

FACULTY – PROFILE

Name : Dr.P.SENTHILKUMAR
Designation : PROFESSOR AND PRINCIPAL
Qualifications : M.E., Ph.D (IITM)
Specialization : THERMALENGINEERING



A. PERSONAL DETAILS

1. FatherName : M.PALANISAMY
2. Sex : MALE
3. Dateofbirth : 15.05.1971
4. Age (Yrs) : 51
5. Community : B.C. / KONGUVELLALAR
6. Address forcommunication

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B. EDUCATIONAL QUALIFICATIONS

S.No	Course	Institution studied	University / Board	Year of passing	% of Marks
1	Ph.D	IIT Madras, Chennai	IIT Madras, Chennai	2005	-
2	M.E	CIT, Coimbatore	Bharathiyar, Coimbatore	1998	82.50
3	AMIE	IIET Chennai	Institution of Engineers(I),Calcutta	1994	60.00
4	SSLC	Govt.High.Sec.School, Mallur	Board	1986	70.00

D.PROFESSIONAL EXPERIENCE

S.No	Institution & Place	Designation	Duration		Noof Years
			From	To	
1	K.S.R. College of Engineering, Tiruchengode.	Professor & Principal	02.12.2013	Till Date	9 years
2	K.S.R. College of Engineering, Tiruchengode.	Professor & Head	01.06.06	01.12.2013	7Years& 6months
3	Sathyabama University, Chennai	Asst. Professor	27.05.02	31.05.06	4 Years (4/0/4)
4	IIT Madras	Research Associate	02.07.98	26.05.02	4 Years
5	Coimbatore Institute of Technology, Coimbatore.	Lecturer	15.07.96	05.05.98	2 Years (1/9/20)
6	Sethupathy Institute of Engineering Technology, Coimbatore.	Lecturer	03.02.93	05.06.96	3.5 Years (3/4/2)
Total					30 Yrs & 1 months

E.FOREIGN EXPERIENCE

S.No	Country Visited	Duration	Purpose of Visit
1	GERMANY	July - August 1999	Research Scientist (DST - DAAD Project), Institute for Technische Thermodynamic and Kaltetechnik, University Karlsruhe.
2	FRANCE	July - August 1999	Academic Visit from IIT Madras.
3	AUSTRIA	July - August 1999	Academic Visit from IIT Madras.

4	UK	July - August 1999	Academic Visit from IIT Madras.
5	USA	August - Sept. 2003	Participated and presented a paper in the "21 st IIR International Congress of Refrigeration" held at WashingtonDC.

G. NUMBER OF PROJECT REPORTS / THESIS HANDLED*

Ph.D (ONGOING)	Ph.D (COMPLETED)	P.G	U.G
5	22	15	20

*Detailed in Annexure I

H. NUMBER OF PUBLICATIONS**

S.No.	DESCRIPTION	TOTAL PUBLICATIONS
1	Patents Filled	28
2	Copy Rights	03
3	International Journals	75
4	National Journals	15
5	International Conference	48
6	National Conference	60
Total		229

**Detailed in Annexure II

I. TEXT BOOK PUBLICATIONS

S.No.	NAME OF THE BOOK	YEAR OF PUBLICATION
1	Hydraulics and Pneumatics	2005
2	Engineering Graphics	2008

