

## Dr. P.Gopal

journals		conference		Books published	Popular article
National	International	National	International	09	-
-	52	38	22		

## LIST OF PUBLICATIONS

### International Journals

1. **P.Gopal** and Azhagiri Pon," *Experimental Analysis of Thermo Electric Refrigeration System by Using the Solar Power*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.4,PP:11-15.
2. • D.B. Sivakumar, **P.Gopal**, Azhagiri Pon, S. Arunkumar, "Performance Study of Dibutyl Ether Blended Petrol in SI Engine", 2017, Transactions on Innovations in Science & Technology,Vol.2,No.4, PP:06-10.
3. • **P.Gopal** and Azhagiri Pon," *Performance and Emission Analysis of a Single Cylinder CI Engine using Jatropha Biodiesel with Hydroxy (HHO) Gas*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.4,PP:11-15.
4. • **P.Gopal** and Azhagiri Pon," *Performance Analysis of Solar Water Purification Concentrators Parabolic Trough Collector for Ni-Cr Coating*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.3,PP:66-79.
5. • **P.Gopal** and Azhagiri Pon," *Design and Analysis of Compliant Gripper Mechanism using Topology Optimization*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.3,PP:62-65.
6. • **P.Gopal** and Azhagiri Pon," *Design and Analysis of Compliant Mechanism Suspension*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.2,PP:71-74.
7. • **P.Gopal** and Azhagiri Pon," *Design and Analysis of Displacement amplifier in compliant Mechanism using topology optimization*",2017, Transactions on Innovations in Science & Technology,Vol.2,No.2,PP:60-70.
8. • **P.Gopal** and Azhagiri Pon," *Analysis of Cow dung and Goat Dung with Vegetable waste and Rice Husk in various proportions at Thermophilic Condition*",2017, Journal of Advanced Engineering Research,Vol.4,No.1,PP:63-66.
9. • **P. Gopal**, T. Senthilkumar, N. Raja Sekar and Pon. Azhagiri," *Bearing Shaft Misalignment Estimation using Acoustic Signal Processing*",2017, Journal of Advanced Engineering Research,Vol.4,No.1,PP:10-13.
10. • N. Srinivas, M. Vinoth, **P. Gopal** and T. Senthilkumar "Review on the Aerodynamic Drag on LCVS and Semi-Trailer Trucks and Reduction Methods", 2016,Transactions on Innovations in Science & Technology,Vol.1,No.4,pp.200-207.
11. • **P. Gopal**, T. Senthilkumar and S. Nanthini "Microstructural Evaluation of Friction Stir Spot Welding in Al 5052 Joints for Vehicle Body Project", 2016,Transactions on Innovations in Science & Technology,Vol.1,No.4,pp.182-187.

