

Date: 8th November 2015

Message

International Conference on Emerging Trends in Engineering Applications and Basic Sciences – 2015 addresses these issues through the seminar and exhibitions, bringing together representatives of all those involved at every fields of business, industry, academic, government and civil.

The International Conference facilitates ideas, information and program possibly to solve. The conference focuses on “Emerging Trends in Engineering Application and Basic Sciences”. This conference is going to address many issues. I am confident that your deliberations and the outcome of your efforts will raise public awareness about the role and value technology as a tool to promote economic, social and cultural development while addressing the complex issues on your agenda.

I wish all the delegates a successful techno career and take the privilege to welcome you all to this International Conference AICETEAB-2015.

We look forward for your participation.

With best wishes.

Dr. B. Anjaneya Prasad
Prof (Mech) & D.E, JNTUH

Date: 8th November 2015

Message

I am glad to know now that AERF (Anveshana Educational and Research Foundation) is organising a conference on “Recent Trends in Engineering Applications and Basic Sciences” on 8th Nov 2015 at The Institution of Engineers (India) in Hyderabad.

This conference would understand the people of India to conquer the emerging trends in engineering application. The seminar will go a long way in establishing the concept and disseminating the knowledge about the emerging trends in engineering application and basic sciences.

I wish the team a very best of luck in their endeavour.

Dr. P.Chandrashekar Reddy
Prof, ECE Dept, JNTUH

I on behalf of administration would like to welcome you all to the Anveshana Educational and Research foundation’s AICETEAB-2015 the International Conference on Emerging Trends in Engineering Application and Basic Sciences. The conference is organised as a set of tracks in Humanoid Robots, Electronic Materials, and Computer-based manufacturing technologies: CNC, CAD, CAM, FMS, CIM, Electric Drivers and Application and Inverter and Converter Technology and many more. There is separate track of management and electrical stream. The objective of the International Conference is to provide a forum where representatives from industry and academia can meet, discuss and present the most recent advances in science and technology.

We hope that you will find the conference both enjoyable and valuable. I am greatly honoured to welcome the delegates and the participants on the occasion of International Conference AICETEAB-2015.

Dr. I. Satyanarayana Raju
Ph.D, F.I.E.
Chairman
The Institution of Engineers (India)

Abstract Proceeding of

**International Conference on Emerging Trends in Engineering Applications and Basic Sciences
(AICETEAB-2015)**

Date: 8th November 2015

Message

AICETEAB-2015 brings the academicians, researchers and industrialists together on a platform for exchange of scientific and technological information and initiates discussion, debate and dissemination of knowledge in the fields of emerging trends in engineering applications and basic sciences. This conference will help the researchers who work continuously towards the development of new ideas for the growth of human kind and to provide solutions to the various research problems. Another step of the conference is filling the gap between formal engineering texts and practically to promote academic interaction and faster collaboration.

We hope that presentation of papers, suggestions and recommendations would help in better understanding of issues. This conference will go a long way in establishing the concept and disseminating the knowledge about the emerging trends in engineering application and basic sciences.

Dr. P.L. Panda
Hon. Secretary
The Institution of Engineers (India)

Modern world is the fast faced changes in technology which is advancing by leaps and bounds to make the world a global village. Special gratitude and appreciation is due to the various tracks chairs as they are primarily responsible of the content of the technical program. The aim of AERF has always been to provide an international forum for individuals from all over the world to network and to share and discuss new research techniques and latest technology in engineering world.

I heartily wish all the participants a successful techno career and take the privilege to welcome you all to the international conference AICETEAB-2015.

Dr. A.K.Astana
Director, KMIT

Date: 8th November 2015

Message

We welcome all the participants to come with new innovations and emerging trends in electrical world. The advanced and innovative technologies are crucial for our lives and ecological cycle in order to achieve global sustainability. The International Conference on Emerging Trends in Engineering Applications and Basic Sciences (AICETEAB) – 2015 address these issues through the conference and exhibitions, bringing together representatives of all those involved in all the field of business, industry, academic and civil.

The slot of areas to discuss and take presentation is composed in various fields such as networking, Parallel Computing, Piezoelectric, Automotive engineering, Mechatronics, and Robotics. This international conference facilitates ideas, information and programs to enhance the technology. The conference focuses on “Emerging Trends in Engineering Applications and Basic Sciences”

Dr.Dutta Maheswar
Principal, KMIT, HYDERABAD
Chief- Organiser (AERF)

Date: 8th November 2015

Message

On behalf of AICETEAB-2015 Organizing Committee, I am glad to welcome you to the International Conference on Emerging Trends in Engineering Applications and Basic Sciences. AICETEAB-2015 continues the tradition of addressing issues of immediate and long term interest to researchers and engineers in developing various engineering systems through technological innovations. The aim of the AICETEAB-2015 has always been to provide an international forum for individuals from all over the world and to share and discuss their innovative thoughts in the emerging trends in engineering applications and basic sciences. These currently include topics in wireless sensor network, mobile computing and emerging trends in management along with excellence management.