J. AWARDS

S.No.	NAME OF THE AWARDS	YEAR
1	The Global Best Principal Award 2021	2020-2021

Annexure I

Supervisor(Completed): Dr. P. SenthilKumar

S.No	Reg. No	Name of the Scholar	Date of Registration	Date of the Viva Voce	University	Title of the Thesis
1	JRC/02/005-15	Dr.S.Sundaram	13.11.2002	14.04.2010	Sathayabama	Wear monitoring of single point cutting tool using acoustic emission techniques.
2	2006194139	Dr.B.Jayaraman	28.02.2006	29.05.2012	Sathayabama	Studies on pulse tube cryogenic refrigerators.
3	7076032120	Dr.P.Kulanthaivelu	10.10.2007	02.11.2012	Anna University	Study of tool wear using acoustic emission and intelligent techniques
4	7071032142	Dr.K.Sampath Kumar	10.10.2007	09.07.2012	Anna University	Studies on the solar still coupled with evacuated tube collector.
5	2007194227	Dr.N.Austin	12.01.2007	28.02.2014	Sathayabama	Studies on vapour compressor refrigeration system using refrigerant mixtures.
6	4086032183	Dr.V.P.Venkata Ramanamoorthy	25.04.2008	15.10.2013	Anna University	Studies on vapour compression refrigerator system using R134a and R22 substitutes with nano lubrications.
7	4086032114	Dr.R.Dhanasekaran	25.04.2008	15.10.2013	Anna University	Studies on industrial three stages planetary gear system.
8	2006194143	Dr.M.Amalajustus Selvam	28.02.2006	05.07.2013	Sathayabama	Studies on the performance of milk chilling system with alternate refrigerants.
9	2006794131	Dr.V.Natarajan	14.10.2008	12.07.2013	Sathayabama	Experimental investigation on joule thomson. Refrigerator system with compact heat exchangers and mixer refrigerants.
10	2009194103	Dr.M.Chandran	03.12.2008	01.02.2015	Sathayabama	Studies on characteristics of cryo (nano) probes and sprays used in surgical applications.
11	2008194163	Dr. A.Ramanan	14.5.2011	01.10.2014	Sathayabama	Experimental studies on boiling on characteristics of pure and mixed refrigerants.
12	4086032169	Dr.N.Shivashankaran	25.04.2008	13.08.2014	Anna University	Hybrid sorting immune simulated annealing algorithm for flexible job shop scheduling.

13	4084032204	Dr.N.Suguna Ramu	25.04.2008	07.03.2016	Anna University	Investigation of R321, R125/R600a mixtures in residential air conditioners.
14	4086032143	Dr.P.Muthusamy	25.04.2008	23.11.2015	Anna University	Studies on preheating of the bio diesel fuel using exhaust and matrix heat exchanger.
15	80913493	Dr. M.Koilraj Gnanadason	01.11.2008	23.06.2015	Prist University	Studies on single basic passive solar still with galvanized iron and black coated copper sheets using pebbles, fins and vacuum pump.
16	10900331073	Dr.T.Senthilkumar	15.05.2009	28.04.2017	Anna University	Experimental Investigation on direct injection diesel engine using kapok methyl ester and similar methyl esters
17	4086032177	Dr.T.Suresh Kumar	25.04.2008	26.10.2016	Anna University	Studies on Effect on Titanium diboride (TiB ₂) in aluminium (2024) matrix composites
18	1414269817	Dr.S.Saravanan	19.06.2014	05.07.2018	Anna University	Experimental investigations on AA6063-TiC metal matrix composite
19	11260331129	Dr.G.Vetri chelvan	18.01.2012	03.10.2019	Anna University	Performance Studies of Titanium Alloy and Tool wear Using Acoustic Emission Technique
20	71070331056	Dr.B.Parasuram	04.09.2010	10.01.2020	Anna University	Synthesis of well aligned CNT from non conventional precursors-their potential applications
21	1513269787	Dr.S.Magibalan	30.06.2015	10.01.2021	Anna University	Investigations on mechanical and wear behaviour of AA8011-fly ash composites
22	1314269262	Dr.R. Magudieshwaran	03.01.2013	05.08.2020	Anna University	Studies on the performance of diesel engine with green synthesized nano material doped diesel fuels

Supervisor(Guide) : Dr. P. SenthilKumar

S.No	Regno	Name	Degree	Faculty	Reg Year	Reg Sess	Supervisor	Status
1.	1313269816	Rasagopal P	Ph.D.	Mech	2013	JUL	Supervisor	Confirmation completed
2.	1314269228	Raja K	Ph.D.	Mech	2013	JAN	Supervisor	Waiting for viva voce
3.	1514269799	Vignesh P	Ph.D.	Mech	2015	JUL	Supervisor	Confirmation completed
4.	17142697137	Vinothkumar S	Ph.D.	Mech	2017	JUL	Supervisor	Confirmation completed
5.	1314269783	Chandrasekaran K	Ph.D.	Mech	2013	JUL	Joint Supervisor	Confirmation completed

