Injection Molding Machines, Advances in Materials Science and Engineering Volume 2022, Article ID 1949061, PP 1-28. https://doi.org/10.1155/2022/1949061.
13. Utkarsh Chadha , Senthil Kumaran Selvaraj , S. Vishak Thanu , Vishnu Cholapadath , Ashesh Mathew Abraham2 , Mohammed Zaiyan M , Manikandan Manoharan , **Velmurugan Paramsivam** (2022), A review of the function of using carbon nanomaterials in membrane filtration for contaminant removal from wastewater, Mater. Res. Express in press https://doi.org/10.1088/2053-1591/ac48b8.
14. Senthil Kumaran Selvaraj , Aditya Raj , Mohit Dharnidharka , Utkarsh Chadha , Isha Sachdeva , Chinmay Kapruan , and **Velmurugan Paramasivam** (2021), A Cutting-Edge Survey of Tribological Behavior Evaluation Using Artificial and Computational Intelligence Models, Advances in Materials Science and Engineering, Volume 2021, Article ID 9529199.pp 1-https://doi.org/10.1155/2021/9529199.
15. Senthil Kumaran Selvaraj , G. Sundaramali , S. Jithin Dev , R. Srii Swathish , Rahul Karthikeyan , K. E. Vijay Vishaal , and **Velmurugan Paramasivam** (2021), Recent Advancements in the Field of Ni-Based Superalloys, Advances in Materials Science and Engineering,Volume 2021, Article ID 9723450, pp 1-60, https://doi.org/10.1155/2021/9723450.

16. Senthil Kumaran Selvaraj , Rathan Ramesh , Tharun M. V. Narendhra , Ishan Nilesh Agarwal , Utkarsh Chadha , **Velmurugan Paramasivam** ,and Ponnusamy Palanisamy (2021), New Developments in Carbon-Based Nanomaterials for Automotive Brake Pad Applications and Future Challenges, Journal of Nanomaterials, Volume 2021, Article ID 6787435,pp 1-24,https://doi.org/10.1155/2021/6787435.
17. **Velmurugan Paramasivam**, Samuel Tilahun , Alelign kerebih Jembere , Senthil Kumaran Selvaraj. Analytical investigation of hydraulic scissor lift for modular industrial plants in Ethiopia. Materials Today: Proceedings 46 (2021) 7596–7601. https://doi.org/10.1016/j.matpr.2021.01.838.Publisher: Elsevier
18. Alelign Kerebih Jembere, **Velmurugan Paramasivam**, Samuel Tilahun, Senthil Kumaran Selvaraj, Stress analysis of different cross-section for passenger truck chassis with a material of ASTM A148 Gr 80–50, Materials Today: Proceedings, 46 (2021) 7304–7316. https://doi.org/10.1016/j.matpr.2020.12.985. Publisher: Elsevier.
19. Samuel Tilahun, **Velmurugan Paramasivam**, Mebratu Tufa, Alelign kerebih, Senthil Kumaran Selvaraj, Analytical investigation of Pelton turbine for mini hydro power: For the case of selected site in Ethiopia, Materials Today: Proceedings, 46 (2021) 7364–7368. https://doi.org/10.1016/j.matpr.2020.12.1038. Publisher: Elsevier
20. Belay Taye Wondmagegnehu, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Fabricated and analyzed the mechanical properties of textile waste/glass fiber hybrid composite material, Materials Today: Proceedings, 46 (2021) 7297–7303. https://doi.org/10.1016/j.matpr.2020.12.984.Publisher: Elsevier.
21. Addisalem Adefris Legesse, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Design of manually operated multiple-seed planting machine for an Ethiopian environment, Materials Today: Proceedings, 46 (2021) 7375–7379. https://doi.org/10.1016/j.matpr.2020.12.1119. Publisher: Elsevier
22. Aweke Gugssa Iddo, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Design and Techno-economic Analysis of power generating unit from waste heat (Preheater and grate cooler) of cement factory in Ethiopia, Materials Today: Proceedings, 46 (2021) 7825–7838 .https://doi.org/10.1016/j.matpr.2021.02.375. Publisher: Elsevier
23. Belay Taye Wondmagegnehu, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Micro hardness and optical microscopy analysis of textile waste/glass fiber hybrid composite material, Materials Today: Proceedings, 46 (2021) 7322–7328. https://doi.org/10.1016/j.matpr.2020.12.993. Publisher: Elsevier
24. Eneyw Gardie, **Velmurugan Paramasivam**, Habtamu Dubale, Ewnetu Tefera Chekol, Senthil Kumaran Selvaraj, Numerical Analysis of reinforced carbon fiber composite material for lightweight automotive wheel application,Materials Today: Proceedings, 46 (2021) 7369–7374. https://doi.org/10.1016/j.matpr.2020.12.1047. Publisher: Elsevier.
25. Ewnetu Tefera Chekol, **Velmurugan Paramasivam**, Enyew Gardie, Habtamu Dubale, Senthil Kumaran Selvaraj, Experimental investigation of suitable thin layer drying curve to solar maize dryer assisted for biomass back-up heater, Materials Today: Proceedings, 46 (2021) 7389–7395. https://doi.org/10.1016/j.matpr.2020.12.1123. Publisher: Elsevier
26. Habtamu Dubale, **Velmurugan Paramasivam**, Eneyw Gardie, Ewnetu Tefera Chekol, Senthil Kumaran Selvaraj, Numerical investigation of thermo-mechanical properties for disc brake using light commercial vehicle, Materials Today: Proceedings , 46 (2021) 7548–7555 .https://doi.org/10.1016/j.matpr.2021.01.437. Publisher: Elsevier
27. Redwan Ali Usman, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Some study on the potential energy extraction from solar-assisted solid waste for produce electricity in Adama city in Ethiopia, Materials Today: Proceedings, 46 (2021) 7537–7547. https://doi.org/10.1016/j.matpr.2021.01.339. Publisher: Elsevier
28. Yihunie Mognhod Bezzie, **Velmurugan Paramasivam**, Samuel Tilahun, Senthil Kumaran Selvaraj, A review on failure mechanisms and Analysis of multidirectional laminates, Materials Today: Proceedings 46 (2021) 7380–7388. Publisher: Elsevier
29. Yonas Tetemke, **Velmurugan Paramasivam**, Fikru Tadele, Senthil Kumaran Selvaraj, Analyzed of vapor absorption refrigeration systems powered by geothermal energy: Site in Ethiopia, Materials