I wish you all a wonderful and exciting time here. At last we could say that at AERF.

The knowledge.....students surely have pleasure to receive

The mentors.....are capable enough to make them believe.....

The goals.....students would find easy to achieve.....

Dr. Sucharitha Devarapu
Director
AERF

Date: 8th November 2015

Message

I am extremely delighted to welcome you warmly to AERF which is dedicated to inculcate strong moral values, integrity, honesty, creativity, imagination, perseverance, benevolence, discipline, self confidence, transparency of thoughts and command over academic excellence. We are at the threshold of a new challenge and we take this opportunity with a pledge to launch out foundation as a centre of excellence to impart stress free and caring environment to nurture research scholars. We seek your vital co-operation and a great support to accomplish high standards. This conference is going to address many issues. I am confident that your deliberations and the outcome of your efforts will raise public awareness about the role and value technology as a tool to promote economic, social and cultural development while addressing the complex issues on your agenda.

Dr. J. Sasi Kiran
Dean, VVIT

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Hybrid Algorithm For MPPT of Wind Energy Conversion Systems [Paper ID:EEE1008]

A paper presented by. K. Chiranjeevi¹ & Dr. Y. Sreenivasa Rao²

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Abstract

The wind energy conversion system can deliver the maximum power when the load impedance matches with the source impedance under a given wind speed. Since the load and wind speed are varying dynamically, the maximum power point tracking (MPPT) becomes more complex. A wind-generator (WG) maximum-powerpoint tracking (MPPT) system is presented in the present work, consisting of a high efficiency buck-type dc/dc converter and a control unit running the MPPT functions. The advantages of the MPPT method are that no knowledge of the WG optimal power characteristic or measurement of the wind speed is required and the WG operates at a variable speed. Thus, the system features higher reliability, lower complexity and less mechanical stress of the WG.

Keywords: MPPT, MPOP, WECS, VSCF, CSCF,

Optimal Location of Piezoelectric Layer [Paper ID:ME1001]

A paper presented by: Sangamesh B. Herakal¹ & Dr. S. Chakradhara Goud²

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Abstract

The application of piezoelectric actuators for static shape control composite plate is investigated in this thesis. Electro-mechanically coupled mathematical model is used for the analysis. The major section of this thesis is the static shape control. Shape control is defined here as the determination of shape control parameters, including actuation voltage and actuator orientation configuration, such that the structure that is activated using these parameters will conform as close as possible to the desired shape. A finite element model for shape control analysis of piezoelectric laminated composite plate using Ansys is presented in this thesis. Piezoelectric actuators and sensors are modeled as additional layers either to be surface bonded or embedded in the laminated composite plate. A finite element software Ansys is used to model and was successfully validated with experimental and numerical results that are readily available in the literatures

Keywords: Composite plate, sensor, intelligent structure, FEM

Strength of Weak Ties in Massive Online Social Network

[Paper ID:CSE1007]

A paper presented by: Dr. Jangala Sasi Kiran¹, M.Anusha², D. Koteswara Rao³ & Md. Karimmudin⁴

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Abstract

Online social networks have permitted us to construct enormous net-works of weak ties: associates and no intimate ties we use all the time to extend information and opinions. On the other hand, strong ties are people we truly trust, persons the majority like us and whose social circles tightly overlies with our own. Regrettably, social media do not incorporate tie strength in the formation and management of relationships, and treat all users the same: friend or stranger, with little or nothing in between. In the present work, we address the challenging issue of detecting on online social networks the strong and intimate ties from the huge mass of such simple social contacts. We studied how weak and strong ties influence the information diffusion process. Our findings suggest that individuals in OSNs self-organize to generate well-connected communities, while weak ties bring about consistency and optimize the exposure of information spread. This paper sets out to achieve two goals. First, we call attention to a model of learning that underscores the importance of weak ties. To do so, we revert to the fundamental tenets of this well-researched model and then review pragmatic cases at both individual and collective levels that demonstrate the contradictory importance of these ties in social exchanges that transpire within and across differentiated contexts. Second, we present a strategy to test two of the model's basic tenets. Using data from an early distributed learning context. We close with a discussion on the ways in which the benefits of strong and weak ties can be leveraged in situations relevant to education organizations.

Keywords: Online social networks (OSN'S), Weak Ties, Face book, Arguments.”