Annexure II

PATENTS

S.No.	Title	Application No. & Patent Filed Date	Status
1.	Wear Behavior of Aluminum alloy 8011	201741002243 A	Published (03.02.2017)
2.	Dry Sliding wear behavior of fly ash particules reinforced aluminum alloy composite for gear application	201741005326 A 15/02/2017	Published (24/02/2017)
3.	Fabricated piston with fly ash particulars reinforced aluminum alloy composites	201741005327 A 15/02/2017	Published (24/02/2017)
4.	The use of TiO ₂ nano particles in the reciprocating compressor lubricant to decrease the total irreversibility of vapour compression refrigeration system	3388/CHE/2012 & 16.08.2012	Request for exam not filed
5.	The use of TiO ₂ nano particles to increase the exergy efficiency of vapour compression refrigeration system	3389/CHE/2012 & 16.08.2012	Request for exam not filed
6.	The use of TiO ₂ nano particles in the rotary compressor lubricant to decrease the total irreversibility of vapour compression refrigeration system	3391/CHE/2012 & 16.08.2012	Request for exam not filed
7.	The use of TiO ₂ nano particles in the rotary compressor lubricant to increase the total exergy efficiency of vapour compression refrigeration system	3392/CHE/2012 & 16.08.2012	Request for exam not filed
8.	Plate heat exchanger for dairy industry	4047/CHE/2012 & 28.09.2012	Request for exam not filed
9.	The persuade of the tube-in-tube compact heat exchanger to increase the performance of joule Thomson refrigeration system	4048/CHE/2012 & 28.09.2012	Request for exam not filed
10.	The use of WC-CO micro particles on the EN353 steel substrate to increase the wear resistance and improve the life of the planetary gear drive system by using plasma spray technology	4117/CHE/2012 & 03.10.2012	Request for exam not filed
11.	Advanced heat transfer enhancement by using hybrid Nano fluids	5249/CHE/2012 & 17.02.2012	Applied
12.	Design & development of cryoprobes and spray	2868/CHE/2013A & 28.06.2013	Request for exam not filed
13.	Using R32/R125/R600a as alternate to R22 in residential air conditioners	937/CHE/2014 & 25.02.2014	Applied

14.	Performance assessment of residential air conditioner using CH ₂ F ₂ /C ₂ HF ₅ / isobutene refrigerant mixture	938/CHE/2014 & 25.02.2014	Applied
15.	A hybrid bubble sorting simulated annealing algorithm for flexible job shop scheduling	2164/CHE/2014 & 29.04.2014	Applied
16.	A hybrid sorting immune simulated annealing algorithm for flexible job shop scheduling	2220/CHE/2014 & 02.05.2014	Applied
17.	Investigation of impact properties for glass fiber, jute fiber and hybrid glass/Jute fiber	E-101/5917/2016-CHE & 25.01.2016	Applied
18.	[0/+30/+45/90] _s and bi-directional glass fiber with isophthalic resin based composite car bonnet	E-101/5918/2016 – CHE & 25.01.2016	Applied
19.	Aero-dynamic design & prediction methodology of grid fins	E-101/10817/2016-CHE 12.02.2016	Applied
20.	Experimental investigation & performance analysis of centrifugal pump using CFD.	7891/2016-CHE APN:201641003461 & 22.01.2016	Applied
21.	Design of computation device for T ₆₄ powder alloy particles	7897/2016-CHE & 01.02.2016	Applied
22.	Erosion Control on Water Wall Tubes in AFBC Boiler	-	Applied
23.	Mechanical Testing on Glass Fiber Reinforced with Jute Fibre Composites	CBR No:23554 Application No:201741024638 11.07.2017	Applied
24.	Performance Evaluation of AA6063-TIC Composite Piston on IC Engines	CBR No:25663 Application No:201741027604 03.08.2017	Applied
25.	Mechanical Vibration Analysis of a Boring Bar in Boring Operation	CBR No:31972 Application No:201741036296 4.10.2017	Applied
26.	Experimental Studies on TIG Welding of 304 Austentic Stainless Steel Weldments	CBR No: 35997 Application No:201741041815 Date:22/11/2017	Applied
27.	Mechanical Property of Palmyra palm fiber composite	CBR No:12096 Application No.201941015033	Applied
28.	Real time water disinfection by gravitational potential energy	-	Applied

