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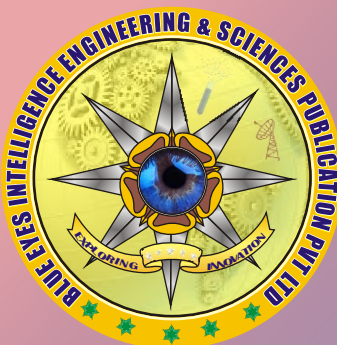
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S. No	<b>Volume-3 Issue-6, August 2014, ISSN: 2249-8958 (Online)</b> <b>Published By: Blue Eyes Intelligence Engineering &amp; Sciences Publication Pvt. Ltd.</b>		Page No.
	<b>Authors:</b>	<b>S. Harisingh Naik, K. Rama Rao, M. V. Ramana Murthy</b>	
	<b>Paper Title:</b>	<b>The Effect of Hall Current on Unsteady MHD Free Convective Couette Flow of a Bingham Fluid with Thermal Radiation</b>	
1.	<p><b>Abstract:</b> The objective of this study to find the numerical solution of unsteady magneto hydrodynamic flow of an electrically conducting viscous incompressible non – Newtonian Bingham fluid bounded by two parallel non – conducting porous plates is studied with thermal radiation considering the Hall Effect. An external uniform magnetic field is applied perpendicular to the plates and the fluid motion is subjected to a uniform suction and injection. The lower plate is stationary and the upper plate moves with a constant velocity and the two plates are kept at different but constant temperatures. The fluid is considered to be a gray, absorbing emitting but non – scattering medium and the Roseland approximation is used to describe the radioactive heat flux in the energy equation. Numerical solutions are obtained for the governing momentum and energy equations taking the Joule and viscous dissipations into consideration. The dimensionless governing coupled, non – linear boundary layer partial differential equations are solved by an efficient, accurate, and extensively validated and unconditionally stable finite difference scheme of the Crank – Nicolson method. The effects of the Hall term, the parameter describing the non – Newtonian behavior, thermal radiation parameter and the velocity of suction and injection on both the velocity and temperature distributions are studied through graphs and tabular form.</p> <p><b>Keywords:</b> Couette flow, Thermal radiation, Bingham fluid, Hall Effect and Finite difference method.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Jana, R. N. and Datta, N., (1977). Couette flow and heat transfer in a rotating system, <i>Acta Mechanical</i>, Vol. 26, pp. 301 – 306.</li> <li>Singh, A. K., Sacheti, N. C. and Chandran, P., (1994). 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	<b>Paper Title:</b>	<b>Strength Efficiency Factor for Nano Silica at Different Age</b>
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		<p><b>Abstract:</b> Concrete is being widely used as a construction material, hence it is necessary to improve its properties. These days supplementary cementitious materials are used for enhancement of concrete properties. Use of Nano materials is gaining importance due to its vital characteristics, these materials help in developing high performance concrete [5]. This study aims at determining efficiency factor ‘K’ for Nano silica. Efficiency factor is the part of supplementary cementitious material in the Nano silica concrete which can be considered as equivalent to Portland cement[3]. The efficiency factor helps in economic mix design of Nano silica concrete. This paper presents the results of an experimental study to evaluate strength of hardened concrete and strength efficiency factor ‘K’ for Nano silica by replacing the cement by various percentages of Nano silica (0.25% to 2.5% by weight of cement) for M20 ,M40 concrete at 7 &amp; 28 days of curing. Modified Bolomey equation[3] is used for determination of strength efficiency factor. From this study it can be concluded that the optimum replacement of Nano Silica is 2% and 1.5% respectively for M20&amp;M40 concrete. The mode value of ‘K’ is 6.0, 6.64 for 7 &amp; 28 days respectively of M20 concrete, similarly 5.83, 5.94 for 7 &amp; 28 days respectively of M40 concrete.</p>
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		<p><b>Keywords:</b> Nano Silica, Strength efficiency factor, Nano Silica concrete, Supplimentary Cementitious Material (SCM)</p>
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	<b>Paper Title:</b>	<b>Effective Bin Rank for Scaling Dynamic Authority Based Search with Materialized Sub Graphs</b>
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		<p><b>Abstract:</b> Dynamic authority-based keyword search algorithms, such as Object Rank and personalized Page Rank, leverage semantic link information to provide high quality, high recall search in databases, and the Web.</p>
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	<p>Conceptually, these algorithms require a query time Page Rank-style iterative computation over the full graph. In this paper we introduce Bin Rank system which approximates Object Rank results by utilizing a hybrid approach inspired by materialized views in traditional query processing.</p> <p><b>Keywords:</b> World Wide Web, Object Rank, sub graphs, Bin Rank.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. S.brin, l.page, "the anatomy of a large-scale hypertextual web search engine", computer networks, vol.30, nos.1-7, pp. 107-117, 1998.</li> <li>2. T.h.haveliwala, "topic-sensitive pagerank", proc.int'l world wide web conf.(www),2002.</li> <li>3. G.jeh, j.widom, "scaling personalized web search", proc.int'l world wide web conf.(www),2003.</li> <li>4. D.fogaras, b.racz,k.csalogany, and .sarlos, "towards scaling fully personalized pagerank: algorithms, lower bounds, and experiment", internet Math., vol.2, no.3, pp.333-358,2005.</li> <li>5. K.avrachenkov, n.litvak, d.nemirovsky, n.osipova, "monte carlo methods in pagerank computation: when one iteration is sufficient", siam J.numerical analysis, vol.45, no.2, pp.890-904,2007.</li> <li>6. A.balmin, v.hristidis, y.papakonstantinou, "objectrank: authority-based keyword search in databases", proc.int'l conf.very large data bases (vldb),2004.</li> <li>7. Znie, y. zhang, j. r. wen, w. y. ma, " object - level ranking: bringing order to web objects", proc.int'l world wide web conf.(www), pp.567-574,2005.</li> <li>8. S.chakrabarti, "dynamic personalized pagerank in entityrelations graphs", proc.int'l world wide web conf.(www),2007.</li> <li>9. H.hwang, a.balmin, h.pirahesh, b.reinwald, "information discovery in loosely integrated data," proc.acm sigmod, 2007.</li> <li>10. V.hristidis, h.hwang, y.papakonstantinou, "authority-based keyword search in databases," acm trans. database systems, vol.33, no.1, pp. 1-40,2008.</li> <li>11. M.r.garey, d.s. johnson, "a 71/60 theorem for bin packing," j.complexity, vol.1, pp.65-106, 1985.</li> <li>12. K.s.beyer, p.j.haas, b.reinwald, y.sismanis, r.gemulla, "on synopses for distinct-value estimation under multiset operations," proc.acm sigmod, pp.199-210, 2007.</li> <li>13. J.t.bradley, d.v.de jager, w.j.knotenbelt, a.trifunovic, "hypergraph partitioning for faster parallel pagerank computation , " EPEW, pp. 155-171, 2005.</li> </ol>	
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	<p><b>Paper Title:</b> <b>Review on Various Kinds of Die Less Forming Methods</b></p>	
4.	<p><b>Abstract:</b> With the increasing demands for low-volume and customer-made products, a die-less forming method, also called Incremental Sheet Metal Forming (ISMF), has become one of the leading research and development topics in the industry. Incremental Sheet Metal Forming (ISMF) is a recently invented die-less forming method that is quite different to the traditional methods. In ISMF, a piece of sheet metal is formed to the desired shape by a series of small incremental deformations. As it does not use dies, ISMF is effective for small batch production and prototypes. There are various kinds of die-less forming methods which can produce sheet metal parts without dies are proposed. This paper can help anyone who is interested in Incremental Sheet Metal forming with insight for future research direction.</p> <p><b>Keywords:</b> Die-less forming, Incremental sheet metal forming, Sheet metal parts.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Cai, Z.-Y., Li M.-Z., and Lan, Y.-W. (2012). "Three-dimensional sheet metal continuous forming process based on flexible roll bending: Principle and experiments." Journal of Materials Processing Technology 212(1): 120-127.</li> <li>2. Cai, Z. Y., Wang, S. H., Xu, X. D. and Li, M. Z., "Numerical simulation for the multi-point stretch forming process of sheet metal", Journal of Materials Processing Technology, Vol. 209, Issue 1, pp396-407, 2009.</li> <li>3. Dejjardin, S., Thibaud, S., Gelin, J.C. and Michel, G., "Experimental investigations and numerical analysis for improving knowledge of incremental sheet forming process for sheet metal parts", Journal of Materials Processing Technology, Vol. 210, Issue 2, pp363-369, 2010.</li> <li>4. Davoodi, B. and Zareh-Desari, B. (2014). "Assessment of forming parameters influencing spring-back in multi-point forming process: A comprehensive experimental and numerical study." Materials &amp; Design 59(0): 103-114.</li> <li>5. Examining Tool Shapes in Single Point Incremental Forming (Cawley et al, 2013).</li> <li>6. Edwards, k. R., Edwardson, S. P., Carey, C, Geoff, D., Watkins, K. G. (2010). "Laser micro peen forming without a tamping layer", International Journal of Advanced Manufacturing Technology, Vol. 47, Issues 1-4, pp191 -200.</li> <li>7. Gariépy, A., Larose, S., Perron, C., Bocher, P., and Lévesque, M. (2013). "On the effect of the peening trajectory in shot peen forming." Finite Elements in Analysis and Design 69(0): 48-61.</li> <li>8. Gariépy, A., S. Larose, C. Perron and M. Lévesque (2011). "Shot peening and peen forming finite element modelling – Towards a quantitative method." International Journal of Solids and Structures 48(20): 2859-2877.</li> <li>9. Shi, Y., Liu, Y., Yi., P. and Hu., J. (2012). "Effect of different heating methods on deformation of metal plate under upsetting mechanism in laser forming." Optics &amp; Laser Technology 44(2): 486-491.</li> <li>10. Kim, T. Y., Lee, J. H., and Cheong, S. K. (2010). " An area-average approach to peening residual stress under multi-impacts using a three-dimensional symmetry cell finite element model with plastic shots", Materials &amp; Design, Vol. 31, Issue 1, pp 50-59.</li> <li>11. Hardt, D.E., Olsen, B.A., Allison, B.T. and Pasch, K.. (1981). "Sheet metal forming with discrete die surfaces", Proceedings of Ninth American Manufacturing Research Conference pp. p140-p144.</li> <li>12. Marciniak, Z., Duncan, J. L. and Hu, S. J. (2002). Mechanics of sheet metal forming, Butterworth Heinemann, Oxford, England.</li> <li>13. Manuelli, A., Persano., L and Pisignano., D. (2014). "Flexible organic field-effect transistors based on electrospun conjugated polymer nanofibers with high bending stability." Organic Electronics 15(5): 1056-1061.</li> </ol>	24-28
	<p><b>Authors:</b> <b>R. Abd Allah</b></p>	
	<p><b>Paper Title:</b> <b>Experimental Results and Technique Evaluation Based on Alienation Coefficients for Busbar Protection Scheme-Part II</b></p>	
5.	<p><b>Abstract:</b> In modern digital power protection systems, statistical coefficients technique is recently used for fault analysis. An alienation technique is developed for busbar protection against all ten types of shunt faults, which may locate in busbar protection zone, under different loading levels, fault resistances and fault inception angle. It does not need any extra equipment as it depends only on the three-line currents measurements, of all feeders connected to the protected busbar, which are mostly available at the relay location. It is able to perform fault detection, fault confirmation, faulty phase selection and determine the fault location in about a half-cycle period. Thus, the alienation technique is well suited for implementation in digital protection schemes. The technique is efficient to detect current</p>	29-36



transformer saturation conditions without needing any additional algorithm. The effects of DC components and harmonics are eliminated with estimation of alienation coefficients. The proposed scheme is applied for an experimental circuit. LABVIEW program and MATLAB package are used to implement the proposed technique.

**Keywords:** Busbar protection, current transformer saturation, fault detection, internal and external faults, alienation coefficient, LABVIEW software, MATLAB.

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**Paper Title:** A Simple Adaptive PD Control Scheme for Underactuated Mechanical Manipulators

**Abstract:** Robot arms have been widely used in the industry for many decades. They have played a very important role in factory automation. However, actuators failure might occur due to unfrequent maintenance or limited life cycle, which could cause severe damages to the operators and products. To solve this problem, an adaptive PD controller incorporated with a nonlinear compensation term is developed. This controller is designed based on conventional PD control scheme combined with adaptive control algorithm. Theoretical proof for the closed-loop dynamic system is given via Lyapunov theorem and La Salle's theorem. To demonstrate the validity of the controller, a number of computer simulations as well as experiments are also performed.