Study on Concept of Combustion with HCCI Technology and Its Challenges
[Paper ID:ME1002]

A paper presented by P. V. Ramana¹, Dr. D. Maheswar² & Dr. S. Chakradhara Goud³

Associate Professor, Mechanical Department, CVR(Research Scholar JNTUA-Anantapuram-AP)¹

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Abstract

The main concept of the internal combustion is quite old principles have not changed from since long. At present many researches are going on to improve further with bio-diesel for further improvement to reduce the usage of diesel in view of depletion the faster rate of fossil fuels and to control the environment pollution but due to less calorific value of bio-fuels engine performance is not up to the expectation. So researches toward approaches to reduce the emission, technology changes, such as engine modifications, exhaust gas recirculation, and catalytic after treatment, taken a way to implement on engines. Diesel engine has always been prevalent due to its robustness and unequalled efficiency. The approach to alternative fuel combustion processes studies the formation of NO_x and soot in the conventional direct injection diesel engine is due to the heterogeneous not premixed combustion characterized by high local temperatures. With alternative fuels combustion methods, suitable combustion control is applied to avoid the conditions where particulates or NO_x are formed by usage of oxygenated fuels can significantly reduce by usage of EGR technique in diesel engines. Another alternative way is for further improving engine efficiency and reducing engine emissions is the change for the combustion process. It was come researchers mind to change the heterogeneous combustion of CI engine by the way of introducing homogeneous combustion it is the mix of both SI and CI engine combustion. The combustion of a homogeneous air/fuel mixture in the cylinder of a diesel engine is very efficient way to burn the lean mixture because of Homogeneous Charge Compress Ignition (HCCI) combustion system merges the advantages of SI engine combustion using a homogeneous mixture and that of a diesel engine. The fuel efficiency from the CI engine and the emission levels from the SI engine, and can be reached to Homogeneous Charge Compression Ignition (HCCI) with least environmental pollution. In the last few years; several studies have shown that the formation of the individual pollutants can be avoided by a far-reaching charge homogenization before combustion and by considerably reducing the combustion gas temperature.

Keywords: HCCI, CI Engine, SI Engine, Twostroke Engine, Fuel Injection, Four stroke Engine

Performance and Productivity in Parallel Computing

[Paper ID:CSE1006]

A paper presented by :Dr. Jangala Sasi Kiran¹, Dr. G. Charles Babu², M. Kavya³ & Mohammed Karimmudin⁴
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Abstract

Reproduction of a computer is a decisive technology that plays a major role in several areas in science and engineering. The companies which are working on HPC (High Performance Computing) are simply shifting their work from the logical computing market toward the big business high-performance computer market where the furthest demand is for money-making of midrange performance computers. In developing High Performance Computing software, time to solution is an important metric. This metric is comprised of two main components: The human effort required developing the software, plus the amount of machine time required to execute it. To date, little experiential work has been made to study the first component: the human endeavour required and the effects of approaches and practices that may be used to reduce it. In this paper, we describe a sequence of studies that address this problem and a survey is presented since beginning of parallel computing up to the use of present state-of-art multi-core processors.

Keywords: Parallelism, High Performance Computing, Modularity & Multi core processor.

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Date: 8th November 2015

An Approach Towards the Analysis of Gramina Bank Sector: Telangana

Gramina Bank

[Paper ID:MNT1004]

A paper presented by:N. Dhanraj¹ & Dr. R. Sai Kumar²

Shri Jagdishprasad Jhabaramal Tibrewala Unv¹ & Prof and Holly Mary Institute of Engineering and
Technology²

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Abstract

Rural bank are providing finance to the weaker sections of society like small farmers, rural artisans, small producers, rural laborers etc, to provide finance to cooperative societies, primary credit societies, Agricultural marketing societies, Enhance & Improve banking facilities to semi urban, rural& other untapped market. The Regional Rural Banks help the rural people to come out from the financial problems and secured the financial assistance to agriculture in India. The study concentrated on Telangana Gramina Bank is of utmost importance in new state to provide financial support to agriculture and performance of the bank in various Identified potential areas. This paper focused on the Continuous Rural Development, reaching the uncovered and being farmer friendly

Key words: Telangana Gramina bank, rural bank, credit societies, cooperative societies

**The Analysis of Plastic Injection Molding Simulation Process with Reference
of Material Temperature and Pressure Injection**

[Paper ID:ME1003]

A paper presented by G.Rajendraprasad¹ & Dr. S. Chakradhara Goud²

MNRCET-Vice Principal, J.J.T.University Rajasthan ¹Professor and Principal, Sana Engineering College-
Kodad²