COPYRIGHTS

S.No.	Type of IPR : Copyright	Title	Date of Filing	Application No. or Registration No. / Diary No.	Current Status
1.	Copyright	COMPUTER AIDED SIMULATION AND ANALYSIS LABORATORY	16.02.2017	Reg No:L-73974/2018 Dairy No.3164/2017-CO/L	Registered
2.	Copyright	ATTENDANCE AND ASSESSMENT RECORD OF K.S.R COLLEGE OF ENGINEERING	14.08.2018	Reg No:L-77899/2018 Dairy No.11675/2018-CO/L	Registered
3.	Copyright	METROLOGY AND MEASUREMENTS LABORATORY MANUAL	07.09.2018	Reg No:L-78883/2018 Dairy No.12671/2018-CO/L	Registered

INTERNATIONAL JOURNALS

1. Magibalan, S., Senthilkumar, P., Senthilkumar, C. and Prabu, M., 2020. Optimization of wear parameters for aluminium 4% fly-ash composites.
2. Magudieshwaran, R., Venkatachalam, R., Senthilkumar, P., Magibalan, S. and Kathirselvam, M., An experimental investigation on performance, combustion and emission characteristics of diesel doped with green synthesized nano cerium oxide. *Environmental Progress & Sustainable Energy*, p.e13492.
3. Magibalan, S., Senthilkumar, P., Senthilkumar, C. and Prabu, M., 2020. Multi-response optimization of AA 8011 and 12 wt.-% fly ash composites. *Materials Testing*, 62(5), pp.525-533.
4. Rasagopal, P., Senthilkumar, P., Nallakumarasamy, G. and Magibalan, S., 2020. A study surface integrity of aluminum hybrid composites during milling operation. *Journal of Materials Research and Technology*.
5. Magibalan, S., Senthilkumar, P., Senthilkumar, C. and Prabu, M., 2019. Tribological behaviour of aluminium alloy 8011. *Indian journal of materials and Engineering sciences*, 26(1),43-50.
6. Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R., & Prabu, M. (2018). Dry sliding behavior of the aluminum alloy 8011 composite with 8% fly ash. *Materials Testing*, 60(7-8),777-782.
7. Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R. and Prabu, M., 2018. Dry sliding behavior of aluminum alloy 8011 with 4% fly ash. *Materials Testing*, 60(2),pp.209-214.
8. Magibalan, S., Senthilkumar, P., Palanivelu, R., Senthilkumar, C., Shivasankaran, N. and Prabu, M., 2018. Dry sliding behavior of aluminum alloy 8011 with 12% fly ash composites. *Materials Research Express*, 5(5),p.056505.
9. Magibalan, S., Senthilkumar, P., Senthilkumar, C., Palanivelu, R. and Prabu, M., 2018. Microstructure and mechanical properties of fly ash particulate reinforced AA8011 aluminum alloy composites. *Materials Testing*, 60(7-8),pp.765-771.
10. Saravanan, S., Senthilkumar, P., Ravichandran, M. and Anandakrishnan, V., 2017. Mechanical, electrical, and corrosion behavior of AA6063/TiC composites synthesized via stir casting route. *Journal of Materials Research*, 32(3),pp.606-614.
11. Saravanan, S., Senthilkumar, P., Palanisamy, T., Ravichandran, M., Anandakrishnan, V., Sankar, S. and Balan, A.V., 2017. Accelerated Short-Term Techniques to Evaluate Corrosion in TiC Reinforced AA6063 Composites. *JOURNAL OF ADVANCES IN CHEMISTRY*, 13(10),pp.5905-5913.
12. Ramesh, R., Prabu, M., Magibalan, S. and Senthilkumar, P., 2017. Hazard Identification and Risk Assessment in Automotive Industry. *International Journal of ChemTech Research*, 10(4),pp.352-358.
13. Gnanadason, M.K., Senthilkumar, P., Wilson, V.H. and Kumaravel, A., 2015. Productivity enhancement of a-single basin solar still. *Desalination and Water Treatment*, 55(8),pp.1998-2008.
14. Shivasankaran, N., Senthilkumar, P., and Raja, K.V., 2015. Hybrid sorting immune simulated annealing algorithm for flexible job shop scheduling. *International Journal of Computational Intelligence Systems*, 8(3),pp.455-466.