**Keywords:** Adaptive control, Underactuated mechanical system, PD control

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	<b>Authors:</b>	<b>Pradnya N. Shinde, M. S. Chaudhari</b>
	<b>Paper Title:</b>	<b>Certification Revocation in Cluster Based MANET using Rerouting Mechanism</b>
7.	<p><b>Abstract:</b> MOBILE ad hoc networks (MANETs) now a days acquires attention of researcher, investors and manufactures due to their mobile nature , easy positioning and hot pluggable nature of involving devices into network . However, the wireless natures reduces security hence MANET becomes more defenseless to various types of security attacks than the cable connected networks. To overcome this challenge various approaches came forward. Cluster based Certificate Revocation with Vindication Capability (CCRVC) is one of them. This approach successfully overcome security challenge but did not pay attention on congestion in network as well as it has no solution for node failure. Proposed system improves CCRVC approach by applying label switched path algorithm which overcome problem of congestion and also gives solution for node failure also.</p> <p><b>Keywords:</b> About four key words or phrases in alphabetical order, separated by commas.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. R. Callon, P. Doolan, N. Feldman, A. Fredette, G. Swallow, and A. Viswanathan, A framework for multiprotocol label switching, Internet draft;draft-ietf-mpls-framework-05.txt, September 1999.</li> <li>2. E. Rosen, A. Viswanathan, and R. Callon, Multiprotocol label switching architecture , RFC 3031,, January 2001.</li> <li>3. D. Awduche, J. Malcolm, J. Agogbua, M. O Dell, and J. McManus, Requirements for traffic engineering over mpls , RFC 2702, September 1999.</li> <li>4. V. Sharma, Ben-Mack Crane, S. Makam, K. Owens, C. Huang, F. Hellstrand, J. Weil, L. Andersson, B. Jamoussi, B. Cain, S. Civanlar, and A. Chiu, Framework for mpls-based recovery, Internet draft;draft-ietf- mpls-recovery-fmwrk-01.txt, November 2000.</li> <li>5. D. Haskin and R. Krishnan, A method for setting an alternative label switched paths to handle fast reroute, Internet draft;draft-haskin-mplsfast-reroute-05.txt, November 2000.</li> <li>6. S.Makam, V.Sharma, K.Owens, and C.Huang, Protection/restoration of mpls networks, Internet draft;draft-makam-mpls-protection-00.txt, October, 1999.</li> <li>7. G. Swallow, Mpls advantages for traffic engineering, in IEEE Communication Magazine, pp 54-57, December 1999.</li> <li>8. L. Andersson, P. Doolan, N. Feldman, A. Fredette, and B. Thoma, Ldp specification,, RFC 3036,, January 2001.</li> <li>9. Daniel O. Awduche, L. Berger, D. Gan, T. Li, V. Srinivasan, and G. Swallow, Rsvp-te: Extensions to rsvp for lsp tunnels, draft ;draft-ietf-mpls-rsvp-lsptunnel- 07.txt, August 2000.</li> <li>10. E. Rosen, D. Tappan, G. Fedorkow, Y. Rekhter, D. Farinacci, T. Li, and A. Conta Mpls label stack encoding , RFC 3032,, January 2001.</li> <li>11. A. Gaeil and C. Woojik Design and implementation of mpls network simulator (mns) supporting qos , 15th International Conference on Information Networking,, January 2001.</li> <li>12. Gaeil and C. Woojik, Design and implementation of mpls network simulator (mns) supporting ldp and cr-ldp, proceedings of the IEEE International Conference on Networks (ICON 00), September 2000.</li> <li>13. Gaeil and C. Woojik Simulator for mpls path restoration and performance evaluation, <a href="http://flower.ce.cnu.ac.kr/É.fog1/mns/index.htm">http://flower.ce.cnu.ac.kr/É.fog1/mns/index.htm</a> see path protection/restoration, April 2001.</li> <li>14. H. Yang, H. Luo, F. Ye, S. Lu, and L. Zhang Security in Mobile Ad Hoc Networks: Challenges and Solutions, IEEE Wireless Comm., vol. 11, no. 1, pp. 38-47, Feb. 2004.</li> <li>15. P. Sakarindr and N. Ansari Security Services in Group Communications Over Wireless Infrastructure, Mobile Ad Hoc, and Wireless Sensor Networks , IEEE Wireless Comm., vol. 14, no. 5, pp. 8-20, Oct. 2007.</li> <li>16. A.M. Hegland, E. Winjum, C. Rong, and P. Spilling A Survey of Key Management in Ad Hoc Networks , IEEE Comm. Surveys and Tutorials, vol. 8, no. 3, pp. 48-66, Third Quarter 2006.</li> <li>17. L. Zhou and Z.J. Haas Securing Ad Hoc Networks , IEEE Network Magazine, vol. 13, no. 6, pp. 24-30, Nov./Dec. 1999.</li> <li>18. L. Zhou, B. C Schneider, and R. Van Renesse COCA: A Secure Distributed Online Certification Authority, , ACM Trans. Computer Systems, vol. 20, no. 4, pp. 329-368, Nov. 2002.</li> <li>19. H. Chan, V. Gligor, A. Perrig, and G. Muralidharan On the Distribution and Revocation of Cryptographic Keys in Sensor Networks , Trans. Dependable and Secure Computing, vol. 2, no. 3, pp. 233-247, July 2005.</li> <li>20. P. Yi, Z. Dai, Y. Zhong, and S. Zhang, Resisting Flooding Attacks in Ad Hoc Networks, Proc. IntâAZI Conf. Information Technology: Coding and Computing, vol. 2, pp. 657-662, Apr. 2005.</li> <li>21. B. Kannhavong, H. Nakayama, A. Jamalipour, Y. Nemoto, and N. Kato, A Survey of Routing Attacks in MANET , IEEE Wireless Comm. Magazine, vol. 14, no. 5, pp. 85-91, Oct. 2007. Technology: Coding and Computing, vol. 2, pp. 657-662, Apr. 2005.</li> </ol>	42-45
	<b>Authors:</b>	<b>P. Asha, A. Salman, R. Arun Kumar</b>
	<b>Paper Title:</b>	<b>Experimental Study on Concrete with Bamboo Leaf Ash</b>
8.	<p><b>Abstract:</b> The use of waste materials with pozzolanic properties in concrete production is a becoming a worldwide practice. The assessment of the pozzolanic activity of cement replacement materials is becoming increasingly important because of the need for more sustainable cementing products. In this paper, bamboo leaf ash is used as partial replacement for cement in ranges of 5%, 10%, 15%. Strength and durability tests were carried out to assess the feasibility of using bamboo leaf ash as partial replacement of cement in concrete</p> <p><b>Keywords:</b> Bamboo Leaf Ash, Concrete, Compressive Strength, Durability tests.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Hernandez JF, Martirena, Middendorf B, Gehrke M, Budelmaun H (1998) "Use of wastes of the sugar industry as pozzolana in lime pozzolana binders: Study of the reaction". Cem. Concr. Res. 28(11): 1528-1536.</li> <li>2. Massaza F, Costa U (1979). "Aspects of the Pozzolanic activity and Properties of pozzolanic cements II" .Cemento. 76: 318.</li> <li>3. Vatsala (2003). Bamboos in India, NISCAIR, New-Delhi.</li> <li>4. Mehta PK (1987). "Natural Pozzolanas in Supplementry Cementing Materials for Concrete"Ed. VM Malhotra, CANMET, Canada. pp: 3-</li> </ol>	46-51

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**Paper Title:** Review on Cellular Manufacturing System and its Components

**Abstract:** Shorter product life cycle, variable demands and international competitions become challenging issues nowadays hence, most of manufacturer made attempts to select type of manufacturing system for their company which be able to respond to these issues. Group technology [GT] is one of the most recent manufacturing philosophies which is able to cover the existed problems. Cellular manufacturing system [CMS] is one of the main applications of GT during these decades. Importance of CMS during these decades makes author motivated for having a brief review on literature of this topic. This paper made attempts to have a brief review on Cellular manufacturing system and its main components.

**Keywords:** Cellular manufacturing system, Cell formation, Machine layout Design.

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	<b>Paper Title:</b> Recent Development of Extraction Processes and Extraction of Essential Oil from Coriander by Clean Technology
	<p><b>Abstract:</b> By increasing demand of essential oil in medical and cosmetically field various different extraction technologies are used to extract a essential oil Semi-continuous supercritical carbon dioxide extraction or clean technology unit was used to extract the essential oil from the coriander seeds. Dried seeds were subjected to extraction after grinding to particle size of 300µm. The extraction was carried out at three different pressure levels (30, 35 and 40 MPa), three temperature levels (308, 313, 318 K) and three levels of supercritical CO2 flow rates (10, 15, 20 g/min). The highest essential oil was obtained at 40MPa, 313 K and 15 g/min combination of parameters and the highest yield was equal to 3.20 gm/100gm. The study showed that the temperature has more significant effect than the pressure while the flow rate was having no significant effect on the yield of coriander seed oil</p> <p><b>Keywords:</b> Recent technology, clean technologies, coriander seed; supercritical carbon dioxide; temperature; essential oil.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Al-Rawi, S.S., Ibrahim, A.H., Abdul Majid, A.S., Abdul Majid, A.M.S., Ab Kadir, M.O., 2013. Comparison of yields and quality of nutmeg butter obtained by extraction of nut megrind by Soxhlet and supercritical carbon dioxide (SC-CO2). J. Food Eng.119 (3), 595–601.</li> <li>2. Anderson ML, Burney DP (1998) J AOAC Int 81:1005 Colegate SM, Molyneux RJ (1993) (eds) Bioactive natural products, CRC Press, Boca Raton.</li> <li>3. Couto, R.M., Fernandes, J., Silva, M., Simoes, P.C., 2009. Supercritical extraction of lipids from spent coffee grounds. J. Supercrit. Fluids 51, 159–166.</li> <li>4. Diederichsen A (1996), Promoting the conservation and use of underutilized and neglected crops.3.IPGRI,22-2</li> <li>5. Donehower RC, Rowinsky ER (1993) Cancer Treat Rev 19C: 63 Hostettmann K, Marston A, Maillard M, Hamburger M (1995) (eds) Phytochemistry of plants used in traditional medicine. Clarendon Press, Oxford.</li> <li>6. El-dengawy, R.A., Khalifa, A., Ramadan, B.R. 2001. Use of Bottle gourd (Lagenaria siceraria) seeds in production of Tahina. Egypt J. of Food Sci., 29(1), 1-11</li> <li>7. Sukhdev Swami Handa, Sumit Preet Singh Khanuja, Gennaro Longo, Dev Dutt Rakesh 2008) Extraction Technology for Medicinal and Aromatic Plants, 155-177</li> <li>8. John Shi , Sophia Jun Xue , Ying Ma , Yueming Jiang,Xingqian Ye, and Dianyu Yu (2012) Green separation technologies in food processing: supercritical-CO2 fluid, Journal of Food Engineering, 93, 273-294</li> <li>9. Jokic, S., Nagy, B., Zekovic, Z., Vidovic, S., Bilic, M., Velic, D., Simandi, B., 2012. Effects of supercritical CO2 extraction parameters on soybean oil yield. Food Bioprocess Technol. 90 (4), 693–699.</li> <li>10. Kaufman PB, Csake LJ, Warber S, Duke JA, Briemann HL (1999) (eds) Natural products from plants. CRC Press, Boca Raton</li> <li>11. McDonald, S., Prenzler, P. D., Antolovich, M., &amp; Robards, K. (2001). Phenolic content and antioxidant activity of olive extracts. Food Chemistry, 73, 73–8.</li> <li>12. Miguel Herreroa,b, Jose A. Mendiola, Alejandro Cifuentesa, Elena Ibañeza,(2010) Supercritical fluid extraction: Recent advances and applications Journal of Chromatography A,1217, 2495–2511.</li> <li>13. Miller, D.J., Hawthorne, S.B., Clifford, A.A., 1997. Solubility of chlorinated hydrocarbons in supercritical carbon dioxide from 313 to 413 K and at pressures from 150 to 450 bar. J Supercrit. Fluids. 10 (1), 57–63.</li> <li>14. Pradhan, R.C., Meda, V., Rout, P.K., Naik, S., Dalai, A.K., 2010. Supercritical CO2 extraction of fatty oil from flaxseed and comparison with screw press expression and solvent extraction processes. J. Food Eng. 98, 393–397.</li> <li>15. Romvari, M., 1976. Book of Spices, third ed, Konyve Kiado, Mezogazdasagi, Budapest, pp91.</li> <li>16. Stahl, E., Quirin, K.W., Gerard, P. 1987. Verdichtete Gaze zur Extraktion und Raffination. Springer, Heidelberg.</li> <li>17. Sthal E. and Gerard D. 1985. Solubility Behaviour and Fractionation of Essential Oils in Dense Carbon Dioxide. Perfumer and Flavorist, 10, 29-37.</li> <li>18. Said, P.P., Pradhan, R.C. and Rai, B.N. (2014), A green separation of Lagenaria siceraria seed oil, Industrial Crops and Product, 52,796-800</li> <li>19. Salgin, U., Korkmaz, H., 2011. A green separation process for recovery of healthy oil from pumpkin seed. J. Supercrit. Fluids 58, 239–248.</li> <li>20. V. Ille's, H.G. Daood , S. Perneckzi, L. Szokonya, M. Then(1999) Extraction of coriander seed oil by CO2 and propane at super- and subcritical conditions, journals of Supercritical Fluids 17 (2000) 177–186</li> <li>21. Zhao, S., Zhang, D., 2013. A parametric study of supercritical carbon dioxide extraction of oil from Moringa oleifera seeds using a response surface methodology. Sep. Purif. Technol. 113, 9-17.</li> </ol>
	<b>Authors:</b> S. Narasimha, M. Sushama
	<b>Paper Title:</b> Control Method for Improving the Voltage Utilization Factor of Multilevel Inverters Considering Co-Generation System Voltage Fluctuation
11.	<p><b>Abstract:</b> Given the threat of diminution of fossil fuels and several environmental concerns, cogeneration systems using natural energy and fuel cells have begin widespread. In such systems, the generated power is converted into a DC voltage, stored in batteries, and then converted into an AC voltage by inverters. The generated power is often unsteady and large voltage fluctuations. In an attempt to improve efficiency and decrease costs, a simple control method for improving the voltage utilization factor of multilevel inverter. This paper describes a control method which combined feed back control of output voltage with the improvement on voltage utilization factor that the superposition ratio is controlled in the three phase multilevel inverter application to smart grid/co-generations. The aim of this control method is to realize improvement on the controllability and absorption of the fluctuation of the DC voltage by superimposing the moderate third harmonic wave. It is applied to the multilevel inverter, and the operation principle and features are explicated, By simulation/MATLAB.</p> <p><b>Keywords:</b> Multilevel inverter; improvement of voltage utilization factor; feedback control; DC-link voltage; Co-generation.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Amei,K.;Tanizaki,Y.;Ohji,T.;Sakui,M."A Control Method of Superposition Ratio in the Improvement of Voltage Utilization Factor in Three-Phase Multilevel Inverter considering the DC Voltage Fluctuation" Power Conversion Conference - Nagoya, 2007.7Publication Year: 2007, Page(s):37 – 142.</li> <li>2. Maruyama T, Asaeda T, Ikeda K. "Multilevel inverter". 1992 Annual Meeting Record IEE Japan, No. S8-4.</li> <li>3. Imai K. Power electronics hand book. NTS Co. Ltd.; 2002. p 533–535.</li> <li>4. Amei K, Maeda T, Ohji T, Sakui M. "Method for reducing of high frequency component in the single phase PWM inverter by the multilevel". Joint Technical Meeting on Semiconductor Power Converter and Industry Electric Application IEE Japan, SPC-03, No. 95, p</li> </ol>