12. • T. Senthilkumar, **P. Gopal** and B. Hemalatha "Effect of SI Engine Performance by Adding the Additive of Oxy Hydrogen", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.146-151.
13. • **P. Gopal**, T. Senthilkumar and J. Siva Prakash "Fabrication and Analysis of power Generation from Shock Absorber", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.124-129.
14. • T. Senthilkumar, **P. Gopal** and B. Chandrasekaran "Analytical Solution For Cathode Design of Diaphragm Through Electrochemical Machining", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.108-113.
15. • A. Manikandan, Cyril Reuben Raj, T. Senthilkumar and **P. Gopal** "Evaluation of Mechanical Properties Using Sisal Fiber Reinforced Polymers", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.83-89.
16. • Pon. Azhagiri, T. Senthilkumar, M. Jignesh and **P. Gopal** "Design and Analysis of Camless and Valveless Engine", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.74-77.
17. • **P. Gopal**, T. Senthilkumar and M. Sathiyaseelan "Noise and Vibration Analysis of Petrol Engine Using Rubber Dampers", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.58-62.
18. • **P. Gopal**, T. Senthilkumar, K. Raja and N. Bala Ganesh "Effect of Oryza Punctata Synthesized With Zinc Oxide Nano Particles as Single Layer Antireflection Coating Layer in Mono Crystalline Silicon Solar Cell", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.40-44.
19. • T. Senthilkumar, **P. Gopal** and M. Manimozhi "Experimental Study of Heat Transfer Radiator using Water Sprayers", 2016, Transactions on Innovations in Science & Technology, Vol.1, No.4, pp.22-25.
20. • J. Kishore Kumar, C. Sundar Raj, **P. Gopal** and P. Sathish Kumar "Blendability and Property of Turpentine Oil With Petrol And Diesel", 2016, International Journal of Chemical Sciences, Vol.14, No.3, pp.1307-1316.
21. • G. Karthikraja, **Dr. P. Gopal**, Dr. M. Chandrasekar, Dr. T. Senthil kumar, "Performance analysis of solar water purification concentrators parabolic trough collector for Ni-Cr coating", 2016, International Journal of Research Science and Engineering, Vol.3, No.6, PP.1-6.
22. • T. Rajesh, **Dr. P. Gopal**, Dr. T. Senthil kumar, Dr. M. Chandrasekar, "*Experimental analysis of thermo electric refrigeration system by using the solar power*", 2016, International Journal of Research Science and Engineering, Vol.3, No.6, PP.1-6.
23. • P. Senthil, **P. Gopal**, T. Senthilkumar, M. Chandrasekhar, "*Performance and the emission analysis of a single cylinder CI engine on jatropha biodiesel with the addition of hydroxy (hho) gas*", 2016, International Journal of Research Science and Engineering, Vol.3, No.6, PP.1-7.
24. • N. Tamilvanan, **Dr. P. Gopal**, Dr. T. Senthil kumar, Dr. M. Chandrasekar, "Analysis of cowdung and goat dung with vegetable waste and rice husk in various proportions at thermophilic condition", 2016, International Journal of Research Science and Engineering, Vol.3, No.6, PP.1-6.

25. • D. BalaSubramanian, **Dr.P. Gopal**, Dr.T.Senthilkumar, "Waste Heat Recovery System by Using Thermoelectric Modules from Internal Combustion Engines", 2016 Journal of Research in Science, Technology, Engineering and Management, Vol.2,No.2,PP.46-50.
26. • D.BalaSubramanian, **Dr.P.Gopal**, Dr.T.Senthil Kumar, "Engine Heat Recovery System by Using Thermoelectric Modules from Internal Combustion Engines", 2016 International Journal of Engineering Science and Computing, Vol.6,No.4, PP.3986-3990.
27. • Manoj.V, **Dr. Gopal. P**, Dr. Senthilkumar. T, "*Heat Transfer Enhancement by using Nanofluid in Spiral Plate Heat Exchanger*", 2016 International Journal of Engineering Research & Technology, Vol.5,No.6, PP.101-105.
28. • Thulasiram.S, **Dr.Gopal.P**, Dr.Senthil kumar.T, Dr.Kumaragurubaran.B, "*Process Optimization and Experimental Investigation on the Performance of VCR Engine Fuelled With Mahua Fatty Acid Methyl Ester and its Blends*", 2016 International Journal of Engineering Science and Computing, Vol.6,No.6,PP.6433-6438.
29. • B. Kumara gurubaran, **P. Gopal**, V. Deepakaravind, T. Senthilkumar, "*Experimental analysis of the wear behaviour of reinforced hybrid LM25 metal matrix nano composite*",2015 Journal of Optoelectronics and Advanced Materials,Vol.17,No.11-12,PP.1794-1798.
30. • Lakshmanan V, Ramesh Kumar C and **Gopal P**, "*Analysis of Mechanical Properties of Hybrid Burmese Silk Orchid and Glass Fibers Composite Material*", 2015 Science, Technology and Arts Research Journal, Vol.4,No.2,PP.241-246.
31. • P.Sathish Kumar, **P Gopal** and S.Aravind, "Performance analysis of diesel engine with diesel, ethanol and vegetable oil blends", 2015 International Journal of Chemical Sciences, Vol.13, No.2,PP.576 – 584.
32. • **P. Gopal**, B. Kumaragurubaran and V. Deepakaravind, "*Investigation of density, microhardness and structural analysis of reinforced hybrid LM 25 metal matrix nano composite*", 2015 Journal of Optoelectronics and Advanced Materials, Vol.17, No.3-4,PP.389 – 394.
33. • Cyril Reuben Raj and **P.Gopal**, "*Energy conservation in water pumping station*", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.163 –166.
34. • M.Mareeswaran and **P.Gopal**, "Cooling of solar cells by chimney -induced natural draft of air", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.167 –169.
35. • Thomas Vinoth .V and **Gopal. P**, "Increase the power output of the horizontal axis wind turbines by varying separation distance", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.254 –256.
36. • S.Thanga mohan raja and **P.Gopal,,** "Performance improvement of diesel engine using absorption refrigeration cycle in air conditioning system by utilizing the waste heat", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.260 –261.
37. • **P. Gopal**, C Ramesh Kumar and Vadivelu, "Experimental investigation on heat transfer enhancement in automotive radiator using copper nano particles in engine coolant", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.282 –287.