Today: Proceedings, 46 (2021) 7570–7580 https://doi.org/10.1016/j.matpr.2021.01.642. Publisher: Elsevier.
30. Fitsum Ashenafi Hailemariam, **Paramasivam Velmurugan**, Senthil Kumaran Selvaraj, Treatment of wastewater from coffee (coffea arebica) industries using mixed culture Pseudomonas florescence and Escherichia coli bacteria, Materials Today: Proceedings , 46 (2021) 7396–7401.https://doi.org/10.1016/j.matpr.2020.12.1124. Publisher: Elsevier
31. Yihunie Mognhod Bezzie, Dereje Engida Woldemichael, Ewnetu Tefera Chekol, Solomon Alemneh Admass, Senthil Kumaran Selvaraj, **Velmurugan Paramasivam**, Effect of volumetric fraction index on temperature distribution in thick-walled functionally graded material made cylinder, Materials Today: Proceedings, 46 (2021) 7442–7447 .https://doi.org/10.1016/j.matpr.2021.01.042. Publisher: Elsevier
32. Temesgen Fantu, Getasew Alemayehu, Getachew Kebede, Yeshi Abebe, Senthil Kumaran Selvaraj, **Velmurugan Paramasivam**, Experimental investigation of compressive strength for fly ash on high strength concrete C-55 grade, Materials Today: Proceedings, 46 (2021) 7507–7517.https://doi.org/10.1016/j.matpr.2021.01.213. Publisher: Elsevier.
33. Yeshi Abebe Yimam , Getachew Kebede Warati , Temesgen Fantu **, Velmurugan Paramasivam** ,Senthil Kumaran Selvaraj, Effect of pond ash on properties of C-25 concrete, Materials Today: Proceedings, 46 (2021) 8296–8302. https://doi.org/10.1016/j.matpr.2021.03.258. Publisher: Elsevier.
34. Addisalem Adefris Legesse, Shishay Amare Gebremeskel, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Development and characterization of bamboo - sesame stalk hybrid urea-formaldehyde matrix composite for particleboard application, Materials Today: Proceedings, 46 (2021) 7351–7358.https://doi.org/10.1016/j.matpr.2020.12.1026. Publisher: Elsevier
35. **P Velmurugan**, Janaki Manohar , C Ramesh Kannan, S Manivannan, J Vairamuthu (2020),A Study On development of Induction Welding of Thermoplastic Composites, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012109.doi:10.1088/1757-899X/988/1/012109.
36. Fikru Tadele, **P. Velmurugan** (2020), Numerical investigation of frame for human powered flywheel equipped cycle rickshaw,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012082. doi:10.1088/1757-899X/988/1/012082.
37. Samuel Tilahun, **P. Velmurugan** (2020), An Numerical Investigation of Open Coil Helical Compression Spring Using Different Alloys Materials for Light Duty Vehicle,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012085. doi:10.1088/1757-899X/988/1/012085
38. J Vairamuthu, P Velmurugan, N Janaki Manohar, C Ramesh Kannan, S Manivannan (2020),Wear experimentation and parametric optimization on synthesized copper titanium composite,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012106. doi:10.1088/1757-899X/988/1/012106.
39. S Manivannan, J Vairamuthu, **P Velmurugan**, N Janaki Manohar,C Ramesh Kannan (2020), Electrochemical studies and corrosion resistance of activated Tungsten inert gas AISI SS316L weldments, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012107. doi:10.1088/1757-899X/988/1/012107.
40. C Ramesh Kannan, S Manivannan, J Vairamuthu, **P Velmurugan**, N Janaki Manohar (2020), Vibration Analysis of Cutting Tool insert in Turning of 42CrMo4 alloy steel IOP Conf. Series: Materials Science and Engineering 988 (2020) 012105. doi:10.1088/1757-899X/988/1/012105.
41. Janaki Manohar, C Ramesh Kannan, S Manivannan, J Vairamuthu, **P Velmurugan** (2020),Design and Analysis of Die for Brake Hose Bracket, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012108. doi:10.1088/1757-899X/988/1/012108.
42. Samuel Tilahun ,**Velmurugan.P**, , S. SenthilKumaran, (2020), Some study on fatigue life of open coil suspension springs, Journal of Critical Reviews, Vol 7 (13), pp 139-143. ISSN- 2394-5125. DOI: http://dx.doi.org/10.31838/jcr.07.13.24.
43. S. Senthil Kumaran, **P. Velmurugan**, Samuel Tilahun (2020), Effect on stress and thermal analysis of tapered roller bearings, Journal of Critical Reviews, Vol 7 (9), pp 492-501. ISSN- 2394-5125. http://dx.doi.org/10.31838/jcr.07.09.99.

44. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan.P**, John Rajan A (2020),A review on life increment of tapered roller bearings, Journal of Critical Reviews ,Vol 7, Issue 6, pp 764-775.ISSN-2394-5125 DOI: http://dx.doi.org/10.31838/jcr.07.06.134.
45. Krishnan V, Ayyasamy E, Paramasivam V. Influence of resistance spot welding process parameters on dissimilar austenitic and duplex stainless steel welded joints. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering. 2021;235(1):12-23. doi:10.1177/0954408920933528(SAGE publication)
46. Ponnusamy P, **Velmurugan P**, Senthil Kumaran S, Kathiravan Srinivasan, Srinivasan N (2019), Execution of Nonstop Mutable Transmission Structure (NMTS) in Farming Vehicle, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-2,pp 413-418. ISSN 2278-3075. DOI: 10.35940/ijitee.B6414.129219.
47. Dawit Desalegn, P. Janaki Ramulu, Dagmawi Hailu, S.Senthil Kumaran, **P.Velmurugan**, D. Venkateswarlu (2019), Formability Analyses on Single Point Incremental Sheet Forming Process on Aluminum 1050, Materials Science Forum, Vol. 969, pp 703-708. ISSN: 1662-9752. DOI: 10.4028/www.scientific.net/MSF.969.703. (Trans Tech Publications Ltd, Switzerland).
48. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan P**, Srinivasan N (2019), Tool Wear Rate Prediction by using Optimization Techniques, International Journal of Innovative Technology and Exploring Engineering (IJITEE) , Volume-9 Issue-2, pp 1271-1277. ISSN 2278-3075 (online). DOI: 10.35940/ijitee.B6416.129219.
49. Kathiravan Srinivasan, Senthil Kumaran S**, Velmurugan P**, Srinivasan N(2019), Valuable Product ForReal World Requirement, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-2, December 2019, 3423-3430. ISSN 2278-3075 (online). DOI: 10.35940/ijitee.B6354.129219.
50. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan P**, Srinivasan N (2019), Wear Resistance Enhancement of Cutting Tools in CNC Machine, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-2, December 2019,pp 1264-1270. ISSN 2278-3075. DOI: 10.35940/ijitee.B6415.129219.
51. K Vignesh, A Elaya Perumal, **P. Velmurugan (2019)** , Resistance spot welding of AISI-316L SS and 2205 DSS for predicting parametric influences on weld strength- experimental and fem approach, Archives of Civil and Mechanical Engineering,19:1029-1042. doi.org/10.1016/j.acme.2019.05.002. Publication: Elsevier
52. K Vignesh, A Elaya Perumal, **P. Velmurugan** (2017), optimization of resistance spot welding process parameters and microstructural examination for dissimilar welding of AISI 316L austenitic stainless steel and 2205 duplex stainless steel, international Journal of Advanced Manufacturing Technology, pp 1-11. DOI 10.1007/s00170-017-0089-4 (Springer Publication).
53. M.Rajeswaran, K.Raja,**P.Velmurugan** and M.D .Saravanan, (2015) Optimization of soxhlet extraction of prosopics julifera using response surface methodology, International Journal of Applied Engineering Research,Vol.10(49), PP NO.552-557. Research India Publications. https://www.ripublication.com/Volume/ijaerv10n49spl.htm
54. **Velmurugan, P.,** Kumaraswamidhas, L.A and Sankaranarayanasamy, K. (2014), Whole Body Vibration Analysis for Drivers of Suspended Cabin Tractor Semitrailer. Experimental Techniques, Vol. 38, pp 47–53. Springer publication. https://doi.org/10.1111/j.1747-1567.2011.00786.x. (Springer Publication).
55. G.Vetrichelvan, S Sundaram, S Senthil Kumaran, and **P Velmurugan** (2014), An investigation of tool wear using acoustic emission andgenetic algorithm, Journal of Vibration and Control, Volume: 21 issue: 15, page(s): 3061-3066. https://doi.org/10.1177/1077546314520835. (SAGE publication).
56. **P.Velmurugan**,., K.Sankaranarayanasamy , L.A.Kumaraswamidhas and K.Pazhaivel (2014), ride comfort analysis for unsuspended Cabin Tractor Semitrailer. International Journal of Vehicle structures and systems, Vol. 6 (4), pp. 104-109. doi: 10.4273/ijvss.6.4.04. (MAFTREE Publication).
57. **Velmurugan, P.,** Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Measurement of whole-body vibration exposure from unsuspended cabin tractor semi-trailers. Human Factors and Ergonomics in Manufacturing & Service Industries. Vol. 22 (6), pp. 481-486. DOI: 10.1002/hfm.20285. (Wiley Periodicals, Inc)