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	<b>Authors:</b> Shivalingappa I. Battur, Shweta S. Bagali	
	<b>Paper Title:</b> A Survey on Energy Efficient Target Tracking Techniques in Wireless Sensor Networks	
12.	<p><b>Abstract:</b> Wireless sensor networks (WSNs) find its application in areas such as target detection and tracking, environmental monitoring, industrial process monitoring, and tactical systems. Energy efficiency is one of the important research issues in WSNs, since it determines the lifetime of the sensor network deployed for the intended applications. Target tracking is one of the killer applications of wireless sensor networks and energy-efficient target tracking algorithms are used for accurate tracking. In this paper, the focus is mainly driven over the survey of the different energy-efficient target tracking techniques for Wireless Sensor Network.</p> <p><b>Keywords:</b> Clustering, Prediction, target tracking, Wireless Sensor Networks.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Tian He., Vicair P., Ting Yan., Liqian Luo., Lin Gu, Gang Zhou, Stoleru R, Qing Cao, Stankovic and Abdelzaher J A (2006). Achieving Real-time Target Tracking using Wireless Sensor Networks, Proceedings of IEEE Real-Time and Embedded Technology and Applications Symposium, San Jose, California, pp. 37-48.</li> <li>2. Xu Y., Winter J and Lee W C (2004). Prediction-Based Strategies for Energy Saving in Object Tracking Sensor Networks, In Proc. International Conference on Mobile Data Management, Berkeley, CA, pp. 346-357.</li> <li>3. Xu Y., Winter J and Lee W C (2003). On Localized Prediction for Power Efficient Object Tracking in Sensor Networks, In Proc. 1st International Workshop on Mobile Distributed computing, Providence RI, pp.434-439.</li> <li>4. Samarah S., Hajri M and Boukerche A (2011). A Predictive Energy-Efficient Technique to Support Object-Tracking Sensor Networks, IEEE Transactions On Vehicular Technology, 60 (2), pp. 656-663.</li> <li>5. Nandhini M and Sarma Dhulipala V R (2012). Energy-Efficient Target Tracking Algorithms in Wireless Sensor Networks: An Overview, International Journal of Computer Science And Technology IJCST , 3 (1), pp.</li> <li>6. Ramya K., Praveen Kumar K and Srinivas Rao V (2012). A Survey on Target Tracking Techniques in Wireless Sensor Networks, International Journal of Computer Science &amp; Engineering Survey (IJCSES), 3 (4), pp.</li> <li>7. Nirmala S., HariPriya C and Suma S (2012). An energy-efficient trade-off between data estimation and data aggregation to maximize lifetime in WSN, International Journal of Advanced Technology &amp; Engineering Research (IJATER), 2 (4), pp.</li> <li>8. Jin Zheng., Weijia Jia and Guojun Wang (2009). Data Management of Mobile Object Tracking Applications in Wireless Sensor Networks, journal of Computers, 4(9), pp.</li> <li>9. Virendra Choudhary and Chowdhary K R (2012). Energy Efficient Object Tracking Technique using Mobile Data Collectors in Wireless Sensor Networks, International Journal of Computer Applications, 3, pp.</li> <li>10. Jukka Kohonen (2004). Data Gathering in Sensor Networks, Helsinki Institute for Information Technology in Finland, pp.</li> <li>11. Ancy R (2012). Energy Reduction using Adaptive Clustering in Sensor Networks, International Journal of Communications and Engineering, 1(1), pp.</li> </ol>	68-71
	<b>Authors:</b> Khushal Khera, Anmol Bhatia, Sanjay Kumar, Mehul Bhatia	
	<b>Paper Title:</b> Investigation of the Effects of Various Heat Treatment Processes on Microstructure & Hardness with Respect to Corrosion Behavior for Carbon Steels	
13.	<p><b>Abstract:</b> In this paper, the effect of heat treatments on microstructure and mechanical properties of EN -31 and EN-8 carbon steel are being studied. Further both the carbon steels are compared on the basis of their mechanical properties as well as the rate of corrosion, then the hardness of both the carbon steel are noted before and after the heat treatment processes. The heat treatment processes i.e. Annealing, Tempering &amp; Oil quenching (hardening) are done. The hardening temperature for EN-31 varies from 8200C - 8600C whereas the hardening temperature for EN-8 varies from 7500C - 9000 C. The mechanical properties such as the hardness and tensile strength among three process, the oil quenching sample posses highest hardness and the annealed sample posses highest elongation. That is how heat treatment plays an important role in the mechanical properties and corrosion resistance of the experimental steel.</p> <p><b>Keywords:</b> EN-31, EN-8, heat treatment, microstructure, mechanical properties.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. N. El-Bagoury, Mohammed A. Amin, Q. Mohsen (2011), Effect of Various Heat Treatment Conditions on Microstructure, Mechanical Properties and Corrosion Behavior of Ni Base Superalloys, International journal of electrochemical science, vol 6,pp.6718 – 6732.</li> <li>2. Ashish Bhateja , Aditya Varma, Ashish Kashyap and Bhupinder Singh Study the Effect on the Hardness of three Sample Grades of Tool Steel i.e. EN-31, EN-8, and D3 after Heat Treatment Processes Such As Annealing, Normalizing, and Hardening &amp; Tempering,The International Journal of Engineering And Science (IJES) ,Vol 1 ,Issue 2 pp. 253-259.</li> <li>3. Datong ZHANG , Ruiping CHEN, Weiwen ZHANG, Zongqiang LUO and Yuanyuan LI (2010), Effect of microstructure on the mechanical and corrosion behaviors of a hot-extruded nickel aluminum bronze, Acta Metall. Sin.(Engl. Lett.)Vol.23 No.2 pp113-120.</li> <li>4. <a href="http://kvsteel.co.uk/steel/EN8.html">http://kvsteel.co.uk/steel/EN8.html</a>.</li> <li>5. Calister- Materials science and engineering- an introduction 7th edition John wiley publication, 2007.</li> <li>6. Kakani, Material Science,New Age International limited, 3rd edition, 2004.</li> </ol>	72-75
	<b>Authors:</b> Olatunji S. O, Oke A. E, Owoeye L. C	
	<b>Paper Title:</b> Factors Affecting Performance of Construction Professionals in Nigeria	
14.	<p><b>Abstract:</b> The construction industry is made up of professionals whose various disciplines are to ensure that construction work can be completed. This study evaluates the effects of the performance of construction professionals on construction project success in Nigeria. The study adopted a survey research design with the use of a well structured questionnaire which was administered on construction professionals, 68 copies were retrieved and used for the analysis out of the administered 139. Frequency and percentiles was used to analyse the distribution of demographic descriptors of construction professionals while mean score and mean difference was used to analyse the roles of construction professionals and factors influencing the performance of construction professional. The findings</p>	76-84

revealed that the major role of an architect is to translate the user's needs into builders requirement, engineer is most concerned with the calculation of load and grade requirements, liquid flow rates and materials stress points to ensure that the structure can withstand stress, the quantity surveyor is mostly concerned with management and control of costs within the construction projects while a builders major role is building production management. The performances of construction professionals are, however, affected mostly by remuneration, motivation and incentives and promotion opportunities and least affected by supervision and co-worker. The demographic factors which mostly affect the professionals are experience, gender and age. Based on the findings of the research, the majority of the construction professionals are male therefore; better friendly work environment should be created by the managements of the construction industry so as to attract female professionals. Also, construction industries should focus its efforts on improving the performance of young and newly employed construction professionals by developing management training programs, workshops, financial incentives, and other non-work-related activities that would encourage and support them to stay and grow with the industry, since there are relatively few young professional in the industry.

**Keywords:** About four key words or phrases in alphabetical order, separated by commas.

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**Paper Title:** Efficient Compression of Image by Lifting Based Technique

15.

**Abstract:** Images contain large amounts of information that requires much storage space, large transmission bandwidths and long transmission times. Therefore it is advantageous to compress the image by storing only the essential information needed to reconstruct the image. Discrete Wavelet Transform (DWT) is most popular transformation technique adopted for image compression In this work" LIFTING BASED-DWT" technique is proposed and is implemented on FPGA Instead of using ROM as a cache memory we are using FIFO as an storage device by which throughput can be increased.