38. • S.Nirnjalkumar and **P.Gopal**, "Design and development of an automobile radiator test rig and development of heat transfer correlations for nanofluid solutions", 2015 Journal of Chemical and Pharmaceutical Sciences, Vol.8, No.6,PP.297 –299.
39. • **Gopal P**, Chandrasekar M and Mohanajaiganesh, "*Experimental Analysis of Heat Transfer and Pressure Drop Characteristics of Aluminum Oxide Nanofluid in Tube with Meshes*", 2014 NanoTrends ( A Journal of Nanotechnology and its applications), Vol.16, No.1,PP.19 – 25.
40. • **Gopal P.** and Senthilkumar.T, "*Influence of wake characteristics of a representative car model by delaying boundary layer separation*", 2013 Journal of Applied Science and Engineering, Vol.16, No.4,PP.363 – 374. ISI indexed Journal
41. • A.Sathyavathi, M.R.Rajaraman, B.Kumaragurubaran and **P.Gopal**, "*Surface Roughness Optimization Techniques of CNC Turning: A Review*", 2013 International Journal of Engineering and Advanced Technology, Vol.2, No.5,PP.447 – 450.
42. • L.Maria Irudaya Raj, Sathishkumar.J, B.Kumaragurubaran and **P.Gopal**, "*Analysis of Hard Chromium Coating Defects and its Prevention Methods*", 2013 International Journal of Engineering and Advanced Technology, Vol.2, No.5,PP.427 – 432.
43. • K.Velayutham, U.Arumugam, B.Kumaragurubaran and **P.Gopal**, "*Analysis of Corrosion Prevention Methods in Railway Coaches and Bogies*", 2013 International Journal of Engineering and Advanced Technology, Vol.2, No.5,PP.372 – 376.
44. • B Kumaragurubaran, **P Gopal**, T Senthil Kumar, M Prasanna Mugunthan and N H Mohamed Ibrahim, "*Optimization of turning parameters of EN-9 steel using design of experiments concepts*", 2013 International Journal of Mechanical Engineering and Robotics Research, Vol.2, No.3,PP.182 – 190.
45. • A.Selvaganapthy, A.Sundar, B.Kumaragurubaran and **P.Gopal**, "*An Experimental Investigation to Study the Effects of Various Nano Particles with Diesel on Di Diesel Engine*", 2013 ARPJ Journal of Science and Technology, Vol.3, No.1,PP.112 – 115.
46. • **Gopal P.** and Senthilkumar.T, "*An experimental investigation of the effect of the multi vortex generator for drag reduction in a utility vehicle*", 2012 International Journal of Mechanical and Materials Engineering, Vol.7, No.3,PP.186 – 191. ISI indexed Journal
47. • **Gopal, P.** and Senthilkumar, T. "*Aerodynamic drag reduction in a passenger vehicle using vortex generator with varying yaw angles*", 2012 ARPJ Journal of Engineering and Applied Sciences, Vol.7 ,No.9, pp 1180-1186.
48. • **Gopal P.**, Senthilkumar.T, M.Chandrasekar. and Rameshkumar.C, "*Investigations on the effect of vortex generator in utility vehicle for reducing drag*", 2012 Archives Des Sciences, Vol.65, No.8,PP.114 – 129.Impact factor:0.474
49. • K.M.Zakariya,M.Chandrasekar and **P. Gopal**, "*Thermal Management of non-concentrating photovoltaic panels under extreme ambient conditions*", 2012 International Journal of Renewable Energy Technology, Vol.3, No.4,PP.372 – 385.ISI Indexed Journal.
50. • **P.Gopal**,Dr.T.SenthilKumar,B.Kumaragurubaran and M.Vivekanandan "Analysis of Flow Through The Exhaust Manifold of A Multi Cylinder Petrol Engine for Improved Volumetric Efficiency", 2009 International Journal of Dynamics of Fluids, Volume.5 No.1,Page No. 15 – 26 , Jan 2009.

