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	<b>Paper Title:</b>	<b>Solar Energy for Sustainable National Development</b>	
	<p><b>Abstract:</b> Solar energy technologies (SETs) can help reduce poverty, energy shortage and environmental degradation such as desertification, biodiversity depletion and climate change effects in Nigeria. The country is short of electricity supply. Over-exploitation of gas in meeting energy needs of the people has caused environmental degradation. SET can help solve those problems if it is widely used in Nigeria where people primarily reside in rural area. Nigeria has enough renewable to mitigate such energy crisis and its adverse consequences. In this paper attention is drawn between solar energy and sustainable national development in the Nigeria, Rural Energy Needs, Hybrid Conversion of the Sun Irradiation and Factors of Success.</p> <p><b>Keywords:</b> Solar energy, Renewable energy, Solar cells, Solar collectors, Sustainable development.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>United States Agency for International Development (2011), Obtained from <a href="http://www.usaid.gov/bd/programs/energy.html">http://www.usaid.gov/bd/programs/energy.html</a></li> <li>Infrastructure Development Company Limited (2011), Obtained from <a href="http://www.idcol.org/prjshsm2004.php">http://www.idcol.org/prjshsm2004.php</a></li> <li>M. S. Islam, A. M. H. R. Khan, S. Nasreen, F. Rabbi &amp; M. R. Islam Renewable Energy (2011): The Key to Achieving Sustainable Development of Rural Bangladesh, Journal of Chemical Engineering, IEB Vol. ChE. 26, No. 1,</li> <li>Council for Renewable Energy, Nigeria (CREN) (2009) Nigeria Electricity Crunch. available at <a href="http://www.renewablenigeria.org">www.renewablenigeria.org</a> website</li> <li>CBN (1985) Central Bank of Nigeria Annual Reports and Statement of Account.</li> <li>Department of Petroleum Resources (DPR) (2007) Nigeria, Nigeria. available at <a href="http://www.DPR.gov.ng">http://www.DPR.gov.ng</a> website</li> <li>Onyebuchi EI (1989) Alternative energy strategies for the developing world's domestic use: A case study of Nigerian household's final use patterns and preferences. The Energy Journal 10(3):121-138</li> <li>Akinbami JFK (2001) Renewable Energy Resources and Technologies in Nigeria: Present Situation, Future Prospects and Policy Framework'. Mitigation and Adaptation Strategies for Global Change 6:155-181. Kluwer Academic Publishers, Netherlands.</li> <li>Akinbami JFK, Ilori MO, Oyebisi TO, Akinwumi IO, Adeoti O (2001) Biogas energy use in Nigeria: Current status, future prospects and policy implications. Renewable and Sustainable Energy Review 5:97-112 Publisher Full Text</li> <li>Naim H. Afgan et al., Sustainable Energy Development, Renewable and Sustainable Energy Review 2, (1998) pp. 235-286</li> <li>T. M. Pavlović, J. M. Radosavljević, Z. T. Pavlović, Lj. T. Kostić (2006) FACTA UNIVERSITATIS Series: Physics, Chemistry and Technology Vol. 4, No 1, 2006, pp. 113 – 119</li> <li>Central Bank of Nigeria (CBN) (2000) 'The changing structure of the Nigerian economy and implications for development'. Research Department, Central Bank of Nigeria; Realm Communications Ltd, Lagos.</li> </ol>		1-4
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	<b>Paper Title:</b>	<b>Crime Automation &amp; Reporting System</b>	
	<p><b>Abstract:</b> National surveys demonstrate that millions of crimes go Unreported. Several reasons may contribute to this lack of reporting. Also Crime reporting needs to be possible 24/7. Although several other options exist and there are most publicized reporting mechanisms. Internet-based crime reporting systems allow victims and witnesses of crime to report incidents to police 24/7 from any location. The aim of this project is to develop an online crime report and managing system which is easily accessible to the public. The police department and the administrative department. The system is intended for use in a community to help the residents interact with each other more easily and to encourage the reporting of suspicious behaviour or crime. This system registers the complaints from people through online and it will also helpful to police department in catching criminals, in system and person can give any complaint at any time.