**Keywords:** Image compression, FIFO, Xilinx, lifting base DWT

**References:**

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<b>Authors:</b>	<b>Bhageerathy K. P, Anu P. Alex, Manju V. S, Raji A. K</b>	
<b>Paper Title:</b>	<b>Use of Biomedical Plastic Waste in Bituminous Road Construction</b>	
<b>16.</b>	<p><b>Abstract:</b> The quantum of plastic in solid waste is increasing due to increase in population, urbanization, development activities and changes in life style which is leading to widespread littering on the landscape. The disposal of waste plastic has thus become a serious problem globally due to their non-biodegradability. The deteriorating quality of roads is another area of concern as the present roads are not able to withstand the increasing traffic and also are less resistant to adverse weather conditions. Research is being carried out to develop suitable alternatives to the conventional road construction materials. In this work, the use of autoclaved medical plastic waste in the form of shredded syringes in road construction is tested. The main objective of the study was to investigate the performance of the bituminous mix modified with bio-medical plastic waste and to compare it with the normal mix. Medical plastic waste was collected from IMAGE (Indian Medical Association Goes Eco-friendly), Palakkad, Kerala, India. As part of the study, the properties of Plastic Coated Aggregates (PCA) were determined. The results showed improved properties for PCA when compared to normal aggregates. The properties of both the mixes were tested by conducting creep test and indirect tensile stiffness modulus test.</p> <p><b>Keywords:</b> Autoclaved medical plastic, Plastic Coated Aggregates, Creep test, Indirect tensile stiffness modulus test.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Vidula Swami, J. Abhijeet, and P. Karan, "Use of waste plastic in the construction of bituminous road", International Journal of Engineering Science and Technology, vol. 4, Issue 5, 2012, pp. 1-5.</li> <li>2. S. K. Sultana and K. S. B. Prasad, "Utilization of waste plastic as a strength modifier in surface course of flexible and rigid pavements", International Journal of Engineering Research and Applications, vol. 2, Issue 4, 2012, pp. 1185-1191.</li> <li>3. A. Gawande, G. Zamare and V. C. Renge, "An overview on waste plastic utilization in asphaltting of roads", Journal of Engineering Research and Studies, vol. 3, Issue 2, 2012, pp. 1-5.</li> <li>4. R. Vasudevan, A. Ramalinga Chandra Sekar, Sundarakannan, and R. Velkennedy, "A technique to dispose waste plastics in an eco friendly way - Application in construction of flexible pavements", Construction and Building Materials Journal, vol. 28, Issue 7, 2011, pp. 311-320.</li> <li>5. C. S. Bindu and K. S. Beena, "Waste plastic as a stabilizing additive in stone mastic asphalt", International Journal of Engineering and Technology, vol. 2, Issue 6, 2010, pp. 379-387.</li> <li>6. K. K. Babu and A. K. Raji, "Utilization of marginal materials as an ingredient in bituminous mixes", Highway Research Record No. 36, Indian Roads Congress, 2007, pp. 42-43.</li> <li>7. A. K. Raji, K. K. Babu and G. Sreekala, "Use of certain industrial solid wastes in Flexible pavement construction", Proc. XXI Kerala Science Congress, Kollam, 2009, pp. 276-278.</li> <li>8. A. K. Raji, K. K. Babu and G. Sreekala, "Utilisation of medical plastic wastes in bituminous pavement", Proc. XXI Kerala Science Congress, Kollam, 2009, pp. 325-327.</li> </ol>	<b>89-92</b>

<b>Authors:</b>	<b>Chander Garg, Ankush Khadwal</b>	
<b>Paper Title:</b>	<b>Behavior of Ground Granulated Blast Furnace Slag and Limestone Powder as Partial Cement Replacement</b>	
<b>17.</b>	<p><b>Abstract:</b> One of the main ingredients used for the production of concrete is the Ordinary Portland Cement (OPC). Carbon-dioxide (CO<sub>2</sub>) gas which is a major contributor in green house effect and the global warming, is produced in the production of cement, hence it is needed either to search for another material or partially replace cement by some other material.[2] In recent years ground granulated blast furnace slag (GGBS) and Limestone powder (LP) when replaced with cement has emerged as a major alternative to conventional concrete and has rapidly drawn the concrete industry attention due to its cement savings, energy savings, and cost savings, environmental and socio-economic benefits.[1]. This paper investigates the possibility of utilizing Blast Furnace Slag (BFS) and Limestone powder (LP) as a cement substitute in concrete, in order to reduce environmental problems due to manufacturing of cement and waste disposal. The present study reports the results of an experimental study, conducted to evaluate the strengths and strength of hardened concrete, by partially replacing the cement by various percentages of blast furnace slag and</p>	<b>93-96</b>



	<p>Limestone powder for M25 grade of concrete at 7 and 28 days. In this study w/c ratio of 0.42 is used. The compressive strengths at various ages are studied. From this study it is observed that BFS and LP could be utilized partially as alternative construction material for replacement of cement in concrete.</p> <p><b>Keywords:</b> Concrete, Replacement, Blast furnace slag, Limestone Powder, Workability, Compressive strength, Flexure strength, Tensile strength, Durability.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Latha K.S, Rao M.V.S, and Reddy V. S. "Estimation of GGBS and HVFA strength efficiencies in concrete with age", International Journal of Engineering and Advanced Technology (IJEAT) ISSN: 2249 – 8958, Vol. 2, Issue 2, December (2012)</li> <li>2. Dubey A, Chandak R, and Yadav R.K. "Effect of blast furnace slag powder on compressive strength of concrete", International Journal of Scientific &amp; Engineering Research. ISSN 2229-5518, Vol. 3, Issue 8, August (2012)</li> <li>3. Pathan V.G, Ghutke V.S, and Pathan G. "Evaluation of concrete properties using ground granulated blast furnace slag", International Journal of Innovative Research in Science, Engineering and Technology Vol. 1, Issue 1, November (2012)</li> <li>4. Gudissa W, and Dinku A. "The use of limestone powder as an alternative cement replacement material: An experimental study", Journal of EEA. Vol. 27, (2010)</li> <li>5. Allahverdi A, and Salem S, "Simultaneous influences of micro silica and Limestone powder on properties of Portland cement paste", Ceramics – Silikáty 54 (1) 65-71 (2010)</li> <li>6. Ahmed A.H.H, Abdurrahman R.B, and Mohammed Z.A, "Influence of Limestone Powder as Partial Replacement of Cement on Concrete and the Effect of High Temperature on It", Received 13/5/2009 and Accepted 10/12/2009</li> <li>7. IS: 8112-1989 Specification for coarse and fine aggregate from natural sources of concrete</li> <li>8. IS: 456-2000 Plain and reinforced concrete - Code of practice</li> <li>9. IS: 9013-1999 Specification for admixtures for concrete (First Revision).</li> <li>10. IS: 10262-2009 Concrete mix proportioning-guidelines (First Revision).</li> </ol>	
18.	<p><b>Authors:</b> A. Benuel Sathish Raj, S. Praveen Kumar, G. Manikandan, P. Jerry Titus</p>	
	<p><b>Paper Title:</b> An Experimental Study on the Performance of Concentrated Photovoltaic System with Cooling System for Domestic Applications</p>	97-101
	<p><b>Abstract:</b> Concentrated photovoltaic (CPV) system helps in focusing the direct solar radiation on the photovoltaic module. The CPV systems use lenses or mirrors and tracking systems to focus a large area of sunlight into a small beam. As the Concentrated Solar radiation reaches the PV panel system, the temperature increases rapidly and because of this increase in temperature, the output efficiency will be decreased. In order to reduce the temperature and to increase the output efficiency, the Cooling System is used. It has been found that the electrical output of the water cooled CPV is 4.7 to 5.2 times more than the PV module (without concentration and cooling). The cooling system has a heat pipe filled with Acetone. The performance of the CPV module with cooling system based on voltage output and temperature were evaluated and verified with the help of an experimental setup. The electrical energy from the CPV panel is stored in the battery and it is converted to AC supply by using inverter and then used for the residential lighting.</p> <p><b>Keywords:</b> Concentrated Solar Photovoltaic (CPV); Cooling System; Pulsating Heat pipe.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Skoplaki E, Palyvos JA., On the temperature dependence of photovoltaic module electrical performance: a review of efficiency/power correlations, Solar Energy, 2009, 614–24.</li> <li>2. Coventry JS, Performance of a concentrating photovoltaic/thermal solar collector, Solar Energy, 2005; 78(2): 211-222.</li> <li>3. Sendhil Kumar Natarajan a, Tapas Kumar Mallick, Matty Katz, Simon Weingaertner, Numerical investigations of solar cell temperature for photovoltaic concentrator system with and without passive cooling arrangements, International Journal of Thermal Sciences, 50 (2011) 2514-2521.</li> <li>4. V.Jafari Fesharaki, Majid Dehghani, J. 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19.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>S.H.V Prasada Rao, B.Rajesh, P.Kanakaraja</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Secure Data Communication on ARM using Embedded ‘C’</b></td> </tr> <tr> <td colspan="2"><b>Abstract:</b> The encryption standards such as DES (Data Encryption Standard), AES (Advanced Encryption Standard) and EES (Escrowed Encryption Standard) are widely used to solve the problem of communication over an insecure channel. With advanced technologies in computer hardware and software, these standards seem not to be as secure and fast as one would like. In this paper we propose a fast and secure encryption algorithm using substitution mapping, translation and transposing operations. Like one’s compliment methodology the proposed symmetric encryption technique has two advantages over traditional schemes. 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25.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Abdul-Husain M. Abdullah, Enas W. Abood</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Race Classification using Craniofacial Features from Colored Face Images</b></td> </tr> </table> <p><b>Abstract:</b> This paper produces a system for race classification from face images. Two powerful types of local features have been considered: craniofacial features (eyes, mouth, nose) of the faces and color variance of the skin color together to further improve race classification accuracy. For classification, five ratios have been taken which calculated as a mathematical relation between features using four race groups selected from FG-NET, CPIR database and other gathered by us as own database. The system scored a success about 82% in recognition for tested images.</p> <p><b>Keywords:</b> Race recognition; facial features.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. J. Brigham, The influence of race on face recognition, in Aspects of Face Processing, eds. H. Ellis, M. Jeeves, and F. Newcombe (1986), pp. 170–177.</li> <li>2. A. O'Toole, J. Peterson, and K. Deffenbacher, Another-race effect for classifying faces by sex, Perception 25 (1996) 669–676.</li> <li>3. Y. Cheng, A. O'Toole, and H. Abdi, Classifying adults' and children's faces by sex. Computational investigations of subcategorical feature encoding, Cognitive Science 25 (2001).</li> <li>4. A. Dina, (2013). Age Classification From Facial Images System. Computer dept. collage of science. Basrah university. Iraq.</li> <li>5. M. Ghulam, H. Muhammad, F. Alenezy, B. George, M. M. Anwar, H. Aboalsamh, Race Classification From Face Images Using Local Descriptors, International Journal on Artificial Intelligence Tools, Vol. 21, No. 5 (2012) 1250019.</li> <li>6. R. Brunelli and T. Poggio, Face recognition: Features versus templates, IEEE Transactions on Pattern Analysis and Machine Intelligence 15(10) (1993) 1042–1052.</li> <li>7. O. H. MacLin and R. S. Malpass, Racial categorization of faces: The ambiguous race face effect, Psychology, Public Policy, and Law 7(1) (2001) 98–118.</li> <li>8. P. J. Phillips, F. Jiang, A. Narvekar, J. Ayyad, and A. O'Toole, An other-race effect for face recognition algorithms, ACM Transactions on Applied Perception 8(2) (2011).</li> <li>9. S. Hosoi, E. Takikawa, and M. Kawade, Ethnicity estimation with facial images, in Proc. 6th IEEE Int. Conf. on Automatic Face and Gesture Recognition (AFGR), (2004), pp. 195–200.</li> <li>10. Levin, D. T. (1996). Classifying faces by race: The structure of face categories. Journal of Experimental Psychology: Learning, Memory, and Cognition, 22, 1364–1382.</li> <li>11. Levin, D. T. (2000). Race as a visual feature: Using visual search and perceptual discrimination tasks to understand face categories and the cross-race recognition deficit. Journal of Experimental Psychology: General, 129, 559–574.</li> <li>12. A. M. Triesman, &amp; G. Gelade, (1980). A feature-integration theory of attention. Cognitive Psychology, 12, 97–136.</li> <li>13. M. H. Papesch and S. D. Goldinger. Deficits in Other-Race Face Recognition: No Evidence for Encoding-Based Effects. Canadian Journal of Experimental Psychology. 2009, Vol. 63, No. 4, 253–262.</li> </ol>	<b>Authors:</b>	<b>Abdul-Husain M. Abdullah, Enas W. Abood</b>	<b>Paper Title:</b>	<b>Race Classification using Craniofacial Features from Colored Face Images</b>	138-143
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<b>Paper Title:</b>	<b>Race Classification using Craniofacial Features from Colored Face Images</b>					