51 **P.Gopal**, M.Kalaivanan, B.Kumaragurubaran and M.Vivekanandan "A view of the future of diesel engine to control emission by using fuel additives and external heater", 2008 Journal of Environmental Research and Development, Volume 3 No. 2, Page No. 531-535, Oct-Dec 2008. Impact factor: 0.157

52. M.Vivekanandan, G.Sridharan, B.Kumaragurubaran and **P.Gopal**, P.Navaneetha Krishnan "Appropriation of Bio Diesel Blends in Diesel Engine", 2008 Current World Environment, Vol. 3 No. 2, December 2008 Page No. 245-250 Dec 2008. ISI indexed Journal.

### **International Conference**

1. Arunkumar.T, **Gopal.P**, Kumaragurubaran.B and SenthilKumar.T, "*Experimental investigation on performance improved phase change materials with graphite nano particles*", TEQIPII and CSIR Sponosred International Conference on Energy and Environmental Systems (ICEES'17) held at BIT Campus, Anna University, Tiruchirappalli during 10 - 12 March 2017, pp223-227. (ISBN: 978-81-933634-0-9)
2. • Ambika.M, **Gopal. P** and ChandraSekar.M, "*An experimental comparative analysis of pvmodule in fixed and single axis solar tracking system*", TEQIPII and CSIR Sponosred International Conference on Energy and Environmental Systems (ICEES'17) held at BIT Campus, Anna University, Tiruchirappalli during 10 - 12 March 2017, pp216-218. (ISBN: 978-81-933634-0-9)
3. • Rajarajagopalan. P, **Gopal. P**, Subash. T and Jeyanthan. A, "*Design and analysis of multi tube heat Exchanger*", TEQIPII and CSIR Sponosred International Conference on Energy and Environmental Systems (ICEES'17) held at BIT Campus, Anna University, Tiruchirappalli during 10 - 12 March 2017, pp208-211. (ISBN: 978-81-933634-0-9)
4. • Deepakaravind. V, **Gopal.P**, Sathish kumar.P and Nirmalkumarisrael.W, "*Reviewing Various Optimization Techniques Of Welding Parameters By Using Tungsten Inert Gas (Tig) Welding In Aluminium Metal Matrix Composites. -A Review*", TEQIPII and CSIR Sponosred International Conference on Energy and Environmental Systems (ICEES'17) held at BIT Campus, Anna University, Tiruchirappalli during 10 - 12 March 2017, pp142-147. (ISBN: 978-81-933634-0-9)
5. • R. Thirunavukkarasu, **Dr. P.Gopal** and Dr. T. Senthil kumar, "*Performance Improvement by adding After Condenser in a 7 effect Evaporator Plant*", TEQIPII and CSIR Sponosred International Conference on Energy and Environmental Systems (ICEES'17) held at BIT Campus, Anna University, Tiruchirappalli during 10 - 12 March 2017, pp17-21. (ISBN: 978-81-933634-0-9)
6. • Rajesh T and **Gopal P** "*Experimental Analysis of Thermo Electric Refrigeration system by using the solar power*", ", International Conference on Emerging Engineering Trends and Science (ICEETS 2016) held at Latha Mathavan Engineering College, Madurai on 29th March 2016. (ISBN: 978-93-80686-03-5)

