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KEYNOTE SPEAKER

Dr. Azilawati Jamaludin

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UTILIZATION OF BRIQUETTE CHARCOAL FROM MIXTURE BIOMASS FUEL AS ALTERNATIVE ENERGY SOURCES IN SMALL INDUSTRIES

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Abstract.
In line with the increasing demand of energy, the development of alternative energy resources must continue be done. Although that function is to overcome the previous energy,even verified and varied of oil or fuel with seek new alternative energy resourses . Average price of small industry make the primary energy source of kerosene and firewood, which is in its production process requires considerable energy and fuel costs are high. Therefore, the needed to find green energy sources as alternative energy that can reduce the industry's dependence on petroleum industry and firewood that could have a negative impact on the planet. One of them comes from a mixture of biomass fuels, such as waste coconut shells, rice husk / straw, corn cobs, sawdust and chainsaw. Hazardous waste is often thrown away. When so many benefits, one of which could be used innovation as a raw material for making charcoal briquets. The charcoal briquettes will be used as an alternative energy for small industries as the main energy source. The mixture of waste BIOMASS, such are formed from molecules of glucose, form cellulose molecules which are large, thus forming a structure that is bonded by a substance called lignin, a substance which is expected in addition to a resin. It is also to make the composition of a fuel that is not much different from other fuels.
Keyword:
Biomass fuels, green energy, alternative energy, lignin, resin

Real World Performance of Low Energy Houses in Scotland

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Abstract
The drive toward energy reduction has resulted in significant changes in the ways that houses are designed and constructed. Whilst it is common for demonstration projects to be well evaluated, routine evaluation of buildings is rare in the construction industry and so very little is known about the real world performance of these dwellings when they become mainstream. This paper reports the outcomes of a series of 7 Building Performance Evaluation projects that undertook monitoring of contemporary low energy buildings over a 2-year period. The results show that there

were significant gaps emerging between design expectations and actual energy consumption, with consumption up to 4 times higher than predicted values. The paper discusses the causes of these gaps which include fabric defects, problems with installed energy and ventilation systems, and occupant behaviours.

CELEBRATION FOR ALL

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Abstract
My Research on festivals around the World will sure give us a chance to plan better tomorrow and talk about the Future of the Past in terms of Sustainable Development. Designing more than One MillionSquare Feet area prioritizing Passive Architecture has been key concern and main area of Focus.
Area of focus will be Social Responsibility towards architecture and creating awareness about sensitivity towards Sustainable Environment.
I anticipate that my Research on World Festivals will be beneficial for all age groups developing the same module will result in planning a public space for all.
The title of the Project will be " Celebration For All"
The research is originating from the indigenous context and environment. Vernacular Architecture and indigenous materials will be used in the development of the project.
The research has designed in a way that it will ensure resilient infrastructure and make rural settlements and surrounding area safe, resilient and sustainable.
Consequently, this can provide immaculate opportunities, improving the social interaction of the area by promoting local crafts, vernacular architecture and indigenous materials of that region.. Sustainable proposal will be energy efficient. The design solution will aim to provide building improvement and infrastructure.
Keywords:
Festivals, Celebration, Vernacular , Indigenous, Sustainable

Soheir M. Hegazy
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Eco Friendly Architecture – The New Orientation of the Sultanate of Oman

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Abstract
In developed countries, the issues of Green architecture and sustainability practices have been one of the concerns of building professionals and the community since many years. On the contrary, in spite of having more serious relevant problems in the developing countries, the same issues are rarely considered in new constructions, in addition these concepts are beyond public awareness. The Sultanate of Oman is one of the countries with its national economy mainly based on costly nonrenewable energy resource, oil. In addition, the recent plummet in the price of fossil fuel ushered Oman to seek alternative energy resources, and to think of adopting new policies. The Sultanate being well known internationally in the field of environmental conservation, adopted a new orientation. The said issues were included in the eight 5 year plan (2011 – 2015) as energy conservation, environmental protection, and development of renewable energy resources were said to be priorities of the

