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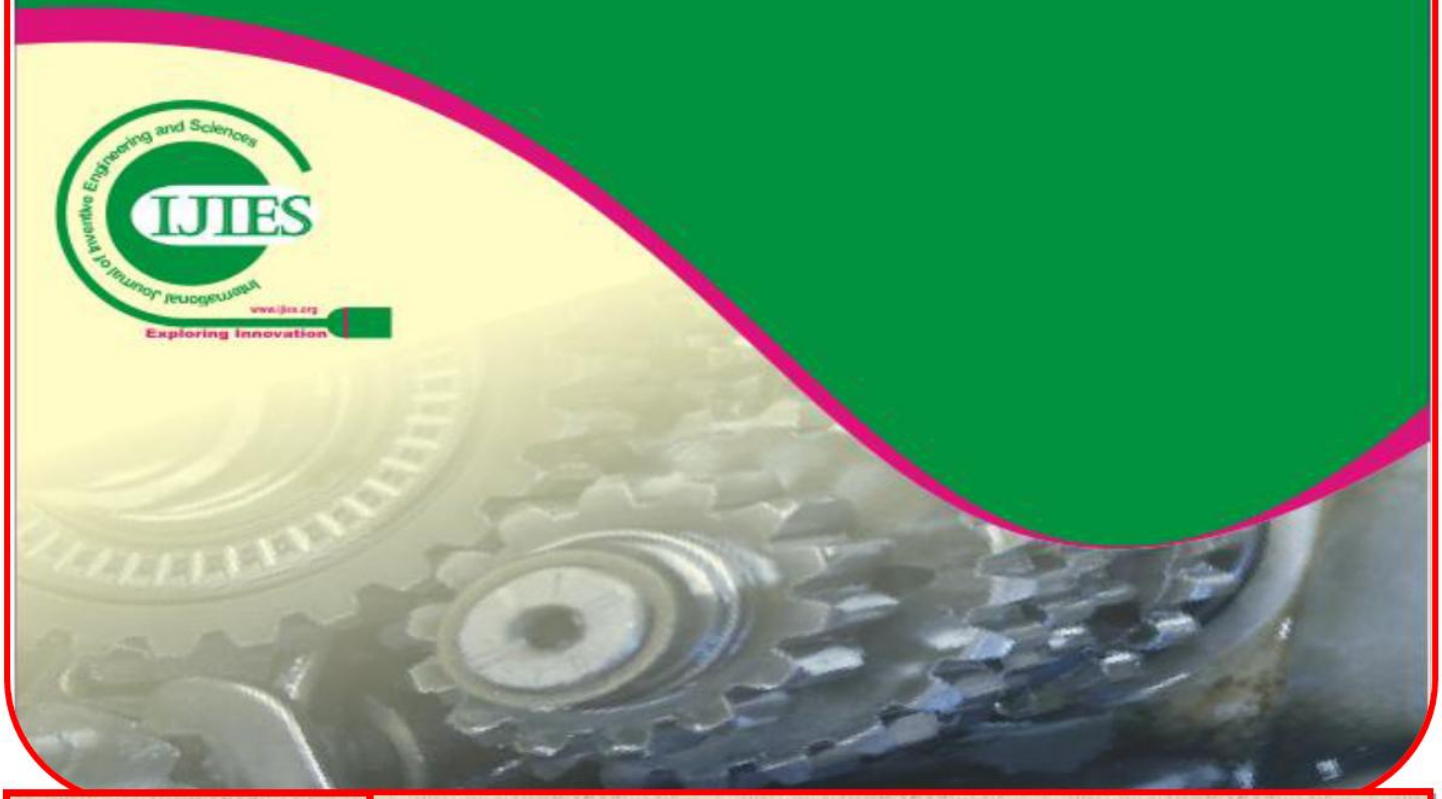

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Website: www.blueeyesintelligence.org
Email: director@blueeyesintelligence.org, blueeyes@gmail.com
Cell #: +91-9669981618, **WhatsApp #:** +91-9669981618, **Viber #:** +91-9669981618
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1.