</p> <p><b>Keywords:</b> Security, Dependability, Networked Systems, Crime-Protection, Conviction.</p> <p><b>References:</b></p> <ol style="list-style-type: none"> <li>Iriberry A., Leroy G. Claremont Graduate University (2007), Natural Language Processing and e-Government: Extracting Reusable Crime Report Information</li> <li><a href="http://en.wikipedia.org/wiki/Software_as_a_service">http://en.wikipedia.org/wiki/Software_as_a_service</a></li> <li>Sahil Parikh (2010), The SaaS Edge "Tata McGraw-Hill"</li> </ol>		5-6
	<b>Authors:</b>	<b>C. Anitha, P. Arul</b>	
	<b>Paper Title:</b>	<b>New Modeling of SSSC and UPFC for Power Flow Study and Reduce Power Losses</b>	
	<p><b>Abstract:</b> Reactive power control is the basic requirement for maintaining the voltage stability of the interconnected power system. The transmission line losses are due to energy dissipated in the conductors, equipment used for transmission Line, Transformer, sub- transmission Line and distribution Line and magnetic losses in transformers. A transmission line loss includes conductor loss, radiation loss, dielectric heating loss, coupling and corona.. The placement of FACTS can help to reduce flows in heavily loaded lines, reduce power system loss and improve the system stability. Static Synchronous series compensator (SSSC) can increase or decrease the overall reactive voltage drop across the line and thereby controlling the transmitted electric power. Unified Power Flow Controller (UPFC) is a shunt and series device connected with the transmission line to improve voltage stability,</p>		

	and reduce the transmission losses. In this work, the Newton Raphson iterative algorithm was adopted due to its ability to converge after a few iterations. Simulation of power flow solutions without and with SSSC was done using MATLAB based program. The model is validated on IEEE 30-bus system.		
3.	<p><b>Keywords:</b> FACTS, Power flow, SSSC (Static Synchronous series compensator), Transmission system, UPFC (Unified Power Flow Controller), Voltage stability.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. Prashant Dhole and Arti Bhandakkar “Review of Active Reactive Power Flow Control Using Static Synchronous Series Compensator (SSSC), International Journal of innovative Research and Development ISSN: 2278- 0211 (Online), April 2013.</li><li>2. Gyugyi, C.D.Shauder, and K.K. Sen, “Static synchronous series Compensator: a solid-state approach to the series compensation of Transmission lines,” IEEE Transactions on Power Delivery, Vol.12, No.1, pp.406-413, Jan.1997</li><li>3. R.Mohan Mathur, Rajiv K.Varma, “Thyristor – Based Facts Controllersfor Electrical Transmission Systems”, IEEE press and John Wiley &amp; Sons, Inc.</li><li>4. N G. Hingorani, and L. Gyugyi, “Understanding FACTS: Concepts andTechnology of Flexible AC Transmission Systems”, IEEE Press, New-York, 2000</li><li>5. Navid Eghtedarpour_ and Ali Reza Seifi, Sensitivity-Based MethodFor the Effective Location of SSSC, Journal of Power Electronics, Vol.11, No. 1, January 2011</li><li>6. R. Benabid, M. Boudour, M.A. Abido, Development of a new power Injection model with embedded multi-control functions for static Synchronous series compensator, IETGener.transm.Disrtib,2012,Vol.6, Iss. 7, pp.680-692</li><li>7. Sreekanth Reddy Donapati and M.K.Verma, “An Approach for OptimalPlacement of UPFC to Enhance Voltage Stability Margin underContingencies” Fifteenth National Power Systems Conference (NPSC),IIT Bombay, December 2008</li><li>8. Sajjad Ahmadian, Nasir Boroomand, Saber Izadpanah Tous, and Somayeh Hasanpour1, “New Modeling of UPFC for Power Flow Study and Setting Parameters to Increase Voltage Level and Reduce Power Losses”, International Journal of Automation and Power Engineering, 2012, 1: 77-82 - Published Online June 2012</li><li>9. Prechanon Kumkratug, Application of UPFC to Increase TransientStability of Inter-Area Power System, Journal of Computers, Vol. 4, No. 4, April 2009.</li></ol>		7-11