7. • Thomasvinoth V, Gopal P and Senthilkumar T "Effect of separation distance on the power output of horizontal wind turbine", " , TEQIP II Sponsored International Conference on Sustainable Energy Systems and Energy Management (SESEM 2015) held at BIT Campus, Anna University, Tiruchirappalli during 4 - 5 June 2015,pp208-211.(ISBN: 978-93-80686-03-5)
8. • ThangaMohanRaja S, Gopal P and Senthilkumar T "Performance and Evaluation of Diesel Engine Using Absorption Refrigeration Cycle In Air Conditioning System By Utilizing The Waste Heat", TEQIP II Sponsored International Conference on Sustainable Energy Systems and Energy Management (SESEM 2015) held at BIT Campus, Anna University, Tiruchirappalli during 4 - 5 June 2015,pp.46-50. (ISBN: 978-93-80686-03-5)
9. • Mareeswaran M, Gopal P and Senthilkumar T "Cooling of solar cells by chimney - forced draft of air", TEQIP II Sponsored International Conference on Sustainable Energy Systems and Energy Management (SESEM 2015) held at BIT Campus, Anna University, Tiruchirappalli during 4 - 5 June 2015,pp.258-261. (ISBN: 978-93-80686-03-5)
10. • Cyril Reuben Raj, Kumaragurubaran B, Gopal P and Senthilkumar T "Designing a simulation kit and simulating a vehicle air conditioning system", TEQIP II Sponsored International Conference on Sustainable Energy Systems and Energy Management (SESEM 2015) held at BIT Campus, Anna University, Tiruchirappalli during 4 - 5 June 2015,pp.262-266. (ISBN: 978-93-80686-03-5)
11. • Lakshmanan V, Gopal P and Siva Kumar E "Analysis of mechanical properties of prosopis Juliflora composite treated with sodium hydroxide", ICEEMS 2014 held at School of Engineering, Cochin University of Science and Technology, Kochi during 10- 12 December 2014,pp.635-640.(ISBN:978-93-80095-58-5.)
12. • Hemachandira Raaj .D and Gopal.P "Interference effect on adjacent lanes while overtaking of heavy trucks by high speeding", ICEETS 2013 held at St. Xavier's Catholic College of Engineering, Nagercoil during 10- 12 April 2013.(IEEE explore,ISBN: 978-1-4673-6149-1,DOI: 10.1109/ICEETS.2013.6533473,pp: 714 – 719.)
13. • P.Gopal,Dr.T.Senthilkumar, C.Ramesh Kumar and B.Rajasekar "Experimental Investigation on drag reduction in a utility vehicle using Multi Vortex Generator", ICAMB 2012 held at VIT University, Vellore during 09- 11 Jan 2012.
14. • M.Chandrasekar,S.Suresh,P.Gopal, Anirudh Nandan and C.Ramesh Kumar "Mechanisms proposed for enhancement in forced convective heat transfer with nanofluids- A Review", ICAMB 2012 held at VIT University, Vellore during 09- 11 Jan 2012.
15. • P.Gopal,Dr.T.Senthilkumar and R.Praveenram "Aerodynamic Drag Reduction through Vortex Generators", INCOTEE 2011 held at Kalasalingam University,Virudhunagar, during 24- 26 March 2011.
16. • P.Gopal,Dr.T.Senthilkumar and M.Dhanasekaran "Method of Drag Reduction In Light Commercial Vehicles", INCOTEE 2011 held at Kalasalingam University,Virudhunagar, during 24- 26 March 2011.
17. • Zakariya Kaneesamkandi, Gopal.P ,Suresh Kumar K and B.M.Gnanasekaran "Thermal Management of Non-concentrating Photovoltaic Panels under extreme ambient conditions",", INCOTEE 2011 to be held at Kalasalingam University,Virudhunagar, during 24- 26 March 2011.
18. • S.K.Jayakrishna P. Gopal, Dr.T.Senthilkumar "Enhancement of Heat Transfer in a Flat Tube Radiator through Decaying Eddy Flow", SAE World Congress to be held during 20- 23 April 2009 at Detroit, Michigan USA (2009-01-0969)

19. • K.N.Arunprakash, P.Gopal, Dr.T.Senthilkumar, B.Kumaragurubaran "Emission control in diesel engines Using External Heater", ERA 2009 held at Velammal Engineering college, Chennai, during 19- 21 March 2009.
20. • A.Shine Jude Hamilton, P.Gopal, Dr.T.SenthilKumar B.Kumaragurubaran "Emission control in diesel engine using fuel additives", ICEE 2009 to be held at Pondichery engineering college, Pondichery during 7- 9 January 2009 .
21. • P.Sriram,B.Kumaragurubaran,M.Vivekanandan,P.Gopal "Hydrogen as an Efficient Fuel in IC Engines", ICEE 2009 to be held at Pondichery engineering college, Pondichery during 7- 9 January 2009
22. • B.Kumaragurubarn, T.Senthilkumar, V.Balaubramanian, P.Gopal" The Effect of Yttria-Zirconia Coating on SI Engine Performance",SOJOM 2008 Held at Welding Research Institute,Tiruchirappalli during 10-13 December 2008