Authors: J. T Liberty, C. E Odo, S. A. Ngabea

Paper Title: Performance Evaluation of a Small-Medium Scale Yam Chips Dryer

Abstract: The design, construction and performance evaluation of a yam chips dryer using fuel wood as source of heat was undertaken with a view to helping small scale farmers process yam chips. The dryer consists of a frame, drying chamber, tray, fuel wood housing, perforated air space and chimney. The dryer was evaluated in terms of final moisture content, drying capacity; time taken to dry the chips and the quality of the chips. Results showed that the moisture content of 71.05% (wb) was reduced to 17.23% , the drying capacity was 6kg per loading and the time taken to dry the chips was increased to about 4hrs due to difficulty in regulating the heat produced by the fuel wood. Compared to other types of dryers (solar dryer, platform dryer, flat – bed dryer, continuous dryer e.t.c), the batch type dryer is preferred due to its ability to be used during rainy season and in the absence of electricity. The quality of the chips was found to be good. The dryer has an efficiency of 76%. The evaluation of the dryer shows that it can be used for small scale drying of yam chips.

Keywords: Batch type dryer, fuel wood, small scale, performance evaluation, yam chips.

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2.

Authors: Sanjay Salla, Jayeshkumar Pitroda, B. K. Shah

Paper Title: Comparative Study on Rice Husk and Ground Nut Shell in Fly Ash Bricks

Abstract: In India, large quantities of fly ash being generated, as most of our energy demand is met through coal based thermal power station. The fly ash generation is expected to grow further as coal would continue to remain major source of energy at least for next 25 years. The fly ash which is a resource material, if not manage well, may pose environmental challenges. At the same time world-wide agricultural footprint is fast growing, with vast agricultural land cultivation and active expansion of the agro based industries. The resulting large quantities of agricultural wastes, unfortunately, are not always well managed or utilized. These wastes can be recycled, such as by retrieving fibres from disposed leaves and fruits bunches, and then incorporate in brick making. The Agricultural Waste was sourced from Rice Husk and Ground Nut Shell added within the range. This research describes change in the physical properties such as weight, density etc. and mechanical properties like compressive strength of fly ash bricks made by adding different Agricultural Waste.

Keywords: Agricultural Waste Fly Ash Bricks, Agro-waste in Bricks, Fly ash bricks with agro-waste.

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3.

Authors:	**Kalaivani.P, M. Usharani**
Paper Title:	**Optimization of Geometrical Parameters of Gate-all-around Tunnel FET for Analog RF Applications**

Abstract: This paper presents the gate oxide thickness, gate oxide material, gate material and gate contact alignment variation impact on on-current, off-current, subthreshold swing, RF and stability performance of Gate-all-around Tunnel FET. The RF figures of Merit (FoM) such as cut-off frequency (ft) and maximum oscillation frequency (fmax) along with Stability factor (K) and dc parameters are calculated for different gate oxide thickness, gate oxide material, gate material and gate contact alignment. One parameter is varied at a time to show the resulting fluctuations in the device characteristics. The process variations show significant changes in the device performance and provide information about acceptable variations and design guidelines for GAA-TFET.

Keywords: Gate-all-around Tunnel FET, Band-to-band Tunneling, Radio Frequency (RF), Technology Computer Aided Design (TCAD).

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Authors:	**S. B. Shivakumar, Ramesh B. E, Kavitha G. M, Mala M**
Paper Title:	**Multi Cloud Architecture for Improved User Experience**

Abstract: Use of cloud computing has increased rapidly in many organizations. There are many commercial cloud providers. Each one provides different storage plans & different QOS like time delay, availability. The QOS parameters & plans vary over a period of time. Every time the user cannot move his data from one cloud provider to another for the cost & QOS optimization. Cloud users also have security & auditing requirement for his data in terms who are accessing it & what frequency in which his data is accessed. To address these requirements of the users, we propose a solution using multi cloud architecture. Our solution will reduce the burden on the users in migration & meeting his security challenges. Our platform will provide the best cost optimization for the security & storage requirements of user.