	<b>Authors:</b>	<b>Raja Sekhar Yellepeddi, Zeeshan Mahmood</b>	
	<b>Paper Title:</b>	<b>Robustness: Resistance to Progressive Collapse</b>	
4.	<p><b>Abstract:</b> Progressive collapse of structures has always been a hidden and one of the challenging topics in the field of structural engineering. It has always been difficult to design a building which is collapse resistant. This paper describes the importance of robustness and the collapse resistant methodology using bracings, for reducing the threat of the progressive collapse of multi-storey buildings. It shows the various ways of achieving the robustness of the structure.</p> <p><b>Keywords:</b> Bracings, Progressive Collapse, Robustness.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. Vincenzo Melchiorre, P.E, ‘Vulnerability of Tall Buildings to Progressive Collapse’, ‘Structure Magazine’ (June 2008), Page 58-60.</li><li>2. B.A.Izzuddin, A.G.Vlassis, A.Y.Elghazouli, D.A.Nethercot, ‘Progressive collapse of multi-storey buildings due to sudden column loss – Part I: Simplified assessment framework’, ‘Engineering Structures’ (2008), Elsevier science publishers, Page 1308-1318.</li><li>3. B.A.Izzuddin, A.G.Vlassis, A.Y.Elghazouli, D.A.Nethercot, ‘Progressive collapse of multi-storey buildings due to sudden column loss – Part II: Application’, ‘Engineering Structures’ (2008), Elsevier science publishers, Page 1424-1438.</li><li>4. H.S.Lew, ‘Analysis procedures for progressive collapse of buildings’.</li><li>5. Uwe Starossek, ‘Avoiding Disproportionate Collapse in High-Rise Buildings’, ‘ASCE SEI 2008 Structures congress’, ‘ Vancouver, Canada’.</li><li>6. Jinkoo Kim, Junhee Park, ‘Design of steel moment frames considering progressive collapse’, ‘Steel and composite structures’, volume 8 (2008), Techno Press, Page 85-98.</li><li>7. Abhay A. Kulkarni, Rajendra R. Joshi, ‘Progressive collapse assessment of structure’, ‘International journal of earth sciences and engineering’, volume 4, October 2011, ‘CAFET-Innova’, Page 652-655.</li><li>8. Franz Knoll, Thonas Vogel, ‘Design for Robustness’, ‘International Association for Bridge and Structural Engineering’(2009).</li><li>9. Uwe Starossek, ‘Typology of progressive collapse, Design for progressive collapse’, ‘Progressive collapse of structures’, First edition, ‘Thomas Telford’(2009).</li></ol>		12-15
	<b>Authors:</b>	<b>Irfan Tore</b>	
	<b>Paper Title:</b>	<b>Uses of Pumice as Alternative Flux for Floor Tile Products</b>	
5.	<p><b>Abstract:</b> Pumice was used as an alternative fluxing agent in floor tiles, replacing albite content, and effect of such modification on the utilization and physical properties was investigated. In this work, two types of pumice (amorphous and crystalline) were researched. Pumice was added to floor tile body in different proportions (5%, 10%, 15%, 20%, 25%, 30% and 35%) as a flux, and comparison between body with albite and bodies with pumice addition was made in terms of physical properties. According to the results, it was found that firing strength and water absorption values were improved as well as decreasing milling time. Started powder and final products were characterized by Particle Size Analyzer, Heat Microscope, XRF, XRD.</p> <p><b>Keywords:</b> Pumice, Floor Tile, Physical Properties.</p> <p><b>References:</b></p> <ol style="list-style-type: none"><li>1. T. J. Peters,R. Iberg, 1978. Am. Ceram. Soc. Bull. 57, pp. 503-506.</li><li>2. M. Dondi, G. Guarini, M. Raimondo, 1999. Tile and Brick International. 15/3.</li><li>3. R. N. Shrew &amp; J. A. Brink. 1977. Chemical Process Industries, fourth ed. Kogakusha: McGraw-Hill.</li></ol>		16-19



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