58. **Velmurugan, P**., Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Optimization of whole body vibration analysis for suspended cabin tractor semitrailer. International Journal of Vehicle Noise and Vibration, Vol. 8 (2), pp. 152-165. DOI: 10.1504/IJVNV.2012.046466. (Inderscience Publishers).
59. L.A. Kumaraswamidhas; B. Sudharsan; S. Girish Krishna; **P. Velmurugan** (2012) Modelling and simulation of non-linear vibration absorber attached to automotive system, Int. J. of Vehicle Systems Modelling and Testing, Vol.7 (4), pp.390 – 404. DOI: 10.1504/IJVSMT.2012.049428. (Inder science Publishers).
60. **Velmurugan, P**., Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Influence of road surfaces on whole body vibration for suspended cabin tractor semitrailer drivers, Journal of Low Frequency Noise, Vibration and Active Control, Vol. 31 (2), pp. 75-84. https://doi.org/10.1260/0263-0923.31.2.75 . (SAGE publication).
61. L.A.Kumaraswamidhas, L. , P.Velmurugan, P. , K.Sankaranarayanasamy, K. (2011). 'Optimization of Human Comfort Reaction for Suspended Cabin Tractor Semitrailer Drivers'. World Academy of Science, Engineering and Technology, Open Science Index 57, International Journal of Mechanical and Mechatronics Engineering, 5(9), 1869 - 1875.
62. **Velmurugan, P.,** Kumaraswamidhas, L. A. and Sankaranarayanasamy, K. (2011), Investigation on influence of stiffness and hydro-pneumatic suspension for dynamic Analysis of a heavy truck using ADAMS simulation. International journal of Human Factors Modeling and Simulation, Vol-2 (3), pp no.204-221. https://doi.org/10.1504/IJHFMS.2011.044504. (Inderscience Publishers).
63. Baskar, S and **Velmurugan,P.** (2011) Creep Analysis of Notched Structural Stainless Steel by Finite Element Method. International Journal of Mechanics and Solids, Volume 6(1), pp. 1-6. https://www.ripublication.com/ijms/ijmsv6n1_1.pdf
64. **Velmurugan, P.** Balasubramanian,P and Thanigaiyarasu,G.(2010) Projectile Penetration Analysis in Armour Using Finite Element Method. International Journal of Mechanics and Solids, Volume 5 (2), pp. 123-129. https://www.ripublication.com/ijms/ijmsv5n2_4.pdf

PUBLICATIONS *(Referred Conference Proceedings)*

1. **P.Velmurugan** (2015),Optimization of soxhlet extraction of prosopics julifera using response surface methodology, International Conference On Emerging Trends In Engineering ,Technology And Management (ICETM2015), April 16-18, 2015, RVS School Of Engineering And Technology, Dindigul ,Tamilnadu,India
2. **P.Velmurugan,** K.Sankaranarayanasamy and K.Pazhanivel (2014), Analytical Investigation on Ride Comfort Analysis for Tractor Semitrailer, International Conference on advance design and manufacturing (ICAD&M- 2014), pp 1648-1650, DEC 5-7, 2014, National Institute of Technology, Tiruchirappalli, India.
3. L.Arun Kumar, **P. Velmurugan** and P. Ananda Kumar (2014) Water Management Design for the Enhanced Performance of Air-Breathing Proton Exchange Membrane Fuel Cell, International Conference on advance design and manufacturing (ICAD&M- 2014), pp 1651-1652, DEC 5-7, 2014, National Institute of Technology, Tiruchirappalli, India
4. **P.Velmurugan**, L.A.Kumaraswamidhas and K.Sankaranarayanasamy (2011), Optimization of human comfort to vibration in unsuspended cabin tractor semitrailer, 1st International Conference In South Asia on "Global Manufacturing Systems & Management" (ICGMSM - 2011), pp 277 - 286, August 1-3, 2011, Coimbatore Institute of Technology, Coimbatore, India.
5. **P.Velmurugan**, L.A.Kumaraswamidhas and K.Sankaranarayanasamy (2011), Investigation on Influence of Speed for Ride Comfort Analysis in Unsuspended Cabin Tractor Semitrailer, Proc. of the 5th International Conference on Advances in Mechanical Engineering (ICAME-2011), pp 671 - 675, June 06-08, 2011,S.V. National Institute of Technology, Surat, India.
6. **P.Velmurugan**, A. Elayaperumal , K.Pazhanivel , G.B.Bhaskar (2012), Flexplate Geometry Design Changes for Improved Stress Analysis Using Finite Element Method, 1st International Conference on Futuristic Trends in Mechanical Engineering (ICFTME - 2012), pp 335 - 344, January 28-29, 2012, Thiruvalluvar college of engineering and technology, vandavasi, tamil nadu, India.
7. **P.Velmurugan,** Dr. A. Elaya Perumal, R. Garudadri ,Sreedhar B Patil , Stress analysis of flexplate, Proceedings of the First National Conference on Emerging Trends in Engineering Design, 27th

March 2008, pp no 31-36, Department of Mechanical Engg. Government College of Engineering Thirunelveli-627007. Tamilnadu, India.

(2022), A Survey of Applications of MFC and Recent Progress of Artificial Intelligence and Machine Learning Techniques and Applications, with competing fuel cells, Eng. Res. Express 4 (2022) 022001. https://doi.org/10.1088/2631-8695/ac5fd9