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26.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>T. Bheemeswara Reddy, K. Satyanarayana, T. Himaja</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Modeling and Analysis of Adaptive Neuro Fuzzy Inference System Based BLDC Motor under Different Operating Conditions</b></td> </tr> </table> <p><b>Abstract:</b> In this paper the performance factors of adaptive neuro fuzzy inference system (ANFIS) based brushless direct current (BLDC) motor for controlling speed and torque under different operating conditions are analyzed. The above scheme has many characteristics like small torque ripple, strong robustness, good anti interference ability and reduction of starting currents. The dynamic characteristics of the brushless DC motor such as speed, torque, current and voltages of the inverter components are observed and analyzed. In order to verify the effectiveness of the controller, the simulation results are compared with PID controller. The simulation result show that the overall performance of ANFIS based BLDC motor is much better when compared to PID controller under different operating conditions.</p> <p><b>Keywords:</b> Brushless DC motor, speed control, torque control, PID controller and ANFIS controller</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>P. Yedamale, Brushless DC (BLDC) Motor Fundamentals. Chandler,AZ: Microchip Technology, Inc., last access; March 15, 2009.</li> <li>R. Akkaya, A.A. Kulaksız, and O Aydogdu, DSP implementation of a PV system with GA-MLP-NN based MPPT controller supplying BLDC motor drive, Energy Conv. and Management 48, 210-218, 2007.</li> <li>Tan Chee Siong, Baharuddin; M.Fayzul; M.Faridun N.T, Study of Fuzzy and PI Controller for Permanent-Magnet Brushless DC Motor Drive, IEEE International Power Engineering and Optimization Conference.PEOCO 2010</li> <li>Derong Luo1, Wei Huang1, Shoudao Huang1, Wenqiang Li1, Lei Zheng1 Simulation Study of the Fuzzy-PID Control System for Brushless DC Motors 1Department of Electrical Engineering, Hunan University, China</li> <li>Tan Chee Siong, Baharuddin Ismail, Siti Fatimah Siraj, Mohd Fayzul Mohammed fuzzy logic controller for BLDC pemanenet magnet motor drives</li> <li>M. V. Ramesh1, J. Amarnath2, S. Kamakshai3 and G. S. Rao3 speed control of brushless dc motor by using fuzzy logic pi controller Department of Electrical and Electronics Engineering, P.V.P. Siddhartha Institute of Technology, Vijayawada, A.P, India</li> <li>Soni Monika Gordhandas., 2Girish V Jadav Speed Control of BLDC Motor using Fuzzy Logic Controller Parul Institute of Engg. &amp;Technology, Vadodara, India</li> </ol>	<b>Authors:</b>	<b>T. Bheemeswara Reddy, K. Satyanarayana, T. Himaja</b>	<b>Paper Title:</b>	<b>Modeling and Analysis of Adaptive Neuro Fuzzy Inference System Based BLDC Motor under Different Operating Conditions</b>	144-148
<b>Authors:</b>	<b>T. Bheemeswara Reddy, K. Satyanarayana, T. Himaja</b>					
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27.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Binu Sara Mathew, Gayathri Mohan, Kuncheria P. Isaac, Susan Rose</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Analytical Investigation on the Benefit of Sisal Fibre Reinforcement of Expansive Clayey Subgrade using Fem</b></td> </tr> </table> <p><b>Abstract:</b> Well-built and maintained highways play a major role in nation’s development. The subgrade soil is integral part of pavements which provides support to the pavement. The subgrade soil and its properties are important in the design of pavement structure. Expansive soils are those soils, which have high swelling and shrinkage characteristics, extremely low CBR value and shear strength. The soil of Kuttanad region of Alappuzha district of Kerala in India is example of expansive soil entirely different from the normal well drained soils in their morphological, chemical and physical characteristics. Thus construction of roadbeds on or with these soils, which do not possess sufficient strength to support wheel loads imposed upon them either during construction or during the service life of the pavement is a commonly encountered problem. Hence extensive research is being done on improvement of strength properties of these types of soils. Ground improvement technique use locally available material to the maximum and hence found economical. It includes stabilization technique and reinforced earth technique. Lime when added to the soil, can substantially increase the stability, impermeability, and load-bearing capacity of the subgrade. Presently, the soil reinforcement technique is well established and is used in variety of applications like improvement of bearing capacity, filtration and drainage control. Conventional methods of reinforcement consists of continuous inclusions of strips, fabrics, and grids into an earth mass. An experimental investigation was done earlier by the same authors to study the effect of stabilization with lime, sand and sisal fibre on compaction characteristics, CBR value, swelling property, and elastic modulus of expansive soil. The optimum quantity of fibers was decided based on CBR value. The static triaxial test was conducted on unstabilized and stabilized soils at a confining pressure of 40 kPa. In this study, a finite element analysis was done to quantify the benefits of stabilization of clay. The stress-strain data from tri-axial test were used as input parameters for evaluating the vertical compressive strain at the top of subgrade soils using elasto-plastic finite-element analysis. It was observed that the elastic modulus value almost doubled as a result of stabilization. The vertical compressive strain at the top of unreinforced and reinforced subgrade soils obtained as an output from the finite element model was used for estimating the improvement in service life of the pavement or decrease in layer thickness and consequent reduction in construction cost. It was observed that a 14% reduction in construction cost and 7.3 times improvement in TBR value can be attained due to sisal fibre stabilization. Hence it can be concluded that the stabilization with sisal fibre after lime stabilization is as an efficient and economic method of stabilizing expansive subgrade soil.</p> <p><b>Keywords:</b> CBR, TBR, subgrade, fibre, stabilization, Kuttanad, Alappuzha.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Binu, S. M. and Gayathri, M. (2012), “Effect of Sisal Fibre Reinforcement on the Performance of Kuttanad Clay as Subgrade Soil”, Proceedings of 13th National Conference on Technological Trends, Aug 10th &amp; 11th, 2012. pp. 275-280.</li> </ol>	<b>Authors:</b>	<b>Binu Sara Mathew, Gayathri Mohan, Kuncheria P. Isaac, Susan Rose</b>	<b>Paper Title:</b>	<b>Analytical Investigation on the Benefit of Sisal Fibre Reinforcement of Expansive Clayey Subgrade using Fem</b>	149-153
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<b>28.</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Ashaar Ahmad, Syed Ali Imam, Syed Razi Haider, Zar Khitab Afridi</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Design and Study of G-Shaped Microstrip Antenna for WLAN Applications</b></td> </tr> </table> <p><b>Abstract:</b> This paper illustrates the usage of G shape patch antenna in WLAN applications. Due to transformation of telecommunication industry and rapid increase in usage of WLAN dual band antennas are preferred. This antenna resonates at single frequency i.e. 2.45 GHz and operates on 2.4 GHz and 5.2 GHz. This proposed antenna can be used for WLAN application worldwide. Due to efficient bandwidth and very less VSWR this antenna is preferred over many microstrip patch antennas. VSWR for 2.4 and 5.2 GHz is 1.2 and 1.5 dB and bandwidth for 2.4 and 5.2 GHz is 50 and 72 MHz. Fabricated antenna have VSWR of 1.24 and 1.49 dB at 2.4 and 5.2 GHz which is in standard range.</p> <p><b>Keywords:</b> Ansoft HFSS, Dual Band, G shaped patch, Microstrip Patch Antenna, WLAN.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Song, C. T. P., P. S. Hall, H. Ghafouri-Shiraz, and D. Wake, "Triple band planar inverted F antennas for handheld devices," Electron. Lett., Vol. 36, No. 2, 112{114, 2002.</li> <li>2. Choi, W., S. Kwon, and B. Lee, "Ceramic chip antenna using meander conductor lines," Electron. Lett., Vol. 37, No. 15, 933{934, 2001.</li> <li>3. Kuo, Y. L. and K. L. Wong, "Printed double-T monopole antenna for 2.4/5.2 GHz dual-band WLAN operations," IEEE Trans. Antennas Propagat., Vol. 51, No. 9, 2187{2192, 2003.</li> <li>4. Raj, R. K., M. Joseph, B. Paul, and P. Mohanan, "Compact planar multiband antenna for GPS, DCS, 2.5/5.8 GHz WLAN applications," Electron. Lett., Vol. 41, No. 6, 290{291, 2005.</li> <li>5. Liu, W. C., "Broadband dual-frequency cross-shaped slot cpw-fed monopole antenna for WLAN operation," Microwave Opt. Technol. Lett., Vol. 46, No. 4, 353{355, 2005.</li> <li>6. Liu, W. C., "Broadband dual-frequency meandered cpw-fed monopole antenna," Electron. Lett., Vol. 40, No. 21, 1319{1320, 2004.</li> <li>7. Indrasen Singh, Dr. V.S. Tripathi, "Microstrip Patch Antenna Applications: a Survey", Motilal Nehru National Institute of Technology Allahabad, 2011.</li> </ol>	<b>Authors:</b>	<b>Ashaar Ahmad, Syed Ali Imam, Syed Razi Haider, Zar Khitab Afridi</b>	<b>Paper Title:</b>	<b>Design and Study of G-Shaped Microstrip Antenna for WLAN Applications</b>	<b>154-157</b>
<b>Authors:</b>	<b>Ashaar Ahmad, Syed Ali Imam, Syed Razi Haider, Zar Khitab Afridi</b>					
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<b>29.</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;"><b>Authors:</b></td> <td><b>Baiju B, Gokul S, Schin Sunny, Ranjith C. M, Sathyamoorthy U</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Hydrogen Petrol Mixture SI Engine</b></td> </tr> </table> <p><b>Abstract:</b> The threat posed by climate change and the striving for securities of energy supply are issues high on the political agenda these days. Governments are putting strategic plans in motion to decrease primary energy use, take carbon out of fuels and facilitate modal shifts. Taking a prominent place in these strategic plans is hydrogen as a future energy carrier. Energy stored in hydrogen would be available at any time and at any place on Earth, regardless of when or where the solar irradiance, the hydropower, or other renewable sources such as biomass, ocean energy or wind energy was converted. The fundamental variations in the times and places of solar energy supply and human energy demands can be overcome using hydrogen. Hydrogen gas combined with the standard air/fuel mixture increases the mileage. This form of alternative fuel is provided by a hydrogen generator mounted in the vehicle. Once set up is ready, the hydrogen gas (fuel) will be produced from water, an electrolyte compound, and electricity supplied from a battery provided. Here we are designing a mixed fuel two wheeler engine in a conventional SI engine we are incorporating traces of hydrogen along with gasoline in order to minimize the consumption of gasoline as well as to increase the power of vehicle. Here in addition, a hydrogen generating unit is made to produce hydrogen. It is actually an electrolysis unit having high grade stainless steel/graphite/semiconductors as electrodes in a closed container and mixture of distilled water &amp; suitable ionic solution (KOH or NaOH) as electrolyte. Power for electrolysis is taken from an additional battery provided (12V). This battery can be recharged from a dynamo/alternator/motor provided on the vehicle. Recharging process is in such a way that a circuit is provided which includes dynamo/alternator/motor and the battery and which completes only when the brake applies while running. ie in spite of using the energy from the bike alternator directly here waste energy is used for the process of electrolysis.</p> <p><b>Keywords:</b> KOH, NaOH, SI engine, Hydrogen, Hydropower.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Delorme A, Rousseau A, Sharer P, Pagerit S, Wallner T, 2010, "Evolution of hydrogen fueled vehicles compared to conventional vehicles", SAE Paper No.01-08</li> <li>2. AL Berland, M Sibulkin, C.H Yang 1983. Hydrogen combustion characteristics related to reactor accidents.</li> <li>3. Levie, R. de (October 1999). "The electrolysis of water". Journal of Electroanalytical Chemistry.</li> <li>4. Junzhi Zhang*, Xin Lu*, Junliang Xue*, and Bos Li* Regenerative braking system for series hybrid city bus.</li> <li>5. Shelef M, Kukkonen CA, 1994, "Prospects of hydrogen-fueled vehicles". Prog Energy Combust Sci; 20:139-48.</li> <li>6. Romdhane Ben Slama. 2012. Hydrogen production by Water electrolysis, Effects of electrodes materials, Nature on the solar water electrolysis performances.</li> <li>7. L. Zhou, Y. Zhou, Int. J. Hydrogen Energy 26, pp. 597-601, 2001. Determination of compressibility factor and fugacity coefficient of hydrogen in studies of adsorptive storage.</li> <li>8. Di Sarli &amp; Di Menetto, Dipartimento di Ingegneria, Università degli studi "Frederico II", Napoli, Italy. Study of hydrogen enriched premixed flames.</li> <li>9. Utz-Jens Beister &amp; Rudy Smaling, MTZ issue 10/2005 p.784. Hydrogen Enhanced Combustion. A promising concept for ultra-lean homogeneous combustion</li> <li>10. L. Bromberg, D.R. Cohn, K. Hadidi, J.B. Heywood and A. Rabinovich, MIT. Emissions reductions using hydrogen from plasmatron fuel</li> </ol>	<b>Authors:</b>	<b>Baiju B, Gokul S, Schin Sunny, Ranjith C. M, Sathyamoorthy U</b>	<b>Paper Title:</b>	<b>Hydrogen Petrol Mixture SI Engine</b>	<b>158-163</b>
<b>Authors:</b>	<b>Baiju B, Gokul S, Schin Sunny, Ranjith C. M, Sathyamoorthy U</b>					
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	<p>converters.</p> <ol style="list-style-type: none"> <li>11. David H.kroon and Lynne M.Ernes,2007.MMO coated titanium anodes for cathodic protection.</li> <li>12. Marcelo Carmo,David L,Fritz Jurgen Mergel,Detlef Stolten.A comprehensive Review on PEM water Electrolysis.</li> <li>13. A Brent Strong. (3rd edition),36-37,68-72, Plastics:materials and processising</li> <li>14. Baiju B, Das L M ,Gajendra Babu M K,2008,Experimental investigations on a rubber seed oil methyl ester fueled compression ignition engine.</li> <li>15. Baiju B, Das LM,Gajendra babu M K,2008, The effect of using high FFA rubber seed based bio diesel with cold and hot EGR on performance and emission of CI engines.</li> </ol>		
30.	<p><b>Authors:</b></p>	<p><b>Vivek Ware, Bharathi H. N</b></p>	
	<p><b>Paper Title:</b></p>	<p><b>Decision Support System for Inventory Management using Data Mining Techniques</b></p>	
		<p><b>Abstract:</b> Timely identification of newly emerging trends is needed in business process. Data mining techniques are best suited for the classification, useful patterns extraction and predications which are very important for business support and decision making. Patterns from inventory data indicate market trends and can be used in forecasting which has great potential for decision making, strategic planning. Our objectives is to get better decision making for improving sale, services and quality, which is useful mechanism for business support, investment and surveillance. An approach is implemented for mining patterns of huge stock data to predict factors affecting the sale of products. For this divide the stock data in three different clusters on the basis of sold quantities i.e. Dead-Stock (DS), Slow-Moving (SM) and Fast- Moving (FM) using K-means algorithm or Hierarchical agglomerative algorithm. After that Most Frequent Pattern (MFP) algorithm is implemented to find frequencies of property values of the corresponding items. MFP provides frequent patterns of item attributes and also gives sales trend in a compact form. Clustering and MFP algorithm can generate more useful pattern from large stock data which is helpful to get item information for inventory.</p> <p><b>Keywords:</b> Most Frequent Patterns, Clustering, Decision Making.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. A Khan, B. Baharudin, K. A. Khan, "Mining Customer Data for Decision Making using new Hybrid Classification algorithm" in journal of theoretical and applied Information Technology Vol 27 no.1 ,15th May 2011</li> <li>2. Dattatray Gandhmal, Ranjeetsingh Parihar and Rajesh Argiddi, "An Optimized Approach to Analyze Stock market using Data Mining Technique" in International Conference on Emerging Technology Trends (ICETT) 2011</li> <li>3. Mrs. Tejaswini Hilage and R. V. 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31.	<p><b>Authors:</b></p>	<p><b>Ramu R, A. Sukesh Kumar</b></p>	
	<p><b>Paper Title:</b></p>	<p><b>Real-Time Monitoring of ECG using Zigbee Technology</b></p>	
		<p><b>Abstract:</b> Cardiovascular disease is one of the leading causes of death around the world. Telemedicine has a great impact in the cardiac monitoring of patients in remote environment. A wireless electrocardiograph monitoring system is implemented with Zigbee module for remote monitoring of cardiac patient. ECG Acquisition system is designed and the signals are plotted in LabVIEW. The Signal from ECG acquisition module is given to Zigbee module. The transmitted signals are then received by Zigbee Transceiver. TTL output from the receiver Zigbee module is converted to RS232 using MAX232 level converter. The serial data are then plotted in Laptop using LabVIEW.</p> <p><b>Keywords:</b> ECG, LabVIEW, Telemedicine, Zigbee.</p> <p><b>References:</b></p>	169-172