Email ID: ganjirajendraprasad@gmail.com, cgsakki@yahoo.com **Abstract**

This paper presents the analysis of plastic injection mould for a plastic product. The plastic part was designed into two different types of product, but in the same usage function. One part is using clip function and another part is using tick function. In the computer-aided design (CAD), two plastic parts were drawn in 3 dimension (3D) views by using SIEMENS 8.0 parametric software. In the computer-aided manufacturing (CAM), DELCAM 12.0 software was used to develop the machining program. For mould design, the product was designed into two changeable inserts to produce two different types of plastic product in one mould base. Before proceeding to injection machine and mould design, this part was analyzed and simulated by using Ansys 15.0. From the analysis and simulation we can define the most suitable injection location, material temperature and pressure for injection. In the present work Component selected for conveyor chain locking links.

Keywords: Changeable insert mould, injection pressure, air traps, injection location, mould design.

**The study of sloshing behaviour in three dimensional tank for different
volume fraction of fluid with time increment step and acceleration with CFD**

[Paper ID:ME1005]

A paper presented by: G. L. Suresh Patil¹, Dr. B. Anjaneya Prasad², Dr. D. Maheswar³ & Dr. S. Chakradhar Goud⁴

Research scholar, J.N.T.University¹, Professor (Mech Dpet) & D.E, J.N.T.University²

Principal, KMIT³, Principal, Sana Engineering Collage⁴

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Abstract

The studies have been reported for the sloshing analysis in liquid containers. One of the major concerns in the marine hydrodynamic field is the accurate prediction of impulsive load on internal structures. During violent sloshing, the sloshing-induced impact load can cause a critical damage on tank structure. Such damage cases have been reported for oil tankers, LNG carriers and bulk carriers. Many analytical and experimental studies on sloshing were performed in the 1950's and 1960's for the tank design of space vehicles. Some numerical methods were applied during this time, and interesting results have been introduced for the two- and three-dimensional sloshing problems. Recently some computational results using the general-purpose flow simulation programs, like FLOW3D, have reported for the sloshing analysis. However, the application of the general purpose programs may be not proper for the prediction of impulsive loads, since the typical numerical treatment of wall condition can result in unrealistic flow simulation. In this study, Volume of fraction method is considered in solving the present problem in Ansys fluent simulation of fluid flows in three-dimensional tank. The physical dimensions appropriate 3D model has been generated in ANSYS Workbench Geometry module. The impact of slosh on tank walls analyzed with 60% and 70% in its height of the tank.

Keywords: Slosh, ANSYS, VOF method, tank.

Date: 8th November 2015

**The Study of Relationship Between Organizational Culture, Leadership
Behaviour and Job Satisfaction**

[Paper ID:MNT1009]

A paper presented K.Venkat Rao¹, Dr. D. Sucharitha²

Research Scholar, S.J.J.T. University 1 & Associate Professor, Siddhartha Institute of Tech & Science 2

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Abstract

The study of organizational culture refers to the beliefs and values that have existed in an organization for a long time, and to the beliefs of the staff and the foreseen value of their work that will influence their attitudes and behaviour. Administrators usually adjust their leadership behaviour to accomplish the mission of the organization, and this could influence the employees' job satisfaction. It is therefore essential to understand the relationship between organizational culture, leadership behaviour and job satisfaction of employees.

Keywords: job satisfaction, leadership, transformation styles, organisation behaviour

**Simulation and Analysis of Zero Voltage Switching PWM Full Bridge [Paper
ID:EEE1013]**

A paper presented by: Shivaji Bhukya, Asst.Prof (PH.D)

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Abstract

In the conventional zero voltage switching full bridge converter the introduction of a resonant inductance and clamping diodes are introduced the voltage oscillation across the rectifier diodes is eliminated and the load range for zero-voltage- switching (ZVS) achievement increases. When the clamping diode is conducting, the resonant inductance is shorted and its current keeps constant. So the clamping diode is hard turned-off, leading to reverse recovery loss if the output filter inductance is relatively larger. By introducing a reset winding in series with the resonant inductance to make the clamping diode current decay rapidly when it conducts this paper improves the full-bridge converter. The conduction losses are reduced by the use of reset winding. Also the clamping diodes naturally turn-off and avoids the reverse recovery. The proposed converter has been simulated for two different configurations and results have been compared. A 1 kW prototype converter is built to verify the operation principle and the experimental results are also demonstrated.