government. Subsequently, the Research Council (TRC) announced the national competition for Eco House Design. Five examples of the Eco House were designed and constructed during the first phase, while the second phase is currently underway. This research aims to shed light on this remarkable Omani experience among the developing countries to all the professionals, scholars, students, decision makers, and other practitioners. Furthermore, it will be a tool for disseminating the green and sustainable issues among the Omani and Gulf region people. The research succeeded in outlining the design criteria of eco-friendly architecture and clarifying the steps taken by the Omani government to adopt the green and sustainability issues as an example to the similar countries. In addition, through a comparative analytical study, two examples of the Eco-houses in arid zones were provided.
Keywords:
Eco House – Energy efficient house –Eco House design criteria – Eco House competition

Mukesh kumar GICECG1703059	**Fuel Quality of Biodiesel from Chlorella Protothecoides Microalgae species** **Mukesh kumar** **Alternate Hydro Energy Centre (AHEC), IIT Roorkee, Roorkee (uutrakhand) India.** **Abstract** Depleting fossil fuel resources coupled with serious environmental degradation has led to the search for alternative resources for biodiesel production as a substitute of Petro-diesel. Currently, edible, non-edible oils and microalgal plant species are cultivated for biodiesel production. Looking at the demerits of edible and non-edible oil resources, the focus is being given to grow microalgal species having high oil productivities, less maturity time and less land requirement. Out of various microalgal species, Chlorella protothecoides is considered as the most promising species for biodiesel production owing to high oil content (58 %), faster growth rate (24–48 h) and high biomass productivity (1214 mg/l/day). The present paper reports the results of optimization of reaction parameters of transesterification process as well as the kinetics of transesterification with 97% yield of biodiesel. The measurement of fuel quality of microalgal biodiesel shows that the biodiesel exhibit very good oxidation stability (O.S) of 7 hrs, more than ASTM D6751 (3 hrs) and EN 14112 (6 hrs) specifications. The CP and PP of 0 and -3 °C are finding as per ASTM D 2500-11 and ASTM D 97-12 standards. These results show that the microalgal biodiesel does not need any enhancement in O.S & CFP and hence can be recommended to be directly used as MB100 or its blends into diesel engine operation. Further, scope is available for the production of binary blends using poor quality biodiesel for engine operation.
Amy Balcita GICECG1703060	**Classification of Tropical Cyclone Related Tweets using Support Vector Machines** **Amy Balcita** **DMMMSU** **Open University System, La Union, Philippines** **Thelma Palaoag**

Global Research & Development Services

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ABSTRACT

The Philippines is subjected to an average of 20 tropical cyclones per year according to the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). It is highly prone to disasters resulting from extreme natural events like tropical cyclones, monsoon rains, earthquakes, tsunamis and volcanic eruptions. Recently, social media services like Twitter have received much attention in the field of disaster response. During disaster, people through their tweets report about missing or found people, buildings or roads damaged, utilities or services interrupted, information about needs and shelters and supplies such as food, water, clothing, medical supplies, etc. In this paper, we perform tropical cyclone tweets classification using Support Vector Machines during the Super Typhoon Lawin and Typhoon Marce then analyze these tweets using text-mining methods and tools. The proponents were able to set up that it is possible to identify tropical cyclone victim-related tweets extracted in Twitter and Support Vector Machine is efficient enough to do so. The Phase 2 of this research involves more on the challenges of extracting location from the social media data to produce relevant information graphics/maps to support disaster response. We would like to find out if these infographics may help official responders develop stronger awareness of the disaster. Likewise, with the use of the maps, disaster managers may have an operational picture of the disaster and be able to act quickly in their response operations.