15. Kumar, T. Senthil, P. Senthilkumar and K. Annamalai. "Experimental study on the performance and emission measures of direct injection diesel engine with Kapok methyl ester and its blends." *Renewable Energy* 74 (2015):903-909.
16. Ramu, N. Suguna, and Senthilkumar, P., "Theoretical Assessment of R32/R125/R600a as a Potential Replacement for R-22." *International Journal of Emerging Technology and Advanced Engineering* 4, no. 8 (2014):508-512.
17. Sampathkumar, K. and Senthilkumar, P., 2014. PERFORMANCE OF AN ACTIVE SOLAR STILL COUPLED TO EVACUATED TUBE COLLECTOR. *Environmental Engineering & Management Journal (EEMJ)*,13(2).
18. Mohan Ram, P., Shanmugam, V. and Senthilkumar, P., 2014. Impact of particle size of solid desiccant mould on moisture absorption and regeneration time. *Journal of Renewable and Sustainable Energy*, 6(1),p.013124.
19. Mohan, R.P., Shanmugam, V. and Senthilkumar, P., 2014. An Expatiate View of Solid Clay Based Desiccant Mould with Varying Void Fraction on Absorption. In *Advanced Materials Research* Vol. 984, pp.94-99.
20. Shivasankaran, N., Senthilkumar, P., and Raja, K.V., 2014. Hybrid non-dominated sorting simulated annealing Algorithm for flexible job shop scheduling problems. In *ICT and Critical Infrastructure: Proceedings of the 48th Annual Convention of Computer Society of India-Vol I* pp.101-107.
21. Muthusamy, P. and Senthilkumar, P., 2014. Waste heat recovery using matrix heat exchanger from the exhaust of an automobile engine for heating car's passenger cabin. In *Advanced Materials Research* Vol. 984, pp.1132-1137.
22. Ramu, N.S., Senthilkumar, P., and Mohanraj, M., 2014. Energy performance assessment of R32/R125/R600a mixtures as possible alternatives to R22 in compression refrigeration systems. *International Journal of Mechanical and Mechatronics Engineering IJMME-IJENS*, 14(02),pp.12-22.
23. Venkataramana Murthy, V.P., Senthil Kumar, P., "Exergy efficiency and irreversibility comparison of R22, R134a, R290 and R407C to replace R22 in an air conditioning system", *Journal of Mechanical Science and Technology*,2012.
24. Venkataramana Murthy, V.P., Senthil Kumar, P. (2012), "The use of TiO₂ nanoparticles to reduce refrigerator irreversibility", *Energy Conversion and Management*, Vol. 59, pp.122-132.
25. Venkataramana Murthy, V.P., Senthil Kumar, P. (2012), "Exergy analysis of hydrocarbons mixture refrigerants R436A and R436B as a drop in replacement for R134a with TiO₂ nanoparticles", *International Journal of Exergy*.
26. Sampathkumar, K., and Senthilkumar, P. "Utilization of solar water heater in a single basin solar still-An experimental study", *Desalination* Vol.297, pp. 8 -19, 2012. (Impact factor:2.899)
27. Sampathkumar, K., and Senthilkumar, P. "Comparative performance solar still coupled with evacuated tube and flat plate collector", *Environmental Engineering and Management Journal*, 2012. (Impact factor :1.435)
28. M. Koilraj Gnanadason, P. Senthil Kumar, G.Jemilda, S.Sherin Jasper, "Effect of Nanofluids in a Modified Vacuum Single Basin Solar Still", *International Journal of Scientific and Engineering Research [IJESER]*, Volume 3, Issue 1, Jan2012.