1. Utkarsh Chadha , Senthil Kumaran Selvaraj , Abhishek Krishna Ravinuthala , Yashwanth Maddini,1 Kaviya Arasu and **Velmurugan Paramasivam** (2022) Bioinspired Techniques in Freeze Casting: A Survey of Processes, Current Advances, and Future Directions, International Journal of Polymer Science, Volume 2022, Article ID 9169046, https://doi.org/10.1155/2022/9169046
2. Addisalem Adefris Legesse , Dawit Desalegn, Senthil Kumaran Selvaraj , **Velmurugan Paramasivam** and Utkarsh Chadha (2022), Experimental Investigation of Sorghum Stalk and Sugarcane Bagasse Hybrid Composite for Particleboard, Advances in Materials Science and Engineering, Volume 2022, Article ID 1844004, https://doi.org/10.1155/2022/1844004
3. Utkarsh Chadha , Senthil Kumaran Selvaraj , Harshita Pant , Anisha Arora , and **Velmurugan Paramasivam** (2022), Phase Change Materials in Metal Casting Processes: A Critical Review and Future Possibilities, Advances in Materials Science and Engineering, Volume 2022, Article ID 7520308, https://doi.org/10.1155/2022/7520308.
4. Utkarsh Chadha , Senthil Kumaran Selvaraj , Hridya Ashokan , Sai P. Hariharan , V. Mathew Paul , Vishal Venkatarangan , and **Velmurugan Paramasivam,** (2022) Complex Nanomaterials in Catalysis for Chemically Significant Applications: From Synthesis and Hydrocarbon Processing to Renewable Energy Applications, Advances in Materials Science and Engineering, Volume 2022, Article ID 1552334. https://doi.org/10.1155/2022/1552334
5. Utkarsh Chadha , Senthil Kumaran Selvaraj , S. Vishak Thanu , Vishnu Cholapadath , Ashesh Mathew Abraham2 , Mohammed Zaiyan M , Manikandan Manoharan , **Velmurugan Paramsivam** (2022), A review of the function of using carbon nanomaterials in membrane filtration for contaminant removal from wastewater, Mater. Res. Express in press https://doi.org/10.1088/2053-1591/ac48b8.
6. Senthil Kumaran Selvaraj , Aditya Raj , R. Rishikesh Mahadevan , Utkarsh Chadha , and **Velmurugan Paramasivam** ,(2022), A Review on Machine Learning Models in Injection Molding Machines, Advances in Materials Science and Engineering Volume 2022, Article ID 1949061, PP 1-28. https://doi.org/10.1155/2022/1949061.
7. Senthil Kumaran Selvaraj , Aditya Raj , Mohit Dharnidharka , Utkarsh Chadha , Isha Sachdeva , Chinmay Kapruan , and **Velmurugan Paramasivam** (2021), A Cutting-Edge Survey of Tribological Behavior Evaluation Using Artificial and Computational Intelligence Models, Advances in Materials Science and Engineering, Volume 2021, Article ID 9529199.pp 1-https://doi.org/10.1155/2021/9529199.
8. Senthil Kumaran Selvaraj , Rathan Ramesh , Tharun M. V. Narendhra , Ishan Nilesh Agarwal , Utkarsh Chadha , **Velmurugan Paramasivam** ,and Ponnusamy Palanisamy (2021), New Developments in Carbon-Based Nanomaterials for Automotive Brake Pad Applications and Future Challenges, Journal of Nanomaterials, Volume 2021, Article ID 6787435,pp 1-24,https://doi.org/10.1155/2021/6787435.
9. Senthil Kumaran Selvaraj , G. Sundaramali , S. Jithin Dev , R. Srii Swathish , Rahul Karthikeyan , K. E. Vijay Vishaal , and **Velmurugan Paramasivam** (2021), Recent Advancements in the Field of Ni-Based Superalloys, Advances in Materials Science and Engineering,Volume 2021, Article ID 9723450, pp 1-60, https://doi.org/10.1155/2021/9723450.
10. **Velmurugan Paramasivam**, Samuel Tilahun , Alelign kerebih Jembere , Senthil Kumaran Selvaraj. Analytical investigation of hydraulic scissor lift for modular industrial plants in Ethiopia. Materials Today: Proceedings 46 (2021) 7596–7601. https://doi.org/10.1016/j.matpr.2021.01.838.Publisher: Elsevier
11. Alelign Kerebih Jembere, **Velmurugan Paramasivam**, Samuel Tilahun, Senthil Kumaran Selvaraj, Stress analysis of different cross-section for passenger truck chassis with a material