### National Conference

1. G.Mahadevan, B.Kumaragurubaran and **P.Gopal** , "An analysis of formability limit diagram of GI and Al 2024 sheets", TEQIP II & SAEINDIA sponsored National conference on Innovations in Engineering Design, NIED14 held at Department of Automobile Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 29-30 April 2014, pp.130-135. (ISBN:978-81-921-1286-2)
2. • G.Mahadevan, B.Kumaragurubaran and **P.Gopal** , "A study on computer aided assembly sequence planning", TEQIP II & SAEINDIA sponsored National conference on Innovations in Engineering Design, NIED14 held at Department of Automobile Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 29-30 April 2014, pp.29-30. (ISBN:978-81-921-1286-2)
3. • M.Rajkumar and **P.Gopal** , "Experimental studies on electrical characteristics of solar PV panel with different conditions in various tilt angles", TEQIP II & SAEINDIA sponsored National conference on Innovations in Engineering Design, NIED14 held at Department of Automobile Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 29-30 April 2014, pp.156-161. (ISBN:978-81-921-1286-2)
4. • S.Thamaraiselvan and **P.Gopal** , "Feasibility study of hybrid PV-Diesel system in commercial sector", TEQIP II & SAEINDIA sponsored National conference on Innovations in Engineering Design, NIED14 held at Department of Automobile Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 29-30 April 2014, pp.162-170. (ISBN:978-81-921-1286-2)
5. • V.Lakshmanan and **P.Gopal** , "Design and failure analysis of EN24 shaft using truck loader in cement industry", TEQIP II & SAEINDIA sponsored National conference on Innovations in Engineering Design, NIED14 held at Department of Automobile Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 29-30 April 2014, pp.301-303. (ISBN:978-81-921-1286-2)
6. • P.Venketesh and **P.Gopal** , "Performance Characteristics of a Diesel Engine using Ethanol, Vegetable oil and Diesel blend", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.157-162.( ISBN:978-81-254-0267-1)
7. • S.Vijayaanandaraj and **P.Gopal** , "Temperature distribution and residual stresses due to welding in type304stainless steel weld pads", TEQIP II & IWS sponsored National

- conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.180-190. ( ISBN:978-81-254-0267-1)
8. • V.Jayasabarinathan, B.Kumaraguru, **P.Gopal** and Dr.T.Senthilkumar, "Experimental Investigation and Analysis of Surface Coating on Windmill Blade with and without Ceramic Material", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.229-234. ( ISBN:978-81-254-0267-1)
  9. • M.Rajkumar and **P.Gopal**, "*Experimental studies on electrical characteristics of solar PV panel with different conditions*", National Conference on Energy and Environment, EECON 14 held at Department of Chemical Engineering,A.C.Tech,Anna University, Chennai on 3rd March 2014.
  10. • K.Muthukumaran, Dr.T.Senthilkumar, Dr.M.Chandrasekar and **P.Gopal**, "*Thermal performance of a solar water heater with PCM as a storage medium*",SRESA National Conference on
  11. • G. Kumaran,**P.Gopal**, S. Chockalingam and Dr.T.Senthil Kumar, "Finite Element Simulation and Experiment of Chip Formation Process during Boring Process", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.247-252. ( ISBN:978-81-254-0267-1)
  12. • D. Ravi kumar, Dr. M. Chandrasekar ,**P. Gopal** and B. Kumaragurubaran, "Finite Element Analysis and Experimental Evaluation of Bonded, Riveted and Hybrid Joints in Glass Fibre Epoxy Composite Laminates for Aircraft structure", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.277-282. ( ISBN:978-81-254-0267-1)
  13. • G.Ravikumar, Dr.T.Senthilkumar, **P.Gopal** and B.Kumaragurubaran "Investigation for Minimizing the Wear rate and Coefficient of Friction in Aluminum MMC", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.283-288. ( ISBN:978-81-254-0267-1)
  14. • M. Saravanan, Dr.T.Senthilkumar, **P. Gopal** and B. Kumaragurubaran "Optimization of Engineering Systems", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014,pp.293-297. ( ISBN:978-81-254-0267-1)
  15. • G. Venkatesan, **P.Gopal**, S. Chockalingam and Dr.T.Senthil Kumar "Chatter Suppression and Tool Wear Optimization using Coated Boring Tool Holder", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.318-323. ( ISBN:978-81-254-0267-1)