Key words: Telangana Gramina bank, rural bank, credit societies, cooperative societies

Date: 8th November 2015

Indian Initiative In Adaption Of Smart Grid Technology

[Paper ID:EEE1012]

A paper presented Mr. K. K. Jain¹, Dr. Praveen²

Prof&Hod EEE, ELLENKI COLLEGE OF E&T1, Professor & HOD EEE, GRIET²

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Abstract

Smart grid is a modernized electrical grid that uses information & communication technology between supplier & consumer interaction in a automated fashion to improve system efficiency, reliability, focusing in distribution sector which is suffering from high transmission losses. In this technology consumers' participation is significantly used for energy management, grid management viz peak load, outage management, demand side management to improve the quality supply to the consumer. There is bilateral communication between consumer & supplier based on information fed in the system. Smart grid technology is adopted worldwide as cost effective & way to quality supply to the consumer. Top 10 advanced countries which have implemented this technology have benefited in a significant manner.

India has taken an initiative to verify the benefits of smart grids technology in 14 pilot projects located in all the 5 regional grids. Puduchery being India's first pilot project which has started on 2nd march 2013 by signing a MOU between Power Grid Corporation& Puduchery Electricity Department. Government of India has also setup smart grid task force to monitor the progress of pilot projects by taking 5 working groups namely:

Working group 1: Aimed for trials & pilots on new technological advances.

Working group 2: Will monitor loss reduction & theft, data gathering & analysis.

Working group 3: Power to rural areas & its reliability & quality, power to urban areas.

Working group 4: Distributed generation & renewable integration with power grid & its impact. Working

group 5: Physical cyber security & standardization of smart grid technology.

By operating in sequence, milestones can be achieved in most efficient & seamless operation in the grid system. In these paper details of AMI infrastructure & implementation methodology is discussed to obtain numerous benefits of smart grid technology which is being implemented in our country. Smart Grid technology ensure optimum energy use & supply enable better planning for outage response & recovery facilitate the integration of heterogeneous technology around the grid, such as renewable energy system, electrical Vehicle net works & smart home, smart energy grids encounters enormous engineering challenges. Spot billing fault reporting remote metering & substation operation. Consumers servicing through internet & telephone call centers

Key Words: Smart Grid Technology, Working Groups, Modernization of Electrical Grid, Information & Communication Technology & Worldwide Adoption.

Date: 8th November 2015

**Synchro Phasor Techonology Adoption In Indian Grid System [Paper
ID:EEE1011]**

A paper presented by: Mr. K K JAIN (PhD), Prof&Hod EEE
Research Scholar from ELLENKI College OF E&T

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Abstract

Synchrophasor technology is a powerful tool for diagnose, prevention and cure for grid system. Synchrophasor are high speed real time synchronized measurement device used for finding health of electrical grid. It is also considered as ULTRA FAST measurement system of grid parameters, and is 100 times faster than present SCADA system. With Synchrophasor data's electrical utilities can use existing power more efficiently and push more power through existing grid system. It reduces likely hood of power disturbances, false trips and cascade tripping leading towards BLACK OUT'S. Power grid proposed to go in big way for WAMS (wide area management systems) for whole country. Under pilot project 4 no's Synchrophasors have been deployed in northern grid viz (1) Kanpur (2) Vindhyachal (3) Dadri (4) Moga, 400 KV substations and is being monitored at NRLDC, DELHI. The results are very much encouraging. This paper describes synchrophasor technology and its advantage over present SCADA system and how utilities can Integrate synchrophasor data's in existing SCADA/EMS. WAMS technology using PMU (Phasor measurement unit) data is found instrumented in improving early warning system. Wide area protection system and many other applications.

**Design And Construction of a Serpentine Solar Flat Plate Collector [Paper
ID:ME1010]**

A paper presented by: Nagalli Raghu¹ & Dr. S. Chakradhara Goud²
Mechanical Engineering¹ and Principal, Sana Engineering Collage²
Research Scholar from Farah Institute of Technology

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Abstract

The use of solar energy systems has been extended in recent years to include many applications. A well-known application is solar water heating systems, in which the main component is the solar flat plate collector. The flat plate collector has many configurations, but it has mainly two types depending on tubes (or tube) attached to the absorber plate. When the water flows inside a group of parallel tubes (acting as risers) between two bigger tubes (acting as headers), the collector is called tubular collector, while it is serpentine collector, when the flow is only in one tube (usually in zigzag form) from the main source to the outlet of the collector. The serpentine collector has been given low attention compared with the tubular one, so it was promoted to be the type used in this study. Based on average daily requirement from heated water, thermal load to be attained by the collector has been estimated and in connection with suitable collector efficiency, a proper size for the constructed collector is estimated. Secondly, after appropriate choice of materials for all main parts of the collector, they are all manufactured and then assembled together to construct the solar collector, and finally it is tested by building an adequate test rig to estimate the efficiency of the constructed collector.