	<p><b>Keywords:</b> metakaolin, boiling curing, high volume fly ash concrete, ternary blend</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. M. J. Chinsu, "Durability Study on Metakaolin Admixed Superplasticised Concrete", M Tech Thesis, Department of Civil Engineering, T K M College of Engineering Kollam. 2007.</li> <li>2. J.T. Ding, and Z. Li, "Effects of metakaolin and silica fume on properties of concrete", ACI Materials journal, Vol. 9(4), 2002, pp. 393 – 398.</li> <li>3. J.M. Khatib, and J.J. Hibbert, "Selected Engineering properties of concrete incorporating slag and metakaolin", Construction and Building Materials, Vol. 19(6), 2005, pp. 460-472.</li> <li>4. P.K. Mehta, (2007), High - Performance, High-volume Fly ash concrete for Sustainable Development, International Workshop on Sustainable Development and Concrete Technology.</li> <li>5. N. Bouzouba, M. H. Zhang, and V. M. Malhotra, Laboratory Produced High-Volume Fly Ash Blended Cements: Compressive Strength and Resistance to the Chloride-Ion Penetration of Concrete, Cement and Concrete Research, (30), 2000, pp. 1037-1046.</li> <li>6. R. Siddique , "Performance characteristics of high-volume Class F fly ash concrete", Cement and Concrete Research (34), 2004, pp. 487– 493</li> <li>7. H.-S. Kim, S-H. Lee, and H-Y. Moon, "Strength properties and durability aspect of high strength concrete using Korean Metakaolin", Construction and Building Materials, Vol. 21(6), 2007, pp. 1229-1237.</li> <li>8. A.M. Fadzil, M.J. Megat Azmi, A.B. Badrol Hisyam, M.A. Khairun Azizi., Engineering Properties of Ternary Blended Cement Containing Rice Husk Ash and Fly Ash as Partial Cement Replacement Materials, International Conference on Construction and Building Technology, A - (10) – 2008, pp. 125 – 134.</li> <li>9. IS: 12269-1987- Specification for 53 Grade Ordinary Portland Cement, Bureau of Indian Standards, New Delhi, 2000.</li> <li>10. IS:383–1970 - Specification for coarse and fine aggregate from natural sources for concrete, Bureau of Indian Standards, New Delhi.</li> <li>11. IS: 1199-1959, Indian standard methods of sampling and analysis of concrete, Bureau of Indian Standards, New Delhi, India.</li> <li>12. IS: 516-1959, Indian standard code of practice methods of test for strength of concrete, Bureau of Indian Standards, New Delhi, India.</li> <li>13. IS: 5816-1999, Indian standard splitting tensile strength of concrete - method of test, Bureau of Indian Standards, New Delhi, India.</li> <li>14. ACI 544.2R – 89 – Measurement of properties of Fibre Reinforced Concrete. American Concrete Institute, Farmington Hills, MI: 2001.</li> </ol>					
34.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Manju Devi, Arun Kumar P. Chavan, K. N. Muralidhara</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>A 9-Bit, 200MS/s Low Power CMOS Pipeline ADC</b></td> </tr> </table> <p><b>Abstract:</b> This paper describes 9-bit, 200MS/s Pipeline analog to digital converter implemented in 0.18<math>\mu</math>m CMOS process consuming 48.97mW power from 1.8v supply. To improve the linearity of pipeline ADC is designed which has three stages, 3-bit/stage architecture. Operational transconductance amplifier is adopted in all pipeline stage to give good power efficiency. The converter is optimized for low voltage, low power application by optimizing opamp and 3- bit flash at circuit level.</p> <p><b>Keywords:</b> Operational Transconductance Amplifier (OTA), Thermometric Codes, Flash ADC, Pipeline ADC.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Maxim Integrated, Design Support, Technical Documents, tutorial no 634 "Pipeline ADCs Come of age". [ONLINE] Availableat:<a href="http://www.maximintegrated.com/appnotes/index.mvp/id/634">http://www.maximintegrated.com/appnotes/index.mvp/id/634</a>.</li> <li>2. R. Jacob Baker, Harry W. Li, David E. Boyce, "CMOS Circuit Design, Layout, And Simulation", 3rd edition, IEEE Press, 1964</li> <li>3. Philip E. Allen, Douglas R. Holberg, "CMOS Analog Circuit Design", Second Edition, Oxford University Press, 1995</li> <li>4. SiddharthDevarajan, Larry Singer, Dan Kelly, Steven Decker, Abhishek Kamath, and Paul Wilkins "A 16-bit, 125 MS/s, 385 mW, 78.7 dB SNRCMOS Pipeline ADC" IEEE Journal Of Solid-State Circuits, Vol. 44, No. 12, December 2009</li> <li>5. B. Murmann and B. E. Boser, "A 12-bit 75-MS/s pipeline ADC using open-loop residue amplification," IEEE J. Solid-State Circuits, vol. 38, no. 12, pp. 2040–2050, Dec. 2003.</li> <li>6. J. K. Fiorenza, T. Sepke, P. Holloway, C. G. Sodini, and H.-S. Lee, "Comparator-based switched-capacitor circuits for scaled CMOS technologies," IEEE J. Solid-State Circuits, vol. 41, no. 12, pp. 2658–2668, Dec. 2006.</li> <li>7. L. Brooks and H.-S. Lee, "A zero-crossing-based 8-bit 200 MS/s pipeline ADC," IEEE J. Solid-State Circuits, vol. 42, no. 12, pp. 2677–2687, Dec. 2007.</li> <li>8. L. Brooks and H.-S. Lee, "A zero-crossing-based 8-bit 200 MS/s pipeline ADC," IEEE J. Solid-State Circuits, vol. 42, no. 12, pp. 2677–2687, Dec. 2007.</li> <li>9. W. Yang, D. Kelly, I. Mehr,M. T. Sayuk, and L. Singer, "A 3-V 340-mW14-b 75-Msample/s CMOS ADC with 85-dB SFDR at Nyquist input,"IEEE J. Solid-State Circuits, vol. 36, pp. 1931–1936, Dec. 2001.</li> </ol>	<b>Authors:</b>	<b>Manju Devi, Arun Kumar P. Chavan, K. N. Muralidhara</b>	<b>Paper Title:</b>	<b>A 9-Bit, 200MS/s Low Power CMOS Pipeline ADC</b>	180-183
<b>Authors:</b>	<b>Manju Devi, Arun Kumar P. Chavan, K. N. Muralidhara</b>					
<b>Paper Title:</b>	<b>A 9-Bit, 200MS/s Low Power CMOS Pipeline ADC</b>					
35.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>G. Nageswara Reddy, S. S. Dash, S. Sivanagaraju, Ch. V. Suresh</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Economic Load Dispatch using Imperialistic Competitive Algorithm: An Effect of Control Variables</b></td> </tr> </table> <p><b>Abstract:</b> The operation of an electric power system is a complex one due to its nonlinear and computational difficulties. One task of operating a power system economically and securely is optimal scheduling, commonly referred to as the Optimal Power Flow (OPF) problem. Optimal power flow has become an essential tool in power system planning and operation. OPF is a typical nonlinear programming problem which consists in determining an optimal steady state operation of an electric power system. In this paper, conventional quadratic and non-convex fuel cost functions optimized while satisfying equality and in-equality constraints. The effect of control variables is identified by considering limited and all control variable cases are analyzed with the supporting numerical results on standard IEEE-14 bus and IEEE-30 bus test systems.</p> <p><b>Keywords:</b> Optimal power flow, Imperialistic competitive algorithm, effect of control variables, Quadratic cost, Non-convex cost.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. E.Ewald, D.W.Angland, "Regional integration of electric power systems", IEEE Spectrum, 1964, pp.96-101.</li> <li>2. D.Watts, "Security &amp; vulnerability in electric power system", NAPS 2003, 35th North American Power Symposium, University of Missouri-Rolla in Rolla, Missouri, 2003, pp.559-566.</li> <li>3. Bullock, G.C., "Cascading Voltage Collapse in Tennesse, August 22, 1987", Proceedings of 17th Annual Western Protective Relay Conference", Spokane, Washington, October 1990.</li> <li>4. IEEE Special Publication 90TH0358-2PWR, "Voltage Stability of Power Systems: Concepts, Analytical Tools and Industry Experience",</li> </ol>	<b>Authors:</b>	<b>G. Nageswara Reddy, S. S. Dash, S. Sivanagaraju, Ch. V. Suresh</b>	<b>Paper Title:</b>	<b>Economic Load Dispatch using Imperialistic Competitive Algorithm: An Effect of Control Variables</b>	184-190
<b>Authors:</b>	<b>G. Nageswara Reddy, S. S. Dash, S. Sivanagaraju, Ch. V. Suresh</b>					
<b>Paper Title:</b>	<b>Economic Load Dispatch using Imperialistic Competitive Algorithm: An Effect of Control Variables</b>					

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**Authors:** Prakash Hiremath, Shambhavi B. R

**Paper Title:** Approaches to Named Entity Recognition in Indian Languages: A Study

**Abstract:** Named Entity Recognition (NER) is subtask of information extraction that seeks to locate and classify the elements in some text into pre-defined categories. NER finds its application in Natural Language Processing tasks like machine translation, question-answering systems and automatic summarization. The approaches to NER are rule based, statistics based or a combination of both. In this paper, we present a survey of these various approaches for identification of Names Entities (NE) in Indian Languages.