29. Dhanasekaran R., Senthil Kumar P., Baskaran S., and Santhi K. "Wear behavior of surface treated alloy steel with assorted blends of fine particles by using plasma spray process", *Advanced Materials Research*, Vol. Vols. 383 - 390, pp 893 - 897,2012.
30. Sampathkumar, K., Arjunan, T.V., Mayilsamy, K. and Senthilkumar, P. "An experimental study on single basin solar still coupled with evacuated tubes", *Thermal Science - International Scientific Journal*, doi: 10.2298/TSCI090806079S, 2011. (Impact factor :0.96)
31. Sampathkumar, K., Arjunan, T.V., and Senthilkumar, P. "Single basin solar still coupled with evacuated tubes - Thermal modeling and experimental validation", *International Energy Journal*, Vol.12, No.1, pp.53 - 66,2011.
32. Natarajan V. and Senthil Kumar P. (2011), "Recital Scrutiny on Tube-in-Tube Compact Heat Exchanger" in *International Journal of Engineering Science and Technology*, ISSN 0975-5462, Volume 3, Issue 4, April 2011, Engg. Journals Publications, pp.2922-2927.
33. Natarajan V. and Senthil Kumar P. (2011), "Experimental Evaluation on Tube-in-Tube Compact Heat Exchanger" in *International Journal on Mechanical & Automobile Engineering*, ISSN 0974 - 231X, Spring Edition 2011, Volume 12, Issue No. 01, December 2010-February 2011, Publisher of SERC from State of California (C.A.) USA, pp.07-13.
34. Moses Koilraj Gnanadason, Palanisamy Senthil Kumar, Gopal Sivaraman, Joseph Ebenezer Samuel Daniel, " Design and Performance Analysis of a Modified Vacuum Single Basin Solar Still", *Smart Grid and Renewable Energy [SGRE]*, 2011, 2, 388 - 395,doi:10.4236/sgre.2011.24044
35. M. Koilraj Gnanadason, P. SenthilKumar, G.Sivaraman, "Design and Performance Analysis of a Vacuum Single Basin Solar Still", *International Journal of Advanced Engineering Technology [IJAET]*, [E-ISSN 0976-3945] /Vol.II/ Issue IV/October-December, 2011/174-181
36. M. Koilraj Gnanadason, P. Senthil Kumar, S.Raja Kumar, MH.Syed Yousuf, "Effect of Nanofluids in a Vacuum Single Basin Solar Still" *International Journal of Advanced Engineering Research and Studies [IJAERS]*, [E-ISSN2249-8974]/Vol.I/Issue I /October -December, 2011/171-177
37. Venkataramana Murthy, V.P., Senthil Kumar, P. (2012), "Thermal model and experimental validation of vapour compression refrigeration system with rotary compressor", *European Journal of Scientific Research*, Vol. 78, No. 2, 168 -172.
38. Venkataramana Murthy, V.P., Senthil Kumar, P. (2010), "Experimental comparative energy, exergy flow and second law efficiency analysis of R22, R436B vapour compression refrigeration cycles", *International Journal of Engineering Science and Technology*, Vol.2 No. 5, pp. 1399 - 1412.
39. Sampathkumar, K., Kavimani, V., Rathnavel Pon, and Senthilkumar, P. "Potability studies of drinking water in rural villages of Coimbatore district, Tamilnadu, India", *International Journal of Applied Environmental Research*, Vol. 5, No.5, pp. 729 - 739, 2010.