CCS Concepts
• Natural Language Processing → Data mining;
Keywords
Machine Learning, Disaster, Classification, Twitonomy

Xiaonan Tang GICECG1703063	Using travertine in pervious pavement to control urban-flooding and storm water quality

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ABSTRACT

The conventional methods for controlling urban-flooding are to build raceway networks to transfer flood water away as quickly as possible. However, due to fast increase of urban population, the conventional methods are facing some problems especially when rainfall intensity is higher than design expectation. The main reason for such problems are due to impervious surfaces. Therefore, pervious pavements, such as porous asphalts or pervious concrete blocks, are now recommended to use by environmental engineers. Compared with conventional pavement surfaces, pervious pavements have lots of benefits although they are relatively expensive to build. This paper introduces the mineral rock of Travertine as the materials for pervious pavements, and describes an experimental model to determine the inflation patterns

and storm water quality improvement in flood precipitating simulation.

The results indicated that Travertine pavement can not only decrease more than 90%of Copper, Lead and Zinc but also play an important role in urban-flood management with a 50% decrease of storm water.

KEYWORDS:

Pervious Pavement, Pollutants, Travertine, Urban flooding, Water quality.

EVER INCREASING ELECTRICITY DEMAND OF PAKISTAN AND FUTURE POWER GENERATION OPTIONS

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ABSTRACT

Globally development of any todays' society is measured by its energy consumption. The energy demand of Pakistan is mainly fulfilled by fossil fuels. Since Pakistan does not have enough oil production capacity and has a low quality of coal so a large amount of oil and coal is imported to the country. In summer season energy short fall even reaches to 50% of the demand because of high fuel prices and limited capacity of generation. Today Pakistan is at 457 Kilo watt hour per capita electric energy consumption. Whereas energy demand of Pakistan is increasing at the rate of 10% per year. Due to Rapid increase of fuel prices and production of greenhouse gases, use of clean and sustainable energy is current need of our society. Pakistan is very rich in renewables and has a massive potential of exploration. Which can not only satisfy current energy demand but also enable country to trade power to neighboring countries. This paper examines each available renewable energy source in terms of availability, capacity, and cost. Each energy source is reviewed from authentic sources and previous literature. It is estimated that country has wind power potential of 50,000 MW with average wind speed of 7 m/s at 80 m height in coastal areas, it is appraised that the country has solar potential of about 5 kWh/m2/day to 7 kWh/m2/day and the total available hydel potential is more than 100GW. ESMAP has published Pakistan solar atlas which is validated by 9 ground based weather stations. They have also published Pakistan atlas for biogas, which estimates that country has total capacity of 5.7 GW of biogas. Proper mix of these energy sources with existing ones can reduce country's energy and economy problems.

Solar Cells Performance Reduction under the Effect of Dust in Jazan region

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Abstract

The accumulation of dust on the solar cells panels worsens the situation and lowers the efficiency of the solar cells day by day especially in the regions known by their high rate of dust, low frequency and intensity of rain. The accumulated dust on the solar cells panel blocks the cells from the sun's rays and act as a screening effect as shown by the calculated spectral transmittance of dust which decreases the performance of the solar cells over time until the cell panels are cleaned manually or

by rain. The tilt angle of the solar cell panels affects considerably the amount of accumulated dust on the surface of the panels.

The study focuses on the effects of dust accumulation on photovoltaic solar panels in Jazan region. The effect is tested in outdoor measurements and it was found that regular dust accumulation reduces the solar cells efficiency by about 10% for an exposure time of 16 weeks. Moreover the tilted panel with an angle of 30o receives more dust than the panel tilted by 50o which means higher efficiency loss for the lower tilted panel. The efficiency loss is significant of large of annual monetary losses. This study can be considered as a reference to predict the level of degradation of any photovoltaic system that might be installed in the Jazan region and also to estimate the real cost include the cost of the solar panel cleaning.

Keywords:
Solar cells, Dust accumulation, efficiency, transmittance

Vertical Greening Systems as a type of Green Infrastructure Techniques

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Abstract
Using Vertical greening system such as; Green roofs and walls as a type of Green Infrastructure techniques, maximizing Green Areas and Sustainable Architecture are very important to the ECO-System However much of them has been degraded according to human behavior toward environment, There are many ways to solve the environment problem and restoring green areas; first to stop abuse and think green, second restoration phase and change the idea of construction buildings to green and sustainable buildings, fourth reusing and recycling, finally monitoring and maintenance to guarantee success..