Date: 8th November 2015

Towards a Comprehensive Data Mining Framework using Neural Networks
[Paper ID: CSE1017]

A paper presented by: M. Dattatreya,

Associate professor Dept of CSE Research Scholar from Arjun College of Technology And Sciences

Abstract

Data mining is a process of deriving value from data maintained by enterprise. In other words, data mining extracts hidden relationships among data objects that constitute valuable business intelligence. Thus the discovery of knowledge from databases is the chief aim of data mining. The discovered knowledge is used to make well informed decisions. This is required in all sectors such as banking, education, insurance, and finance, healthcare and so on. This is one side of the coin. On the other side of the coin is that neural networks are successfully used in a wide range of applications with supervised and unsupervised learning. As neural networks produce incomprehensible models, generally they are less explored for data mining activities. However, the neural network learning algorithms can also provide comprehensible models that can be used as part of data mining activities. Some of the important neural networking applications include steering motor vehicle recognizing genes in uncharacterized DNA sequences scheduling payloads for the space shuttle and predicting exchange rates. Combining the data mining algorithms with neural networks can provide useful mechanisms that can be used to mine data to discover useful knowledge. The aim of this research is to investigate the suitability of neural networks for data mining besides other aspects described here. A comprehensive data mining framework is designed and implemented. The framework is flexible in nature having provision to adapt new data mining algorithms that are based on neural networks both in supervised and unsupervised learning.

How Accounting Standards Influences The Strategies of Global Capital
Markets [Paper ID:MGT1015]

A paper presented by: Gurmeet Kaur¹ and Dr. Chandrashekar²

Associate professor, Dept of MBA Finance

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Abstract

Current accounting and reporting practices fall short of meeting the information needs of the capital markets in the 21st century. A critically important element in the solution to this problem is the convergence of US GAAP and IFRS, a process now under way at an early stage. The convergence of accounting standards is a matter of decisive strategic importance to the future of global capital markets. High quality information is essential to high quality markets. All stakeholders who rely on high-quality markets need to understand the issues surrounding convergence. This Process will have several phases. Currently the uppermost issue is the process for achieving high-quality converged standards, which will be substantially equivalent although not uniform in every detail. Later the issue is likely to be the possibility of achieving a single set of global high-quality standards and a single global standard setter. the scope and nature of accounting and reporting standards will be gradually altered. All major stakeholders have the opportunity to influence this challenging process in positive ways that reflect both their business interests and their commitment to sound global capital markets.

**A Survey on Earthquake Resistant Buildings on Ground Surface By Using
ETab**

[Paper ID:CIVIL1016]

**A paper presented by: THANNIRU MALYADRI, Assistant professor, Dept of Civil
Research Scholar from, Sree Datta Institute of Engineering & Science**

Abstract

On the earth surface, everyone is aware that many natural disasters such as earthquakes, floods, tornadoes, hurricanes, droughts, and volcanic eruptions occurs of-all natural disasters the least understood and most destructive are earthquakes. The annual losses due to earthquakes are very large in many parts of the world. They not only cause great destruction in terms of human casualties, but also have a tremendous economic impact on the affected area. Although the incidents of earthquakes of destructive intensity have been confined to a relatively few areas of the world, the catastrophic consequences of the few that have struck near centers of population have stressed on the need to provide adequate safety against this most terrible nature's quirks. India had witnessed several major disasters due to earthquakes over the past century. In fact more than 50 percent of the country is considered prone to severe earthquakes. The north - east region of the country as well as the entire Himalayan belt is susceptible to great earthquakes of magnitude more than 8.0 the main cause of earthquakes in these regions is due to the movement of the Indian plate towards the Eurasian plate at the rate of about 50 mm per year. Besides the Himalayan region and the Indo-Gangetic plains, even the peninsular India is prone to severe earthquakes as clearly .illustrated by the Koyna (1967), the Latur (1993), and the Jabalpur (1997) earthquakes, Sumatra earthquake (2004) Kashmir earthquake (2005).and Nepal earthquake (2015) The Bhuj earthquake is considered to be the largest intra-plate earthquake ever recorded. The 2001 Bhuj earthquake had great implications for earthquake hazard, not only in India, but also in other parts of the world.

Date: 8th November 2015

**Investigation on Association Rules Mining Based Scheme for Healthcare
Repository**

[Paper ID:CSE1014]

A paper presented by: D.Ravi Kiran, Mechanical Engineering

Research Scholar from IResearch Scholar, Acharya Nagarjuna University, Nagarjuna Nagar, Guntur(D.t)

Abstract

Early detection of patients with elevated risk of developing various disease is a challenging issue, in this connection Healthcare institutes enrich the repository of patients' disease related information in an increasing manner which could have been more useful by carrying out relational analysis. Data mining algorithms are proven to be quite useful in exploring useful correlations from larger data repositories. In this paper we have investigation on Association Rules mining based scheme for finding co-occurrences of diseases carried by a patient using the healthcare repository. In this paper we proposed prediction of clinical outcome (PCO) scheme which extracts data from patients' healthcare database, transforms the OLTP data into a Data Warehouse by generating association rules. The PCO system helps reveal relations among the diseases. The PCO system predicts the correlation(s) among primary disease and secondary diseases.