40. Sampathkumar, K., Arjunan, T.V., Pitchandi, P. and Senthilkumar P. "Active solar distillation - A detailed review", *Renewable and Sustainable Energy Reviews*, Vol. 14, No.6, pp. 1503-1526, 2010. (Impactfactor:6.167)
41. Sampathkumar, K., Arjunan, T.V., Eswaramoorthy, R.M. and Senthilkumar, P. "Experimental investigation of solar still coupled with evacuated tube collector", *Energy Sources, Part A: Recovery, Utilization and Environmental Effects Manuscript ID: UESO-2010-0197.R1 (Accepted)*, 2010. (Impactfactor:1.09)
42. Sampathkumar, K., Arjunan, T.V., Eswaramoorthy, R.M. and Senthilkumar, P. "Thermal modeling of solar still coupled with evacuated tube collector under natural circulation mode - An experimental validation", *Energy Sources, Part A: Recovery, Utilization and Environmental Effects Manuscript ID: UESO-2010-0383.R1 (Accepted)*, 2010. (Impactfactor:1.09)
43. Dhanasekaran R., Senthil Kumar P., Baskaran S., and Santhi K. "Failure analysis of first stage planet gear", *International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences*, Vol. 3, Issue 2, pp. 476-478, 2010.
44. Dhanasekaran R., Senthil Kumar P., and Santhi K. "Crack failure of planetary gearbox sun gear", *International Journal of Recent Trends in Engineering and Technology*, Vol. 3, No. 6, pp12 - 14,2010.
45. Venkataramana Murthy, V.P., Senthil Kumar, P. (2009), "CFD Analysis of R245fa and R245ca refrigeration cycles for scaling down towards small geometries", *International Journal on Mechanical and Automobile Engineering*, Vol. 6, No. 9, pp. 8 -16.
46. Dhanasekaran R., and Senthil Kumar P. "Investigation of a sun gear in an industrial planetary gearbox", *International Journal on Mechanical & Automobile Engineering*, Vol. 04, No. 05, pp. 12 - 16,2009.
47. Amala Justus Selvam.M, Senthil Kumar.P. (2009), "The Characteristics of Brazed Plate Heat Exchangers with Different Chevron Angles", *ARPJ Journal of Engineering and Applied Sciences (International)*, ISSN 1819 - 6608, Volume 4, Number 10, Pages 19 - 26.
48. Amala Justus Selvam.M, Senthil Kumar.P. (2009), "Modeling of Plate Heat Exchanger with Different Chevron angles for Improved Efficiency Using CFD code", *Journal of Mechanical Design*, ISSN 0973 - 810X, Volume 3, Number 2, Pages 050 -057.
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50. S.Sundaram, P.Senthil Kumar, A.Kumaravel and N.Manoharan "Flank Wear Monitoring in Coated Carbide Tool Using Ae Signal Analysis, Cutting Force, Motor Current and Acceleration Due to Tool Vibration", *IJSSCEA International Journal of Signal System Control and Engineering Application* 1 (2): 159 - 162,2008.
51. S.Sundaram, P.Senthil Kumar, A.Kumaravel and N.Manoharan "Crater Wear Monitoring of Single Point Cutting Tool using Acoustic Emission Sensor Techniques", *IJERIA International Journal of Engineering Research and Industrial Applications*, Vol.- I, ISSN 0974 - 1518,2008.

52. S.Sundaram, P.Senthil Kumar and N.Manoharan "Study of Acoustic Emission Sensor Techniques for Monitoring Machining Processes", Med well international Journal of Engineering and Applied Sciences 2 (4):1581 - 1586,2007
53. M.Amala Justus Selvam, P.Senthil Kumar, T.Nibin, "Computational Modeling and Simulation of Heat transfer Analysis in Plate Heat Exchanger with Different Chevron angles", Medwell, International journal for Applied Sciences 2 (4):760-767,2007
54. Amala Justus Selvam.M, Senthil Kumar.P. (2007), "Computational modeling and simulation of heat transfer analysis in plate heat exchanger with chevron angles", Journal of Engineering and Applied Sciences", ISSN 1816 - 949X, Volume 2, Number 4, pages 760 -767.
55. P.Senthil Kumar, G.Venkarathnam and S.Srinivasa Murthy " Performance of a throttle cycle refrigerator operating with Nitrogen-Hydrocarbon and Argon-Hydrocarbon mixtures", Advances in Cryogenic Engineering, Vol.49, 1576 - 1583, 2004.
56. Dhanasekaran R and Senthil kumar P and Santhi K, "Micro structure and wear behavior of planetary gear material and metal carbide coating" International Review of Mechanical Engineering, Vol 6, No. 6, pp: 1321-1325,2012.
57. B.Jayaraman and P.Senthil kumar(2008), " Simulation of Gryogenic Regenerator" International Journal of Engineering Research and Industrial Applications, ISSN 0974-1518, Vol 1, No.7,pp275-282.
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