The main aim of the paper develops is How can we use Vertical Greening systems such as; Green Walls and Green Roofs as a type of green infrastructure techniques to solve the problem of the lake of green spaces, maximize the indoor and outdoor air quality, saving energy and integrating natural vegetation with building construction.

Methodology includes literature review and analytical examples. Research is expected to conclude some recommendations to use Vertical Greening systems as a type of green infrastructure techniques and knowing the impact of using it.

Keywords
Green Infrastructure, Vertical Greening Systems, Recycling and Reuse and Green Buildings

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Application of sustainable electrode material for bio electricity generation from waste water using Microbial fuel cell (MFC)

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Abstract:
The paper will demonstrate the technical and economic feasibility of application of sustainable electrode material for bio electricity generation from waste water using Microbial fuel cell (MFC) which will evaluate the efficiency and effectiveness for power generation. The paper will cover the application of various sustainable electrodes in MFC for power generation which will be adopted to make an eco-friendly system. The purpose of application of various electrodes includes process modifications and engineering approaches. It comprises existing technologies with new advancement technology at all stages of the process.This paper also evaluate the reliability of technologies for small and large system to make the system cost-effective. It will also demonstrate how sustainable electrode will work and show that the "MFC for power generation" can operate with positive economical balance through application of sustainable electrode. Thus, future prospects of MFC should be directed not only how to economically improve waste water treatment but also demonstrate how to effectively commercialize such economically sounded 'sustainable electrode in different industries.
Keywords:
Sustainable electrode, bio electricity, waste water, Microbial fuel cell (MFC)

Solar Vapor Generation by Commercial Black Polyurethane Sponge

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Abstract.
Solar irradiation is the most renewable and abundant energy resources on Earth. Efficient utilization of solar energy has been of great importance as energy and environment issues become serious. Solar-driven water evaporation has attracted extensive attentions and emerged as a promising method for solar energy usage and realizes fresh water production in the sustainable field. The traditional evaporation process mainly heats the whole bulk water, which suffers from poor efficiency due to the heat loss. As water evaporation is mainly a surface process, localizing heat on the surface is of crucial importance to reduce energy loss and improve the solar-heat conversion efficiency.

Recently, in order to efficiently converse light into heat, a large amount of new materials structures based on the metallic plasmonic nanoparticles, carbon-based materials such as graphene, carbon nanotube, graphite oxide and carbon black have been extensively investigated to convert solar energy. However, the fabrication process of these solar absorbers is often not simple enough and the non-ideal cost limits their practical applications. In our work, we applied the low-cost, recyclable commercially available black polyurethane sponges as the solar absorbers for the enhanced solar evaporation. The porous structure for liquid transport, low thermal conductivity and black property make it available for efficient solar vapor generation. The black polyurethane sponge used for this study is the same as those common package materials. Reutilization of these materials for solar vapor generation provides a quite attractive idea for the sustainable development of resources and environment. A one-step hydrophilic treatment by dopamine solution was applied to improve the wettability, leading to an evaporation efficient of 52.2%. Compared with natural evaporation process, the evaporation rate has been achieved more than 3 times higher.

Keywords:
Solar evaporation, heat localization, black polyurethane sponge, solar energy

Column study for the transport of a soybean-oil nanoemulsion in groundwater

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Abstract.
Chlorinated organic solvents are common pollutants in groundwater contamination. In-situ groundwater remediation technologies include chemical, physical and biological treatments. Due to its higher cost effectiveness for remediating low-level contaminations, biological remediation is probably more suitable than chemical and physical treatment. Furthermore, anaerobic biodegradation is more feasible than aerobic for removing highly chlorinated compounds. However, implementation of anaerobic bioremediation often lack of enough electron donors. Thus, researchers are