**Analysis Of Existing Logistic Setup In Marketing Of Mangoes In Khammam District Of
Telangna**

[Paper ID:MGT1018]

A paper presented by: K.Venkat Reddy¹ M.Sudhir Reddy²

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Abstract

Present study was under taken to identify the different channels of marketing of mangoes were identified; the profit margins in the respective channels were analyzed. This study provides useful and meaningful insights to the orchardists, intermediaries in marketing under different channels with regard to economic level of mango production and marketing. The marketing costs, margins, and the role of middlemen will be of great relevance to the policy makers to overcome problems in marketing of mangoes. Research studies conducted by an individual are always confronted with various bottlenecks and hence the present study is not an exception to such limitations. This study was confined to a particular agro-climatic region and hence conclusions drawn are applicable to that area and or other areas where similar conditions exist. Further, the necessary data and information collected through survey method by conducting personal interviews with sample farmers and inferences drawn are subject to recall bias, since the farmers did not maintain any records on cultivation and marketing aspects. But almost care had been taken in collection of relevant data. The study was carried out in a limited period of time and for limited size of sample and hence generalization of results may not be possible.

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Market Structure, Conduct, Channel and Margin of Dry Season Okra vegetable in India

[Paper ID:MGT1019]

A paper presented by: K.Venkat Reddy

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Abstract

Abstract: The study was carried out with four purposes. The first objective included the socio-economic characteristics of dry season Okra marketers; the second described the marketing channel; the third analysed the structure and conduct of the market; and the fourth determined the marketing margin for dry season Okra marketers. Multi-stage sampling technique was adopted for the study. 55 Okra marketers were selected and structured questionnaires administered to them. Descriptive statistics, Gini coefficient model and Marketing margin analysis were used for analyzing the objectives. Most of the Okra marketers interviewed were females indicating that these were doing active dry season marketing of Okra vegetable in the study area. Four (4) marketing channels were identified. From the Gini coefficient model, which determined the level of concentration in relation to the structure of the markets of wholesale and retail markets, there were no barriers to entry and exit in and out of the markets during the dry season period. There was a high percentage (85 %) in the marketing margin of the marketers. Government's indispensable role in building and repairing worn out roads, as well as constructing new ones; which will in turn bring about reduction in the cost of transportation and minimization of vegetable losses in the marketing process should be encouraged.

Keywords: Okra, dry season, market, marketing, marketers.

**A Study Analysis Of The Boundary Element Method For Continuum Models Of
Carbon Nanotube-Based Composites**

[Paper ID:ME1020]

A paper presented by: N.Chandrashekar Reddy & Dr.B.Anjaneya Prasad

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Abstract

To understand the thermal mechanisms in nanocomposites, it is necessary to study high thermal conductivity of carbon nanotubes.several theoretical models predicts a high thermal conductivity for CNT reinforced polymer composites, the experimental validation are not so encouraging. An attempt made by using finite element model for reinforced nanocomposite to be developed based on continuum mechanics approach. In this approach, the finite element model is a representative volume element (RVE) with single MWNT inclusion is a model based on the continuum model of MWNT as effective solid fibre. The interface resistance between the nanotube and the matrix material is model using thermal contact elements

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analysed and carried out keeping volume fraction of MWNT fibres as constant and varying three important parameters which influences the effective thermal conductivity. Analysis with varying volume fractions of CNT fibbers was also carried out to study the influence of volume fraction. The results obtained were in agreeable range with the theoretical calculations. The finite element analysis showed that the interface resistance between the nanotube and the matrix material does not affect effective thermal conductivity noticeably which is contradictory with few theoretical models which attribute interface resistance for lower than expected effective thermal conductivity. The above analysis also validates the use of finite element approach based on continuum mechanics in studying the overall behaviour of the nanocomposites.