of ASTM A148 Gr 80–50, Materials Today: Proceedings, 46 (2021) 7304–7316. https://doi.org/10.1016/j.matpr.2020.12.985. Publisher: Elsevier.
12. Samuel Tilahun, **Velmurugan Paramasivam**, Mebratu Tufa, Alelign kerebih, Senthil Kumaran Selvaraj, Analytical investigation of Pelton turbine for mini hydro power: For the case of selected site in Ethiopia, Materials Today: Proceedings, 46 (2021) 7364–7368. https://doi.org/10.1016/j.matpr.2020.12.1038. Publisher: Elsevier
13. Belay Taye Wondmagegnehu, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Fabricated and analyzed the mechanical properties of textile waste/glass fiber hybrid composite material, Materials Today: Proceedings, 46 (2021) 7297–7303. https://doi.org/10.1016/j.matpr.2020.12.984.Publisher: Elsevier.
14. Addisalem Adefris Legesse, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Design of manually operated multiple-seed planting machine for an Ethiopian environment, Materials Today: Proceedings, 46 (2021) 7375–7379. https://doi.org/10.1016/j.matpr.2020.12.1119. Publisher: Elsevier
15. Aweke Gugssa Iddo, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Design and Techno-economic Analysis of power generating unit from waste heat (Preheater and grate cooler) of cement factory in Ethiopia, Materials Today: Proceedings, 46 (2021) 7825–7838 .https://doi.org/10.1016/j.matpr.2021.02.375. Publisher: Elsevier
16. Belay Taye Wondmagegnehu, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Micro hardness and optical microscopy analysis of textile waste/glass fiber hybrid composite material, Materials Today: Proceedings, 46 (2021) 7322–7328. https://doi.org/10.1016/j.matpr.2020.12.993. Publisher: Elsevier
17. Eneyw Gardie, **Velmurugan Paramasivam**, Habtamu Dubale, Ewnetu Tefera Chekol, Senthil Kumaran Selvaraj, Numerical Analysis of reinforced carbon fiber composite material for lightweight automotive wheel application,Materials Today: Proceedings, 46 (2021) 7369–7374. https://doi.org/10.1016/j.matpr.2020.12.1047. Publisher: Elsevier.
18. Ewnetu Tefera Chekol, **Velmurugan Paramasivam**, Enyew Gardie, Habtamu Dubale, Senthil Kumaran Selvara, Experimental investigation of suitable thin layer drying curve to solar maize dryer assisted for biomass back-up heater, Materials Today: Proceedings, 46 (2021) 7389–7395. https://doi.org/10.1016/j.matpr.2020.12.1123. Publisher: Elsevier
19. Habtamu Dubale, **Velmurugan Paramasivam**, Eneyw Gardie, Ewnetu Tefera Chekol, Senthil Kumaran Selvaraj, Numerical investigation of thermo-mechanical properties for disc brake using light commercial vehicle, Materials Today: Proceedings , 46 (2021) 7548–7555 .https://doi.org/10.1016/j.matpr.2021.01.437. Publisher: Elsevier
20. Redwan Ali Usman, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Some study on the potential energy extraction from solar-assisted solid waste for produce electricity in Adama city in Ethiopia, Materials Today: Proceedings, 46 (2021) 7537–7547. https://doi.org/10.1016/j.matpr.2021.01.339. Publisher: Elsevier
21. Yihunie Mognhod Bezzie, **Velmurugan Paramasivam**, Samuel Tilahun, Senthil Kumaran Selvaraj, A review on failure mechanisms and Analysis of multidirectional laminates, Materials Today: Proceedings 46 (2021) 7380–7388. Publisher: Elsevier
22. Yonas Tetemke, **Velmurugan Paramasivam**, Fikru Tadele, Senthil Kumaran Selvaraj, Analyzed of vapor absorption refrigeration systems powered by geothermal energy: Site in Ethiopia, Materials Today: Proceedings, 46 (2021) 7570–7580 https://doi.org/10.1016/j.matpr.2021.01.642. Publisher: Elsevier.
23. Fitsum Ashenafi Hailemariam, **Paramasivam Velmurugan**, Senthil Kumaran Selvaraj, Treatment of wastewater from coffee (coffea arebica) industries using mixed culture Pseudomonas florescence and Escherichia coli bacteria, Materials Today: Proceedings , 46 (2021) 7396–7401.https://doi.org/10.1016/j.matpr.2020.12.1124. Publisher: Elsevier
24. Yihunie Mognhod Bezzie, Dereje Engida Woldemichael, Ewnetu Tefera Chekol, Solomon Alemneh Admass, Senthil Kumaran Selvaraj, **Velmurugan Paramasivam**, Effect of

volumetric fraction index on temperature distribution in thick-walled functionally graded material made cylinder, Materials Today: Proceedings, 46 (2021) 7442–7447 .https://doi.org/10.1016/j.matpr.2021.01.042. Publisher: Elsevier

25. Temesgen Fantu, Getasew Alemayehu, Getachew Kebede, Yeshi Abebe, Senthil Kumaran Selvaraj, **Velmurugan Paramasivam**, Experimental investigation of compressive strength for fly ash on high strength concrete C-55 grade, Materials Today: Proceedings, 46 (2021) 7507–7517.https://doi.org/10.1016/j.matpr.2021.01.213. Publisher: Elsevier.
26. Yeshi Abebe Yimam , Getachew Kebede Warati , Temesgen Fantu **, Velmurugan Paramasivam** ,Senthil Kumaran Selvaraj, Effect of pond ash on properties of C-25 concrete, Materials Today: Proceedings, 46 (2021) 8296–8302. https://doi.org/10.1016/j.matpr.2021.03.258. Publisher: Elsevier.
27. Addisalem Adefris Legesse, Shishay Amare Gebremeskel, **Velmurugan Paramasivam**, Senthil Kumaran Selvaraj, Development and characterization of bamboo - sesame stalk hybrid urea-formaldehyde matrix composite for particleboard application, Materials Today: Proceedings, 46 (2021) 7351–7358.https://doi.org/10.1016/j.matpr.2020.12.1026. Publisher: Elsevier
28. **P Velmurugan**, Janaki Manohar , C Ramesh Kannan, S Manivannan, J Vairamuthu (2020),A Study On development of Induction Welding of Thermoplastic Composites, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012109.doi:10.1088/1757-899X/988/1/012109.
29. Fikru Tadele, **P. Velmurugan** (2020), Numerical investigation of frame for human powered flywheel equipped cycle rickshaw,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012082. doi:10.1088/1757-899X/988/1/012082.
30. Samuel Tilahun, **P. Velmurugan** (2020), An Numerical Investigation of Open Coil Helical Compression Spring Using Different Alloys Materials for Light Duty Vehicle,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012085. doi:10.1088/1757-899X/988/1/012085
31. J Vairamuthu, P Velmurugan, N Janaki Manohar, C Ramesh Kannan, S Manivannan (2020),Wear experimentation and parametric optimization on synthesized copper titanium composite,IOP Conf. Series: Materials Science and Engineering 988 (2020) 012106. doi:10.1088/1757-899X/988/1/012106.
32. S Manivannan, J Vairamuthu, **P Velmurugan**, N Janaki Manohar,C Ramesh Kannan (2020), Electrochemical studies and corrosion resistance of activated Tungsten inert gas AISI SS316L weldments, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012107. doi:10.1088/1757-899X/988/1/012107.
33. C Ramesh Kannan, S Manivannan, J Vairamuthu, **P Velmurugan**, N Janaki Manohar (2020), Vibration Analysis of Cutting Tool insert in Turning of 42CrMo4 alloy steel IOP Conf. Series: Materials Science and Engineering 988 (2020) 012105. doi:10.1088/1757-899X/988/1/012105.
34. Janaki Manohar, C Ramesh Kannan, S Manivannan, J Vairamuthu, **P Velmurugan** (2020),Design and Analysis of Die for Brake Hose Bracket, IOP Conf. Series: Materials Science and Engineering 988 (2020) 012108. doi:10.1088/1757-899X/988/1/012108.
35. Samuel Tilahun ,**Velmurugan.P**, , S. SenthilKumaran, (2020), Some study on fatigue life of open coil suspension springs, Journal of Critical Reviews, Vol 7 (13), pp 139-143. ISSN-2394-5125. DOI: http://dx.doi.org/10.31838/jcr.07.13.24.
36. S. Senthil Kumaran, **P. Velmurugan**, Samuel Tilahun (2020), Effect on stress and thermal analysis of tapered roller bearings, Journal of Critical Reviews, Vol 7 (9), pp 492-501. ISSN-2394-5125. http://dx.doi.org/10.31838/jcr.07.09.99.
37. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan.P**, John Rajan A (2020),A review on life increment of tapered roller bearings, Journal of Critical Reviews ,Vol 7, Issue 6, pp 764-775.ISSN- 2394-5125 DOI: http://dx.doi.org/10.31838/jcr.07.06.134.