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developing all different kinds of electron donors such as glucose, formate, acetate, lactate, ethanol, vegetable oil emulsion, etc. Currently, on the international market, most commercially available emulsion products are either in solid form or as an emulsion with an average oil droplet size larger than 500 nm. Such large size oil droplets can clog the pores and decrease hydraulic conductivity of the aquifer. Therefore, the objectives of this study were to (1) making a fluorescent soybean oil nanoemulsion with an average oil-droplet size less than 100 nm; and (2) monitoring the concentration profiles of this nanoemulsion in columns packed with uniform and non-uniform glass beads, and (3) modeling the eluent concentration profiles. By using traditional one-dimensional solute transport model, we successfully simulate the elution curve of the emulsion concentration and the R2 of the uniform-bead packed and nonuniform-bead packed columns were 0.984 and 0.824, repetively. After transport experiments, the surfaces of the glass beads were observed under scanning electron microscope and a layer of nanoemulsion were sorbed on the beades. The result suggested that nanoemulsion may undergo the processes of sorption, desorption, and reemulsification, which are much more complicated than those reported in literature before.

Keywords:
Nanoemulsion; Bioremediation; Column study; Fluorescence monitoring; One-dimensional transport model

Dr. Dhirendra B. Singh GICICRST1703052	**Cancer Chemoprevention** **Dr. Dhirendra B. Singh** **Dr Shakuntala Misra National Rehabilitation University, Moohan Road Lucknow Uttar Pradesh India** **Abstract.** **Types of Treatment** **Surgery** **Radiation Therapy** **Chemotherapy** **Immunotherapy** **Targeted Therapy** **Hormone Therapy** **Stem Cell Transplant** **Personalized medicine** **Cancer Chemoprevention** **Chemotherapy is routinely used for cancer treatment. Since cancer cells lose many of the regulatory functions present in normal cells, they continue to divide when normal cells do not. This feature makes cancer cells susceptible to chemotherapeutic drugs.** **Chemotherapy** **Chemotherapy** **• The treatment of cancer using specific chemical agents or drugs that is destructive to malignant cells and tissues. The term comes from two words that mean "chemical" and "treatment."**

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NseAbasi NsikakAbasi Etim
GICICRST1703053

Scrotal Morphometric Characteristics Of West African Dwarf Rams Administered With African Marigold (Aspilia Africana) Plant Extract

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ABSTRACT
West African Dwarf (WAD) rams aged 6-9 months, average weight of 4.65 kg; n=24 were used to study scrotal morphometric characteristics of rams administered with aqueous Aspilia africana extract. The experiment was in a Completely Randomized Design (CRD) and lasted for 6 months. The rams were randomly assigned to four (4) treatment groups, designated T1 T2 T3 and T4. There were six (6) rams per treatment; each treatment was replicated 3 times with 2 rams per replicate. Rams in T1 (control) received 10 ml of distilled water whereas T2, T3 and T4 were administered with aqueous Aspilia africana extract at 1000, 2000, and 3000 mg-1kg body weight, respectively. Rams in all the treatment groups were fed 2 kg of mixed forages, 500 g of the same concentrate diet daily and water were supplied ad libitum. The scrotal morphometric characteristics of the rams were measured weekly for 4 weeks after administration of the extract. Scrotal circumferences and lengths were measured with the help of flexible tape, which was passed round the broad part and length of the scrotum, respectively. Scrotal volume was estimated by the volume of liquid displaced, by immersing the whole scrotal sac of a standing ram in 1 litre container filled with warm water. The quantities of feed consumed by the animals daily were also measured. Results of the study revealed significant differences (P<0.05) in the scrotal circumferences and scrotal volumes of the rams among the various treatment groups. There were dose-dependent decreases in the scrotal circumferences (19.67cm, 18.83cm and 16.67cm) and scrotal volumes (175.00ml, 100.00ml, 50.00ml) for rams in T2, T3 and T4, respectively. Whereas, rams in the control group (T1) had the highest mean values for scrotal circumference (21.83cm) and scrotal volume (383.33ml). The findings of the study showed that Aspilia africana might have deleterious effects on fertility of rams administered with it. Thus, it is recommended that Aspilia africana be fed to animals not meant for breeding until an anti-dote which can suppress its anti-fertility effect is discovered.
Keywords:
Aspilia africana, scrotum, extract, fertility, rams,
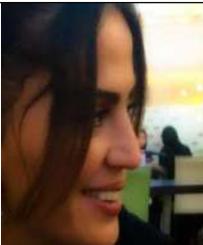
Ilhame Amirali
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A PRIORI ESTIMATES OF SOLUTION OF PARAMETERIZED SECOND-ORDER BOUNDARY VALUE SINGULARLY PERTURBED PROBLEM
ILHAME AMIRALI