**Keywords:** Named Entity Recognition (NER), Natural Language Processing, Machine Learning

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37.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Divyesh Dave, Vimal Patel, Dhruvil Parikh, Sachin Prajapati, Sumaiya Patel</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Working Model of Remote Controlled Hovercraft</b></td> </tr> </table> <p><b>Abstract:</b> In this study, mainly focus on analysis and procedure about designing and making of the working model of Hovercraft. Different criteria vital in designing procedure of the model hovercraft are theoretically calculated here. Subsequently, proper material is elected and working Hovercraft was prepared. Main problem is to create enough pressure of air cushion and that leads to decrease in accuracy and poor operation of model. Main intention of our project is to produce an amphibious vehicle that can also be operated over less perfect surfaces.</p> <p><b>Keywords:</b> working model, Hovercraft, Design, Performance, function, component.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. <a href="http://umpir.ump.edu.my/3745/1/EDWIN_CHAN_HANJIANG">http://umpir.ump.edu.my/3745/1/EDWIN_CHAN_HANJIANG</a></li> <li>2. <a href="http://www.hoverhawk.com/lcalc.html">http://www.hoverhawk.com/lcalc.html</a></li> <li>3. <a href="http://www.rqriley.com/hc-calc.html">http://www.rqriley.com/hc-calc.html</a></li> <li>4. <a href="http://www.leanproduction.com/tpm.html">http://www.leanproduction.com/tpm.html</a></li> <li>5. <a href="http://personal.osi.hu/fuzesisz/strc_eng/">http://personal.osi.hu/fuzesisz/strc_eng/</a></li> <li>6. Kofi Anguah &amp; Nick Szapiro, (2009) Design and Construction of a Passenger Hovercraft. E90 final report</li> <li>7. David D. Moran (1981) Dynamic response of hovercraft lifts fans.</li> <li>8. Okafor (2013),; Development of a Hovercraft Prototype; International Journal of Engineering and Technology Volume 3 No. 3; p.no. 276-281</li> <li>9. Jeffrey Schleigh (2006) Construction of a Hovercraft Model and Control of its Motion. Undergraduate report, Institute for Systems Research, Maryland.</li> <li>10. Michael McPeake (2004) History of the Hovercraft.</li> </ol>	<b>Authors:</b>	<b>Divyesh Dave, Vimal Patel, Dhruvil Parikh, Sachin Prajapati, Sumaiya Patel</b>	<b>Paper Title:</b>	<b>Working Model of Remote Controlled Hovercraft</b>	195-201
<b>Authors:</b>	<b>Divyesh Dave, Vimal Patel, Dhruvil Parikh, Sachin Prajapati, Sumaiya Patel</b>					
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38.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Shivanand Pandey, Bhagirath Pandey</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>DC Motor Torque Control using Fuzzy Proportional-Derivative Controllers</b></td> </tr> </table> <p><b>Abstract:</b> This paper demonstrates the design of a fuzzy logic control system to torque control of a DC motor by using fuzzy rules in Mamdani interference system. So, as to achieve the better control performing results, fuzzy rules and fuzzy sets optimize the input parameters as well as the parameters of fuzzy logic controller, which is defined by Membership Function (MFs). By using the torque- speed characteristic of DC motor we design the simulation model which shows the optimization of torque near to ideal value as well as comparable result between the output values with its input unit step value. The numbers of rule design are much enough to minimize the ripples in its output torque signal.The mathematical modeling of proposed DC motor is also presented. To achieve effective control output the simulink software is used. This proposed paper is able to obtain results for variable load torque. This paper is also describing the comparative description of conventional PID controller technique with fuzzy logic controller technique.</p> <p><b>Keywords:</b> DC motor, Fuzzy logic controller, Torque control, Membership function, PID controller.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Theodore Wildi, "Electrical Machines, Drives and Power Systems," in Ed., 6th ed., Pearson Hall,2013</li> <li>2. Prof. Krishna Vasudevan, Prof. G. Sridhara Rao, Prof. P.Sasidhara Rao, "Electrical Machines I" in Indian Institute of Technology, Madras, India. pp. 1-8</li> <li>3. Naveen Joy and C. K. Vijayakumari , "Direct Torque Control of BLDC motor using Fuzzy Logic in Labview", Department of Electrical Engineering Rajiv Gandhi Institute of Technology, Kottayam, Kerala, India , Volume- 2, Issue- 1, Jan.-2014</li> <li>4. Zadeh L. A., "Outline of a New Approach to the Analysis of Complex Systems and Decision Processes", IEEE Transactions Systems, Man and Cybernetics, SMC-3, 1973, pp. 28-44.</li> <li>5. Manafeddin Namazov and Onur Basturk, "DC motor position control using fuzzy proportional-derivative controllers with different defuzzification methods", Cumhuriyet University, Faculty of Engineering, Turkish Journal of Fuzzy Systems , May 26, 2010 , Vol.1, No.1, pp. 36-54, 2010.</li> <li>6. Vikas S. Wadnerkar , Mithun M. Bhaskar, Tulasi Ram Das and A.D. Raj Kumar, "A New Fuzzy Logic based Modelling and Simulation of a Switched Reluctance Motor", Journal of Electrical Engineering &amp; Technology Vol. 5, No. 2, pp. 276 - 281, 2010.</li> <li>7. John D. Jackson. Classical Electrodynamics (Second Edition). John Wiley &amp; Sons, New York, 1975.</li> <li>8. Fuzzy Logic Toolbox user's Guide R2012b, © COPYRIGHT 1995-2012, The MathWorks, Inc. Revised for Version 2.2.16 (Release 2012b) pp. 34-36, 109-144, September 2012, Available: <a href="http://www.mathworks.com">http:// www.mathworks.com</a></li> <li>9. Glenn Vinnicombe, "Impulse responses, step responses and transfer functions." Part IB Paper 6: Information Engineering "LINEAR SYSTEMS AND CONTROL",pp. 3-22</li> <li>10. Allan R. Hambley, "Electrical Engineering Principles and Applications," Chapter 16.</li> <li>11. Giorgio Rizzoni, "Principles and Applications of Electrical Engineering," Chapter 17.</li> <li>12. John Mouton, "Brushed DC Motor Basics", Part 1 in a 4 part series of web seminars on "Controlling a Brushed DC Motor using a Microcontroller", AN905 "Brushed DC Motor Fundamentals.", Available: <a href="http://Microchip.com">http:// Microchip.com</a>.</li> <li>13. Luca Zaccarian, " DC motors: dynamic model and control techniques" pp. 9-15</li> <li>14. E.Kalika, "A High Performance Direct Torque Control of PMDC Motor Using Hybrid (GA Based Fuzzy Logic) Controller" – Springer , Power Electronics and Instrumentation Engineering Communications in Computer and Information Science Volume 102, 2010, pp. 96-99</li> </ol>	<b>Authors:</b>	<b>Shivanand Pandey, Bhagirath Pandey</b>	<b>Paper Title:</b>	<b>DC Motor Torque Control using Fuzzy Proportional-Derivative Controllers</b>	202-207
<b>Authors:</b>	<b>Shivanand Pandey, Bhagirath Pandey</b>					
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	<b>Authors:</b>	<b>Senzota Kivaria Semakuwa, Florence Upendo Rashid</b>
	<b>Paper Title:</b>	<b>Artificial Intelligence in My Eyes on the Applications to Game Design</b>
39.	<p><b>Abstract:</b> Artificial Intelligence (AI) is the ability of a digital computer or computer-controlled robot to perform tasks commonly associated with intelligent beings. A computer game is an electronic game that involves human interaction with a user interface to generate visual feedback on a video device. Using of AI in game designing makes exciting playing strategies in game, which keeps player attracted and focused on it. Also the AI in game avoid the monotony of repetition where by the player are provided with exciting opponents, more intelligent creative that dwell the world of their games. In order to give a player good game experience, an AI is implemented to produce the illusionary effect of intelligence augments. Here in we are surveying the interaction of AI technology such as path finding and perception, neural networks, finite state machines, rule based systems and genetic algorithm, in different kind of games like strategy, action, adventure and, role playing. We provide comparison of the surveyed technologies in terms of their usability, efficiency and robustness. The survey results indicate the more interaction of finite states machines technology in game design although may not always provide the optimal solution, but it generally provide a simple solution that works. Furthermore a game object that uses an FSM can also use other techniques such as neural networks. For these advantages FSM can be used in most commercial games designing, for example Enemy Nations and Quake</p> <p><b>Keywords:</b> Artificial intelligence, Game, Technologies.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. A. Nareyek, "Game AI Is Dead. Long Live Game AI!" IEEE Computer Society, January/February 2007, Vol. 22, No. 1.</li> <li>2. A. Nareyek, "Artificial Intelligence in Computer Games—State of the Art and Future Directions," ACM Queue, vol. 10, 2004, pp.58–65.</li> <li>3. B. Tracy. "Game Intelligence AI Plays Along". Computer Power User. 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	<b>Authors:</b>	<b>Roshni Kishan, Siri A, Meghana G. R, Meghana S</b>
	<b>Paper Title:</b>	<b>Embedded Spiking Neural Network</b>
40.	<p><b>Abstract:</b> NEURAL networks are computational models of the brain. These networks are excellent at solving problems for which a solution seems easy to obtain for the brain, but requires a lot of efforts using standard algorithmic techniques. Examples of such problems are pattern recognition, perception, generalization and non-linear control. In the brain, all communication between neurons occur using action potentials or spikes. In classical neural models these individual spikes are averaged out in time and all interaction is identified by the mean firing rate of the neurons. Recently there has been an increasing interest in more complex models, which take the individual</p>	