Keywords: matrix materials, nanotube, FEM

Effect Of Rice Husk And Fly Ash Reinforcements On Microstructure And Mechanical Properties Of Aluminium6061 Matrix Composites

[Paper ID:ME1021]

A paper presented by: Sura Sapthagiri & Dr. Jayathirtha Rao

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Abstract

The application spectrum of low cost material reinforced metal matrix composites is growing rapidly in various engineering fields due to their superior mechanical properties. In the present study it is proposed to explore the possibilities of reinforcing aluminium alloy (Al6061) with locally available inexpensive rice husk and fly ash for developing a new composite material. A rice husk and fly ash particles of 5, 10 and 15% each by weight are proposed to develop metal matrix composites using liquid metal processing route. The surface morphology is to be studied using optical and scanning electron microscopes. The mechanical properties such as tensile strength, compressive strength, hardness and percentage elongations are to be studied for reinforced composites. It is also proposed to use Taguchi's method of DOE for optimizing the process parameters like wt.% of reinforcement, stirring speed and blade angle under study.

Keywords: MMC'S preparation, Micro structural and Mechanical Properties

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Brilliant Approach for Load Balancing in Cloud Computing

[Paper ID:CSE1022]

A paper presented by: Mrs.M.Padmavathi¹, Shaik.MahaboobBasha²

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Abstract

Cloud is a Parallel and Distributed Computing System Consisting of a Collection of inter-connected and Virtualized Computers that are Dynamically Provisioned and Presented as one or more unified computing Resources based on Service -level Agreements (SLA) established through Negotiation between the Service Provider and Consumers . Virtualization is like something that is not real but provides all the facilities that are of real world. Virtualization is a part of Cloud Computing, because different services of cloud can be used by user .many Cloud task schedulers had Discovered to perform Scheduling task but most of them are static, not Elastic, not Economic and time Consuming. In this paper a cloud computing scheduling policy has been proposed to minimize the imbalance between the Work Loads of different Systems. The proposed Strategy Simulated using Cloud Sim tool kit and at last our proposed Algorithm and existing Algorithms Comparison study will be performed.

A Study On Six Sigma Quality Systems Improving Efficiency In Thermal Power Plant

[Paper Id:EEE1023]

A paper presented by: T.Sudhakar

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Abstract: The rate of exploitation of the energy resources has been expanding over time and may result in reduction of panic reserves. Efficiency of all resources is crucial both in an environmental and economic sense. Using energy inadequately creates waste in all the world's economies. It has environmental impacts with regional, local and global implications. Today, provided continues with the enlarged use of renewable resources and also restricted use of non-renewable resources. Steam turbine plants generally have a history of achieving up to 95% availability and can operate for more than a year between shutdowns for maintenance and inspections. Their unplanned or forced outage rates are typically less than 2% or less than one week per year. Modern large steam turbine plants (over 500MW) have efficiencies of about 40-45%. Six Sigma (SS) is an emerging powerful management framework tool increasingly utilized for process, quality, inventory control etc. in diverse industrial and business sectors across the globe. It can also be utilized to analyze and provide best possible solution for a complicated task in the process. It facilitates in identifying the causes for defects and errors in manufacturing and business processes by utilizing various input tools

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like engineering, management, statistical, infrastructural, manpower, marketing and quality to name a few. The key object is to adopt energy management in every field in order to reduce the wastage of energy sources and cost effectiveness without affecting productivity and growth. Energy audits help to recognize the pattern of energy, form of energy consumption and amount of energy consumption so that identify the possible area of energy conservation. The load distribution or consumption patterns in the power plant and the operation of energy intensive equipments or systems were studied during the energy audit in order to identify potential areas where energy saving is practically possible.

Keywords: power plant, steam turbines, six sigma, available resources.

A Hybrid Controller for Two Area Power System

[Paper Id:EEE1024]

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Abstract

As and when there is a change in load or a disturbance on the load, a change in load frequency is caused, which is a problem that needs immediate attention for satisfactory performance of power system in terms of reliability, quality and continuity. Along with conventional controller this paper proposes a hybrid controller for two area power system. A fuzzy controller performance is compared with conventional, most commonly used PI controller. The untrained fuzzy controller operation is hybridized with particle-swarm optimization algorithm for load frequency control for an improved response. Analysis done and the algorithms applied are shown for a two area power system which can be extended to multi area power system. The performance is verified through simulation for the application of PI, fuzzy and hybrid controllers and the comparison is presented.

High Pulse Converter for Reduction of Harmonics

[Paper Id:EEE1025]

A paper presented by: Dr R.Kiranmayi
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Abstract

By reducing harmonic content, transmission can be made more reliable. As harmonic content affects all elements of transmission, reduction of content to the minimum level is most desirable. Performance of high pulse converter applied to HVDC transmission is illustrated, as HVDC transmission is made more feasible by reducing converter station harmonics. The performance of diode based 48 pulse converter is compared with the basic diode based six pulse converter through simulations. The simulations show that the harmonic content is within the IEEE specified standards. Simulations are also carried out for a practical application.