38. Vignesh Krishnan , Elayaperumal Ayyasamy and **Velmurugan Paramasivam** (2020), Influence of resistance spot welding process parameters on dissimilar austenitic and duplex stainless steel welded joints, J Process Mechanical Engineering, 0(0) 1–12. DOI: 10.1177/0954408920933528. (SAGE publication)
39. Ponnusamy P, **Velmurugan P**, Senthil Kumaran S, Kathiravan Srinivasan, Srinivasan N (2019), Execution of Nonstop Mutable Transmission Structure (NMTS) in Farming Vehicle, International Journal of Innovative Technology and Exploring Engineering (IJITEE), Volume-9 Issue-2,pp 413-418. ISSN 2278-3075. DOI: 10.35940/ijitee.B6414.129219.
40. Dawit Desalegn, P. Janaki Ramulu, Dagmawi Hailu, S.Senthil Kumaran, **P.Velmurugan**, D. Venkateswarlu (2019), Formability Analyses on Single Point Incremental Sheet Forming Process on Aluminum 1050, Materials Science Forum, Vol. 969, pp 703-708. ISSN: 1662-9752. DOI: 10.4028/www.scientific.net/MSF.969.703. (Trans Tech Publications Ltd, Switzerland).
41. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan P**, Srinivasan N (2019), Tool Wear Rate Prediction by using Optimization Techniques, International Journal of Innovative Technology and Exploring Engineering (IJITEE) , Volume-9 Issue-2, pp 1271-1277. ISSN 2278-3075 (online). DOI: 10.35940/ijitee.B6416.129219.
42. Kathiravan Srinivasan, Senthil Kumaran S**, Velmurugan P**, Srinivasan N(2019), Valuable Product ForReal World Requirement, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-2, December 2019, 3423-3430. ISSN 2278-3075 (online). DOI: 10.35940/ijitee.B6354.129219.
43. Senthil Kumaran S, Kathiravan Srinivasan, **Velmurugan P**, Srinivasan N (2019), Wear Resistance Enhancement of Cutting Tools in CNC Machine, International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-9 Issue-2, December 2019,pp 1264-1270. ISSN 2278-3075. DOI: 10.35940/ijitee.B6415.129219.
44. K Vignesh, A Elaya Perumal, **P. Velmurugan (2019)** , Resistance spot welding of AISI-316L SS and 2205 DSS for predicting parametric influences on weld strength- experimental and fem approach, Archives of Civil and Mechanical Engineering,19:1029-1042. doi.org/10.1016/j.acme.2019.05.002. Publication: Elsevier
45. K Vignesh, A Elaya Perumal, **P. Velmurugan** (2017), optimization of resistance spot welding process parameters and microstructural examination for dissimilar welding of AISI 316L austenitic stainless steel and 2205 duplex stainless steel, international Journal of Advanced Manufacturing Technology, pp 1-11. DOI 10.1007/s00170-017-0089-4 (Springer Publication).
46. M.Rajeswaran, K.Raja,**P.Velmurugan** and M.D .Saravanan, (2015) Optimization of soxhlet extraction of prosopics julifera using response surface methodology, International Journal of Applied Engineering Research,Vol.10(49), PP NO.552-557. Research India Publications. https://www.ripublication.com/Volume/ijaerv10n49spl.htm
47. **Velmurugan, P.,** Kumaraswamidhas, L.A and Sankaranarayanasamy, K. (2014), Whole Body Vibration Analysis for Drivers of Suspended Cabin Tractor Semitrailer. Experimental Techniques, Vol. 38, pp 47–53. Springer publication. https://doi.org/10.1111/j.1747-1567.2011.00786.x. (Springer Publication).
48. G.Vetrichelvan, S Sundaram, S Senthil Kumaran, and **P Velmurugan** (2014), An investigation of tool wear using acoustic emission andgenetic algorithm, Journal of Vibration and Control, Volume: 21 issue: 15, page(s): 3061-3066. https://doi.org/10.1177/1077546314520835. (SAGE publication).
49. **P.Velmurugan**,., K.Sankaranarayanasamy , L.A.Kumaraswamidhas and K.Pazhaivel (2014), ride comfort analysis for unsuspended Cabin Tractor Semitrailer. International Journal of Vehicle structures and systems, Vol. 6 (4), pp. 104-109. doi: 10.4273/ijvss.6.4.04. (MAFTREE Publication).