	<p>spikes into account. This sudden interest is catalyzed by the fact that these more realistic models are very well suited for hardware implementations, more specifically embedded systems. In addition they are computationally stronger than classic neural networks.</p> <p><b>Keywords:</b> embedded systems, neural network, neurons, spikes.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. C. M. Bishop. Neural Networks for Pattern Recognition. Clarendon Press, Oxford, 1995.</li> <li>2. W. Maass and C. M. Bishop. Pulsed Neural Networks. Bradford Books/MIT Press, Cambridge, MA, 2001.</li> <li>3. W. Gerstner and W. Kistler. Neurons, Populations, Plasticity. Cambridge University Press, Cambridge, 2002.</li> <li>4. J-Y. Mignolet, S. Vernalde, D. Verkest, and R. Lauwereins. Enabling Hardware-Software Multitasking on a Reconfigurable Computing Platform for Networked Portable Multimedia Appliances. In Proceedings. The 2002 International Conference on Engineering of Reconfigurable Systems and Algorithms. June 2002.</li> <li>5. H. Chang, L. Cooke, M. Hunt, G. Martin, A. McNelly, and L. Todd. Surviving the SOC Revolution. Kluwer Academic Publishers, Dordrecht, 1999.</li> <li>6. B. Gold and N. Morgan. Speech and Audio Signal Processing: Processing and Perception of Speech and Music. John Wiley and Sons, New York, NY, 2000.</li> <li>7. M. S. Ahmed. Neural net based MRAC for a class of nonlinear plants. Neural Networks, 13:111–124, 2000. Spiking Neuron Models: Single</li> <li>8. Biologically Sound Neural Networks for Embedded Systems Using OpenCL By István Fehérvári, Anita Sobe and Wilfried Elmenreich1.</li> <li>9. Design and FPGA implementation of an embedded real-time biologically plausible spiking neural network processor by M.J.Pearson, C.Melhuish, A.G.Pipe, M.Nibouche, I.Gilhesphy, K.Gurney, B.Mitchinson</li> <li>10. Embedded spiking neural networks By Benjamin Schrauwen, Korea University, Söul, Seoul, South Korea [4] Embedded spiking neural networks By Chandra Mohanty</li> </ol>					
41.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Seematai S. Patil, Koganti Bhavani</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Dynamic Resource Allocation using Virtual Machines for Cloud Computing Environment</b></td> </tr> </table> <p><b>Abstract:</b> Cloud computing allows business customers to scale up and down their resource usage based on needs. Many of the touted gains in the cloud model come from resource multiplexing through virtualization technology. In this paper, we present a system that uses virtualization technology to allocate data center resources dynamically based on application demands and support green computing by optimizing the number of servers in use. We introduce the concept of “skewness” to measure the unevenness in the multi-dimensional resource utilization of a server. By minimizing skewness, we can combine different types of workloads nicely and improve the overall utilization of server resources. We develop a set of heuristics that prevent overload in the system effectively while saving energy used. Trace driven simulation and experiment results demonstrate that our algorithm achieves good performance</p> <p><b>Keywords:</b> Cloud computing, Green computing, Resource, Skewness, Virtual machine.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. M. Armbrust et al., “Above the Clouds: A Berkeley View of Cloud Computing,” technical report, Univ. of California, Berkeley, Feb. 2009.</li> <li>2. L. Siegele, “Let It Rise: A Special Report on Corporate IT,” The Economist, vol. 389, pp. 3-16, Oct. 2008.</li> <li>3. P. Barham, B. Dragovic, K. Fraser, S. Hand, T. Harris, A. Ho, R. Neugebauer, I. Pratt, and A. Warfield, “Xen and the Art of Virtualization,” Proc. ACM Symp. Operating Systems Principles (SOSP ’03), Oct. 2003E. H. Miller, “A note on reflector arrays (Periodical style—Accepted for publication),” IEEE Trans. Antennas Propagat., to be published.</li> <li>4. “Amazon elastic compute cloud (Amazon EC2),” <a href="http://aws.amazon.com/ec2/">http://aws.amazon.com/ec2/</a>, 2012.</li> <li>5. C. Clark, K. Fraser, S. Hand, J.G. Hansen, E. Jul, C. Limpach, I. Pratt, and A. Warfield, “Live Migration of Virtual Machines,” Proc. Symp. Networked Systems Design and Implementation (NSDI ’05), May 2005..</li> <li>6. M. Nelson, B.-H. Lim, and G. Hutchins, “Fast Transparent Migration for Virtual Machines,” Proc. USENIX Ann. Technical Conf., 2005.M. Young, The Technical Writers Handbook. Mill Valley, CA: University Science, 1989.</li> <li>7. N. Bobroff, A. Kochut, and K. Beaty, “Dynamic Placement of Virtual Machines for Managing SLA Violations,” Proc. IFIP/IEEE Int’l Symp. Integrated Network Management (IM ’07), 2007.</li> <li>8. T. Wood, P. Shenoy, A. Venkataramani, and M. Yousif, “Black-Box and Gray-Box Strategies for Virtual Machine Migration,” Proc. Symp. Networked Systems Design and Implementation (NSDI ’07), Apr. 2007.</li> </ol>	<b>Authors:</b>	<b>Seematai S. Patil, Koganti Bhavani</b>	<b>Paper Title:</b>	<b>Dynamic Resource Allocation using Virtual Machines for Cloud Computing Environment</b>	218-221
<b>Authors:</b>	<b>Seematai S. Patil, Koganti Bhavani</b>					
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42.	<table border="1"> <tr> <td><b>Authors:</b></td> <td><b>Vitul Varshney, Melvin Wilson, Sakthivel Sivaraman</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>PID based Stabilization of Gesture Controlled Drones using HIL Simulation</b></td> </tr> </table> <p><b>Abstract:</b> In order to understand the balancing dynamics of a quadcopter, a hardware-in-the-loop simulation (HIL Simulation) using NI ELVIS II+ was undertaken. The purpose of this project was to implement collision avoidance on a quadcopter prototype in a controlled environment. The extra mile was run by simulating PID control for the motor actions in the balancing of the quadcopter. Three modules were developed to simulate the control, which upon implementation, provoked an angular change in the quadcopter position. Upon removal of the control, the balancing aspect comes into the picture. PID control was used to simulate the balancing procedure and its constituting effects. The project was approached with modular programming and project approach in mind to incorporate a readable, maintainable and fool-proof environment..</p> <p><b>Keywords:</b> Balancing, Collision avoidance, Gesture control, PID .</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Dirman Hanafi1, Mongkhun Qetkeaw1, Rozaimi Ghazali1, “Simple GUI Wireless Controller of Quadcopter,” in Int. J. Communications, Network and System Sciences, 2013, 6, 52-59</li> <li>2. Atheer L. Salih1, M. Moghavvemi1, Haider A. F. Mohamed, “Flight PID controller design for a UAV quadrotor” Scientific Research and Essays Vol. 5(23), pp. 3660-3667, 4 December, 2010.</li> <li>3. Andrew Gallagher “Surveillance UAV” in Worcester Polytechnic Institute, 1May, 2014</li> </ol>	<b>Authors:</b>	<b>Vitul Varshney, Melvin Wilson, Sakthivel Sivaraman</b>	<b>Paper Title:</b>	<b>PID based Stabilization of Gesture Controlled Drones using HIL Simulation</b>	222-225
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43.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>S. Poongothai, N. Sridhar, R. Arun Shourie</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Change Detection of Land use/ Land Cover of a Watershed using Remote Sensing and GIS</b></td> </tr> </table> <p><b>Abstract:</b> This study reveals to identify the changes of Land Use/Land Cover of the Kiliyar sub-watershed of Tamilnadu. In this study, Kiliyar sub-watershed is chosen as study area which is located partly in Thiruvannamalai and Kanchipuram districts. The objectives of the study are to prepare temporal Land Use/Land Cover maps of the study area to analyze the nature and extent of Land Use/Land Cover changes of the study area and to identify the major components those promote the trend changes in the Land Use/Land Cover. Satellite imageries and toposheets are collected from IRS, Anna University. Both satellite imageries and toposheets are georeferenced to get the Land Use/Land Cover maps for different years (1995, 2003 and 2009) of the study area. The digitization of maps was done using ArcGIS (version 9.3) software. The change detection of LU/LC of the study area are analysed and compared. The results are presented spatially as well as graphically by GIS maps and pie-charts. From this study it is inferred that there are significant changes in wasteland, forest and water bodies in the study area. It is necessary to conserve forest and water bodies of the study area for sustainable development. This study will be useful for efficient watershed management.</p> <p><b>Keywords:</b> Arc GIS, Land Use/ Land Cover, Watershed , Toposheets.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Anil.N.C and Jaishankar.G (2011), Studies on Land Use/Land Cover and change detection from parts of South West Godavari District, A.P – Using Remote Sensing and GIS Techniques, J. Ind. Geophys. Union, Vol.15, No.4, pp.187-194.</li> <li>2. Kiran.V.S.S (2013), Change Detection in Land use/Land cover Using Remote Sensing &amp; G.I.S Techniques: A Case Study of Mahanadi Catchment, West Bengal, International Journal of Research in Management Studies (IJRMS), Vol. 2, No. 2.</li> <li>3. Kuldeep and Kamalesh (2011) Land Use / Land cover change detection in Doon valley (Dehradun Tehsil), Uttarakhand: using GIS&amp; Remote Sensing Technique, International Journal of Geomatics &amp; Geosciences. 2011, Vol. 2 Issue 1, pp.34-41.</li> <li>4. Manonmani.R and Mary Divya Suganya (2010),Remote Sensing and GIS Application In Change Detection Study In Urban Zone Using Multi Temporal Satellite International Journal of Geomatics and Geosciences ,Volume 1, No 1.</li> <li>5. Manish K Tiwary and Aruna Saxena (2011, Change Detection of Land Use/ Land cover Pattern in an Around Mandideep and Obedullaganj Area, Using Remote Sensing and GIS, International Journal of Technology And Engineering System(IJTES):Jan –March 2011- Vol.2.No.3.</li> <li>6. Nagarajan.N and Poongothai.S (2012), Effect of Land Use/ Land Cover Change Detection of Ungauged Watershed, World Applied Sciences Journal 17 (6): pp.718-723.</li> <li>7. Nagamani.K and Ramachandran.S (2003), Land use /Land cover in Pondicherry Using Remote Sensing and GIS', Proceedings of the Third International Conference on Environment and Health, Chennai, India, 15-17 December, 2003. Chennai, Department of Geography, University of Madras and Faculty of Environmental Studies, York University. pp 300 – 305.</li> <li>8. Prabakaran.S and Srinivasa Raju.K (2010), Remote Sensing and GIS Applications on ChangeDetection Study in CoastalZone Using Multi Temporal Satellite Data, International Journal of Geomatics and Geosciences ,Volume 1, No 2.</li> <li>9. Symeonakis.E and Koukoulas.S (2009), A Land use Change and Land Degradation Study in Spain and Greece Using Remote Sensing and GIS, J. Ind. Geophysics. Union, Vol.14, No.4, pp.180-190.</li> </ol>	<b>Authors:</b>	<b>S. Poongothai, N. Sridhar, R. Arun Shourie</b>	<b>Paper Title:</b>	<b>Change Detection of Land use/ Land Cover of a Watershed using Remote Sensing and GIS</b>	226-230
<b>Authors:</b>	<b>S. Poongothai, N. Sridhar, R. Arun Shourie</b>					
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44.	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Authors:</b></td> <td><b>T. Subbulakshmi, B. Vidivelli</b></td> </tr> <tr> <td><b>Paper Title:</b></td> <td><b>Mechanical Properties of High Performance Concrete in Corporating with Quarry Wastes</b></td> </tr> </table> <p><b>Abstract:</b> Concrete is a stone like material obtained by designing a carefully proportioned mixture of cement, sand and gravel or other aggregates and water to harden in forms of the shape and dimensions of the desired structure. A High performance concrete is something which demands much higher performance from concrete as compared to performance expected from routing concrete. Use of chemical admixtures reduces the water content, thereby reducing the porosity within the hydrated cement paste. The demand for natural sand in the construction industry has consecutively increased which has resulted in the reduction of sources and an increase in price. In such a situation the quarry dust can be an economical alternative to the river sand. Therefore the quarry dust should be used in construction works, then the cost of construction would be saved significantly and the natural resources would be used efficiently. In this study, I have obtained the quarry dust material sample from the source of Thiruvakkarai and perumukkal source from Villupuram district. The scope of the present study is to investigate the effect of quarry dust towards the performance of High performanceconcrete. An effort has been made to focus on the mechanical properties of High performance concrete made with quarry dust material. This paper presents the results of a study to use quarry dust in concrete as a partial replacement of sand. The strength characteristics such as compressive strength and flexural strength were investigated to find the optimum replacement of quarry dust. The mechanical properties of High performanceconcrete with quarry dust at the replacement levels of 0%, 50%, and 100% were studied at 3 days, 7 days, 14 days, 28 days and 60 days of curing. From the studies contained, it was observed that quarry dust plays a vital role in improving the strength of concrete. The performance of concrete ratio and quarry dust replacement level on the compressive strength of quarry dust concrete was investigated.</p> <p><b>Keywords:</b> High performance Concrete, Quarry dust, Strength, Workability, Mechanical properties.</p>	<b>Authors:</b>	<b>T. Subbulakshmi, B. Vidivelli</b>	<b>Paper Title:</b>	<b>Mechanical Properties of High Performance Concrete in Corporating with Quarry Wastes</b>	231-236
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**Paper Title:**

**Dispersion Modelling of SO2 Emission from a Coal Fired Thermal Power Plant in Dadri, Uttar Pradesh**

**Abstract:** Ambient air quality management in any industrial area is a prime concern in India. High concentrations of ambient sulfur dioxide (SO2) in many Indian places are responsible for non-compliance of ambient air quality standards. Dispersion modeling finds an important tool to simulate the ambient air quality of a region and to predict the ground level concentration of SO2 under various scenarios. National Thermal Power Plant Corporation in Dadri region (NTPC) is chosen in the present investigation for the application of a widely used industrial source complex – short term version 3 (ISCST3) model to predict the ground level concentration of SO2. Objective of this study is to stimulate the dispersion modeling of SO2 emission from the coal-fired Thermal Power Plant.

**Keywords:** Sulphur Dioxide, Spatial Pollution Rose dispersion pattern

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46.	<b>Authors:</b>	<b>Seema Dev Aksatha D, Lalitha T</b>
	<b>Paper Title:</b>	<b>A Comprehensive Overview on Manet</b>
	<p><b>Abstract:</b> Mobile Adhoc NETWORK (MANET) is a collection of mobile nodes that dynamically form a temporary network and are capable of communicating with each other without the use of a network infrastructure or any centralized administration. We present in this paper, the history of MANET, characteristics, challenges (issues) involve in MANET and its some applications.</p> <p><b>Keywords:</b> Mobile Ad Hoc Networks (MANET), history, characteristics, challenges in MANET, applications.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>1. Dr. Torsten Braun, Marc Heissenbüttel, “Performance Comparison Of MANET Routing Protocols In Different Network Sizes”,2003.</li> <li>2. S. Basagni, I. Chlamtac, V.R. Syrotivk, B.A. Woodward,A distance effect algorithm for mobility (DREAM), in: Proceedings of the Fourth Annual ACM/IEEE International Conference on Mobile Computing and Networking (Mobicom98), Dallas, TX, 1998.</li> <li>3. Eichler, Stephan U., “Challenges of Secure Routing in MANETs: A Simulative Approach using AODV-SEC”, Oct. 2006,IEEE International Conference on Mobile Adhoc and Sensor Systems (MASS).</li> <li>4. B. Bellur, R.G. Ogier, F.L Templin, Topology broadcast based on reverse-path forwarding routing protocol (tbrpf)in: Internet Draft, draft-ietf-manet-tbrpf-06.txt, work in progress, 2003.</li> <li>5. T.-W. Chen, M. Gerla, Global state routing: a new routing scheme for ad-hoc wireless networks, in: Proceedings of the IEEE ICC, 1998.</li> <li>6. C.-C. Chiang, Routing in clustered multihop mobile wireless networks with fading channel, in: Proceedings of IEEE SICON, April 1997, pp. 197–211.</li> </ol>	