Keywords: Cloud computing, single cloud, multi-clouds, cloud storage, data integrity, data intrusion, service availability.

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5.

Authors: **Kartheek B. V, Manojkumar S. B, M. B. Anandaraju**

Paper Title: **Design and Implementation of Modified Adaptive Filtering Algorithm for Noise Cancellation in Speech Signal on FPGA for Minimum Resource Usage**

Abstract: In recent years FPGA systems are replacing dedicated Programmable Digital Signal Processor (PDSP) systems due to their greater flexibility and higher bandwidth, resulting from their parallel architecture. This paper presents the applicability of a FPGA system for speech processing. Here adaptive filtering technique is used for noise cancellation in speech signal. Least Mean Squares (LMS), one of the widely used algorithms in many signals processing environment, is implemented for adaption of the filter coefficients. The cancellation system is implemented in VHDL and tested for noise cancellation in speech signal. The simulation of VHDL design of adaptive filter is performed and analysed on the basis of Signal to Noise ratio (SNR) and Mean Square Error (MSE).When compared with previous methodology this paper achieves nearly 93% of accuracy.

Keywords: Adaptive Filter, LMS Algorithm, Active Noise cancellation, VHDL Design, SNR, MSE.

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6.

Authors: **Archana Bhat**

Paper Title: **Analysis of Ripple Content in DC-DC Converters**

Abstract: The DC-DC converter has the major applications in LED, lamp flashers and computers, also in industrial applications like batteries, solar cells, drives, motors.etc. In this propose study the comparison of two switches in DC-DC Converters are taken, which are MOSFET, IGBT. DC-DC converters which are used in proposed method is buck and buck-boost converter. Outputs parameters are output voltage, output current, capacitor voltage, inductor current, ripple content in the output respectively.The simulation has done by using P-Spice software using Cadence tool, and then implemented using hardware components. Variation in the inductance and capacitance variation is done. By this analysis the dynamic response, steady state response, ripple and variation in the output can be found. By comparing hardware results and simulation results the better switch among them can be found. The proposed method consists of designing, simulation and stability analysis in transient state as well as in steady state. The best switch is used in dc-dc converter.

Keywords: Dynamic state, Steady state, Ripple content, Buck converter, Buck-boost converter.

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Authors: **Suvarna M, Prabhavathi K, M. B .Anandaraju, Nuthan A. C**

Paper Title: **Design and Implementation of Highly Secure Cryptosystem for Image Encryption**

Abstract: Chaos based encryption may offer new quality in secure data transmission. Recently proposed chaotic key based algorithms are found to be more susceptible to the known plain text attacks and cipher text attacks. In this paper

BB (Brahmagupta-Bhaskara) equation is combined with chaos to give a non linear dependency and thus improved security. The proposed algorithm is designed and realized using MATLAB and Xilinx ISE software.

Keywords: Chaotic map, Security, BB equation, Image encryption.

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7. **28-31**

Authors:	**Parlekar Pinal Narsinhbhai, Mary Grace Shajan**
Paper Title:	**Data Rate Enhancement For Cell Edge Users In A Wireless Cellular Network**

Abstract: Users at the cell edge in a cellular network suffer from low data rate due to low SINR Cooperative transmission schemes which are used in wireless networks to improve the spectral efficiency. Cooperative transmission schemes are used in wireless networks to improve the spectral efficiency and Throughput. It is found that the throughput for cell edge users degraded because of interference from other cell. The object of this dissertation is to study the various techniques for improve the performance of cell edge users.
The techniques to be studied are:
1. Cooperative MIMO
2. Simple cooperation
3. Cooperation with 1-bit phase feedback.
The results shows that the performance of selective cooperation is better then without cooperation and with cooperation and the performance of Simple Cooperation is better then Cooperative MIMO and Cooperation with 1-bit phase feedback.

Keywords: Spectral Efficiency, Data Rate, Cell Edge User, Capacity.

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