16. • G.Karthikeyan, **P.Gopal**, Dr.T.senthilkumar and B.Kumaragurubaran "Experimental Analysis of Vapour Compression Refrigeration with Humidifier", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.350-355. ( ISBN:978-81-254-0267-1)
17. • M.Sethuraman, **P.Gopal**, Dr.T.Senthilkumar and B.Kumaragurubaran, "An Investigation of Material Research with Solar Water Heater by using V Trough Collector", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.382-386. ( ISBN:978-81-254-0267-1)
18. • M.Vinoth kumar, **P.Gopal**, Dr.T.Senthil kumar and B.Kumaragurubaran, "Experimental Analysis Over Heat Sink", TEQIP II & IWS sponsored National conference on Advancements and Futuristic trends in Mechanical Engineering, AFTME 14 held at Department of Mechanical Engineering, University College of Engineering(BIT Campus),Tiruchirappalli during 21-22 April 2014, pp.396-399. ( ISBN:978-81-254-0267-1)
19. S.Thamaraiselvan and P.Gopal, "Prospects of standalone solar PV diesel hybrid system on tollgate premises in trichy ", National Conference on Energy and Environment, EECON 14 held at Department of Chemical Engineering,A.C.Tech,Anna University, Chennai on 3rd March 2014.
20. • M.Rajkumar and P.Gopal, "Experimental studies on electrical characteristics of solar PV panel with different conditions", National Conference on Energy and Environment, EECON 14 held at Department of Chemical Engineering,A.C.Tech,Anna University, Chennai on 3rd March 2014.
21. • K.Muthukumaran, Dr.T.Senthilkumar, Dr.M.Chandrasekar and P.Gopal, "Thermal performance of a solar water heater with PCM as a storage medium",SRESA National Conference on
22. Reliability and Safety Engineering, NCRS14 held at University College of Engineering (BIT Campus) during 13-15th Feb 2014,pp.243-246. (ISBN 978-8-19211-284-8).
23. • L.S.Narendhira, Dr.T.Senthilkumar, B.Kumaragurubran and P.Gopal, "A study of the effects of Metalworking fluid on Human health and Environment",SRESA National Conference on Reliability and Safety Engineering, NCRS14 held at University College of Engineering (BIT Campus) during 13-15th Feb 2014,pp.247-252. (ISBN 978-8-19211-284-8).
24. • M.Saravanan, L.S.Narendhira, B.Kumaragurubran and P.Gopal, "Optimisation of CNC tooling to iprove reliability and safety",SRESA National Conference on Reliability and Safety Engineering, NCRS14 held at University College of Engineering (BIT Campus) during 13-15th Feb 2014,pp.256-260. (ISBN 978-8-19211-284-8).
25. • G.Ravikumar, Dr.T.Senthilkumar, P.Gopal and B.Kumaragurubran, "Investigation for minimizing the wear rate and coefficient of friction in aluminium MMC",SRESA National Conference on Reliability and Safety Engineering, NCRS14 held at University College of Engineering (BIT Campus) during 13-15th Feb 2014,pp.261-266. (ISBN 978-8-19211-284-8).
26. • G.Kumaran, S.Chockalingam, P.Gopal and B.Kumaragurubran, "Investigation of chip morphology in a Passive Damping Boring tool bar Using Defom-3D",SRESA National