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ABSTRACT
In this talk, we discuss a parameterized singularly perturbed second order quasilinear boundary value problem. Asymptotic estimates for the solution and its first and second derivatives are also established. The theoretical estimates are

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	illustrated by some numerical example. Keywords Parameterized problem, Asymptotic bounds, Singular perturbation and Boundary layer.
Haththotuwa Gamage Nishadhi Dimalka **GICICRST1703055**	**Administrative and Financial Challenges encountered by the Public Universities in Sri Lanka** **Nishadhi Haththotuwa** **University of Colombo** **ABSTRACT** The emergence of the university system in Sri Lanka with a single university in 1942, currently comprises of 15 universities. The University Grants Commission being its pinnacle. This paper will explore and critically review the pressing administrative and financial issues in public universities in Sri Lanka. Unlike in advanced higher education systems in the Commonwealth countries, there is no normative funding system for public universities. Instead the recurrent funding among individual universities is immensely based on historical levels and the capital funding is based on negotiations between individual institutions. Attracting a pool of talented staff is a major issue. Offering low basic salaries hinders the advent of talented MBA/engineering degree holders whereas private sector rich with attractive salaries and fringe benefits is in the forefront. Figures reveal that the percentages of those who left were more than those appointed in years 2011 and 2013 in the Administrative, Finance and Administrative Others category. 10% left due to resignation. The present management and administrative capacity of universities are comparatively underdeveloped in recently established universities in the lagging regions. Sadly till 2013, there were no professors in the Uva Wellassa and South Eastern Universities. Providing spacious offices and absenteeism are other pressing concerns. Keywords: Administrative, financial, challenges, public universities, Sri Lanka
Mahmud, Abba. Tahir **GICICRST1703056**	**Comparative Sulphate Resistance of Pozzolanic Cement Mortars** **Mahmud, Abba. Tahir** **Department of Building Technology, Federal Polytechnic, Bauchi. Nigeria.** **Garba, Magaji. Muhammad** **Department of Building, Ahmadu Bello University, Zaria. Nigeria.** **ABSTRACT** This is report on experiment out to compare the sulphate resistance of sand mortar made with five different pozzolanic cement. The pozzolanic cement were prepared by blending powered burnt bricks from the Adamawa, Makurdi, Kano, Kaduna and Niger bricks factories with ordinary Portland cement in the ratio 1:4. Sand – pozzolanic cement mortars of mix ratio 1:6 and 1:3 with water-cement ratio of 0.65 and 0.40 respectively were used to prepare cubes and bars specimens. 150 mortar cubes of size 70mm x 70mm x 70mm and 35 mortar bars of 15mm x 15mm x 100mm dimensions were cast and cured for 28 days. The cured specimens then immersed in

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the solutions of K2SO4, (NH4)2SO4 and water for 28 days and then tested. The compressive strengths of cubes in water increased by 34% while those in the sulphate solutions decreased. Strength decreases of the cubes, cracking and warping of bars immersed in K2SO4 were less than those in (NH4)2SO4. Specimens made with Niger and Makurdi pulverized burnt bricks experienced less effect of the sulphates and can therefore be used as pozzolan in mortar and concrete to resist sulphate.

KEY WORD:
Burnt brick powders, pozzolanic cement, sulphate, comparative.