50. **Velmurugan, P.,** Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Measurement of whole-body vibration exposure from unsuspended cabin tractor semi-trailers. Human Factors and Ergonomics in Manufacturing & Service Industries. Vol. 22 (6), pp. 481-486. DOI: 10.1002/hfm.20285. (Wiley Periodicals, Inc)
51. **Velmurugan, P**., Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Optimization of whole body vibration analysis for suspended cabin tractor semitrailer. International Journal of Vehicle Noise and Vibration, Vol. 8 (2), pp. 152-165. DOI: 10.1504/IJVNV.2012.046466. (Inderscience Publishers).
52. L.A. Kumaraswamidhas; B. Sudharsan; S. Girish Krishna; **P. Velmurugan** (2012) Modelling and simulation of non-linear vibration absorber attached to automotive system, Int. J. of Vehicle Systems Modelling and Testing, Vol.7 (4), pp.390 – 404. DOI: 10.1504/IJVSMT.2012.049428. (Inder science Publishers).
53. **Velmurugan, P**., Kumaraswamidhas, L. A and Sankaranarayanasamy, K. (2012), Influence of road surfaces on whole body vibration for suspended cabin tractor semitrailer drivers, Journal of Low Frequency Noise, Vibration and Active Control, Vol. 31 (2), pp. 75-84. https://doi.org/10.1260/0263-0923.31.2.75 . (SAGE publication).
54. Kumaraswamidhas, L. A., **Velmurugan, P** and Sankaranarayanasamy, K. (2011), Optimization of Human Comfort Reaction for Suspended Cabin Tractor Semitrailer Drivers. World Academy of Science, Engineering and Technology, Vol. 81(158), pp. 858-864.doi. scholar.waset.org/1999.8/12083
55. **Velmurugan, P.,** Kumaraswamidhas, L. A. and Sankaranarayanasamy, K. (2011), Investigation on influence of stiffness and hydro-pneumatic suspension for dynamic Analysis of a heavy truck using ADAMS simulation. International journal of Human Factors Modeling and Simulation, Vol-2 (3), pp no.204-221. https://doi.org/10.1504/IJHFMS.2011.044504. (Inderscience Publishers).
56. Baskar, S and **Velmurugan,P.** (2011) Creep Analysis of Notched Structural Stainless Steel by Finite Element Method. International Journal of Mechanics and Solids, Volume 6(1), pp. 1-6. https://www.ripublication.com/ijms/ijmsv6n1_1.pdf
57. **Velmurugan, P.** Balasubramanian,P and Thanigaiyarasu,G.(2010) Projectile Penetration Analysis in Armour Using Finite Element Method. International Journal of Mechanics and Solids, Volume 5 (2), pp. 123-129. https://www.ripublication.com/ijms/ijmsv5n2_4.pdf
58. **Velmurugan, P.** Balasubramanian,P and Thanigaiyarasu,G.(2010) Projectile Penetration Analysis in Armour Using Finite Element Method. International Journal of Mechanics and Solids, Volume 5 (2), pp. 123-129. https://www.ripublication.com/ijms/ijmsv5n2_4.pdf

PUBLICATIONS *(Referred Conference Proceedings)*

1. **P.Velmurugan** (2015),Optimization of soxhlet extraction of prosopics julifera using response surface methodology, International Conference On Emerging Trends In Engineering ,Technology And Management (ICETM2015), April 16-18, 2015, RVS School Of Engineering And Technology, Dindigul ,Tamilnadu,India
2. **P.Velmurugan,** K.Sankaranarayanasamy and K.Pazhanivel (2014), Analytical Investigation on Ride Comfort Analysis for Tractor Semitrailer, International Conference on advance design and manufacturing (ICAD&M- 2014), pp 1648-1650, DEC 5-7, 2014, National Institute of Technology, Tiruchirappalli, India.
3. L. Arun Kumar, **P. Velmurugan** and P. Ananda Kumar (2014) Water Management Design for the Enhanced Performance of Air-Breathing Proton Exchange Membrane Fuel Cell, International Conference on advance design and manufacturing (ICAD&M- 2014), pp 1651-1652, DEC 5-7, 2014, National Institute of Technology, Tiruchirappalli, India
4. **P.Velmurugan**, L.A.Kumaraswamidhas and K.Sankaranarayanasamy (2011), Optimization of human comfort to vibration in unsuspended cabin tractor semitrailer, 1st International Conference In South Asia on “Global Manufacturing Systems & Management” (ICGMSM -

2011), pp 277 - 286, August 1-3, 2011, Coimbatore Institute of Technology, Coimbatore, India.

5. **P.Velmurugan**, L.A.Kumaraswamidhas and K.Sankaranarayanasamy (2011), Investigation on Influence of Speed for Ride Comfort Analysis in Unsuspended Cabin Tractor Semitrailer, Proc. of the 5th International Conference on Advances in Mechanical Engineering (ICAME- 2011), pp 671 - 675, June 06-08, 2011,S.V. National Institute of Technology, Surat, India.
6. **P.Velmurugan**, A. Elayaperumal , K.Pazhanivel , G.B.Bhaskar (2012), Flexplate Geometry Design Changes for Improved Stress Analysis Using Finite Element Method, 1st International Conference on Futuristic Trends in Mechanical Engineering (ICFTME - 2012), pp 335 - 344, January 28-29, 2012, Thiruvalluvar college of engineering and technology, vandavasi, tamil nadu, India.
7. **P.Velmurugan,** Dr. A. Elaya Perumal, R. Garudadri ,Sreedhar B Patil , Stress analysis of flexplate, Proceedings of the First National Conference on Emerging Trends in Engineering Design, 27th March 2008, pp no 31-36, Department of Mechanical Engg. Government College of Engineering Thirunelveli-627007. Tamilnadu, India.