- Conference on Reliability and Safety Engineering, NCRS14 held at University College of Engineering (BIT Campus) during 13-15th Feb 2014, pp.422-426. (ISBN 978-8-19211-284-8).
27. • S.Aravind, P.Gopal and C.Kannan "Influence of compression ratio and injection timing on the performance and combustion characteristics of a direct injection diesel engine using diethyl ether and diesel blends", LTIME'13 held at K.Ramakrishna College of Engineering, Tiruchirappalli on 19th March 2013.
  28. • J.Mohanajaiganesh, P.Gopal and M.Chandrasekaran "Analysys of groove geometry effect on heat transfer for helically grooved tubes ", RAT2013 held at Mother Teresa College of Engineering and Technology, Pudukottai during 16-17 February 2013.
  29. • P.Gopal, T.Senthilkumar, C.Ramesh kumar R.Venkatesan "Experimental investigation on the variation of pressure coefficient and dynamic pressure on the roof of a utility vehicle with vortex generators for varying L/H ratio", STEPMACC'11 held at Anna University of Technology Tiruchirappalli, Tiruchirappalli on 27th September 2011. (ISBN 978-81-921128-3-1)
  30. • P.Gopal, T.Senthilkumar, M.Chandrasekar R.Venkatesan "Experimental investigation on the variation of pressure coefficient and dynamic pressure on the roof of a utility vehicle with vortex generators for varying Yaw angle", STEPMACC'11 held at Anna University of Technology Tiruchirappalli, Tiruchirappalli on 27th September 2011. (ISBN 978-81-921128-3-1)
  31. • P.Gopal, T.Senthilkumar, R.Praveenram "A study on aerodynamic drag reduction by vortex generators", RTCME'11 held at Anna University of Technology Tiruchirappalli, Tiruchirappalli during 8-9th April 2011, pp.88-92. (ISBN:978-81-251-032-8)
  32. • P.Gopal, T.Senthilkumar, G.Rethinakumar "CFD Analysis on drag reduction using vortex generator", RTCME'11 held at Anna University of Technology Tiruchirappalli, Tiruchirappalli during 8-9th April 2011, pp.81-87. (ISBN:978-81-251-032-8)
  33. • C.Rameshkumar, P.Gopal "An Experimental Investigation on Fumigation of Ethanol in S.I. Engines", SEDAN 2007 held at Bharathidasan institute of technology, Bharathidasan University, Tiruchirappalli during 8-9th February 2007.
  34. • P.Gopal, Prakash.R, Udit Arora "A Comparative study on regeneration of particulate trap using fuel additives and external heaters", NCRTMT 2006 held at Thanthai periyar government institute of technology, Vellore on 10th April 2006.
  35. • P.Gopal, Dibyendu Karmakar, Dipayan Bhattacharjee "A Study of performance and emission characteristics of twin cylinder diesel engine using Pongamia oil and Pongamia biodiesel as an alternate fuel", NCRTMT 2006 held at Thanthai periyar government institute of technology, Vellore on 10th April 2006
  36. • **P.Gopal**, Gunjan Adhikary, Anurag Rao "*Performance and emission analysis of direct injection diesel engine using Jatropa oil and Jatropa biodiesel as an alternate fuel*", NCRTMT 2006 held at Thanthai periyar government institute of technology, Vellore on 10th April 2006
  37. • **P.Gopal**, G.P.Subash, B.Rajendraprasad "*Experimental investigation on regeneration of particulate trap using metal oxide catalyst*", TECM 2005 held at St.Joseph college of engineering, Chennai on 24th January 2005.
  38. • **P.Gopal**, Dr.P.Tamilporai "*Development and performance analysis of catalysed continuously regenerative particulate trap*", FAME 2004 held at Bharath institute of higher education and research, Chennai on 30th July 2004.

## **BOOKS PUBLISHED**

1. Recent Trends in Civil and Mechanical Engineering  
ISBN:978-81-251-032-8
2. ▪ Advancements and Futuristic trends in Mechanical Engineering  
ISBN:978-81-254-0267-1
3. ▪ Innovations in Engineering Design  
ISBN:978-81-921-1286-2
4. ▪ Energy Efficient Technologies for Automobiles  
ISSN:0974-2115
5. ▪ Sustainable Energy Systems and Energy Management  
ISBN: 978-93-80686-03-5
6. ▪ Advances in Mechanical Engineering  
E-ISSN: 2456-5075
7. ▪ Engineering Design and Analysis  
E-ISSN: 2456-5075
8. ▪ Energy and Environmental Systems  
ISBN:978-81-933634-0-9
9. ▪ Vehicle Dynamics  
ISBN:938-06-8606-4