Development of a Dual Axis Sun Tracking System with Astronomical Equation Program on Arduino via GPS module

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Abstract

The overall objective of this study is to design and develop a program for controlling A Dual axis sun tracking system with astronomical equation program on Arduino via GPS module. This paper discusses about mechanical structure, concept of program and algorithm base on the astronomical equation in Thailand. The concept of this tracking system is to collect GPS location and real-time data of date and time to calculate azimuth and elevation angle without another sensors, which is usually have problem of sun tracking. The dual axis sun tracking controller system develops by using an 8 bits Arduino MEGA via GPS module. This paper also compares the efficiency of the dual axis sun tracking system and a non-tracking system under the same location and environment.

Keywords:
Dual Solar Tracking System, Arduino, GPS Module

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GICICRST1703058

Energy Dependence of Effective Atomic Numbers of Oxides of Lanthanides for Photon Energy absorption

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Abstract

Effective atomic numbers ($Z_{PEA,eff}$) of selected oxides of lanthanides, such as Praseodymium oxide Neodymium oxide, Gadolinium oxide and Terbium oxide have been calculated for photon energy absorption in the photon energy region 1 to 20 MeV. The Z_{PEA}, eff values then compared with Z_{PI}, eff for photon interaction. The $Z_{PEA,eff}$ and $Z_{PI,eff}$ values have been found to change with energy and composition of the oxides of lanthanides. The variation of $Z_{PEA,eff}$ with energy exhibits the dominance in different energies, that is photoelectric absorption, Compton scattering, pair production. The maximum difference between the values of $Z_{PEA,eff}$ and

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	ZPI,eff occurs at 300 keV for all selected oxides of lanthanides. The substantial change in the values of ZPEA,eff and ZPI,eff which represents the absorbed dose. The presented data's can be helpful in the wide range of applications like radiation shielding, engineering etc. KEYWORDS: Lanthanides, Effective atomic number, Photon interaction, Photon energy absorption, Absorbed dose
Nurwarrohman Andre Sasongko GICICRST1703059	**An Automatic Milking Tool Using Membrane Nano Chitosan/Pva to Kill And Filter Bacteries on The Milk** **Nurwarrohman Andre Sasongko** Department of Chemistry, Diponegoro University, Indonesia **Nangimatun Muslimah** Department of Chemistry, Diponegoro University, Indonesia **Fajrul Falah** Department of Physics, Diponegoro University, Indonesia **Abstract** Pure milk is the one of the product from animal husbandry. The people generally consume milk in the form of processed products from the plant or processed products own by boiling to kill bacteria from pure milk. However, that method can damage the nutrients in milk so that people can't get the maximum nutrition. Chitosan is a polymer compound derivative of chitin. These compounds have the amine functional group (-NH2) are positively charged and highly reactive so as to bind to the cell wall of bacteria that are negatively charged. Chitosan is widely used as an anti-bacterial. AC MART was an innovative milkmaid modified chitosan membranes porous nano to take milk from the farm animals that produce milk without bacteria. Based on this innovation, the bacteria in the milk can be killed and filtered by nano chitosan membrane without damaging the nutrient content. Pores chitosan itself was made to the size of 10-150 nm with the aid of doping polyvinyl alcohol. chitosan membrane porous nano used to kill bacteries and filter bacteries that have size of 0.5-5μm. AC MART beneficial to produce milk which contains optimum nutrition and improve the economy of farmers. Keywords: Chitosan, Nano Membrane, Milk, Polyvinyl Alcohol, filtration
ALY AUDU FADA GICICRST1703060	**The prospect of Tour Operators in Sustainable Tourism Development in Bauchi State, Nigeria** **ALY AUDU FADA** Leisure and Tourism Management Department, Federal Polytechnic, Bauchi **Abstract** The study aimed to assess the prospect of tour operators in sustainable tourism development in Bauchi state, Nigeria. The specific objectives of the study is to find out the main functions of tour operators in Tourism business, to identify the roles of tour operators in sustainable tourism development, to find out the challenges of tour operators in tourism business in Bauchi state. The researcher reviewed literatures from different scholars that are related to the research topic. The instrument uses for the data collections is the questionnaire method, the populations for the research are

some tour operators in Bauchi state, the staff of Bauchi state tourism Board, staff of leisure and tourism management department of the federal polytechnic Bauchi and some tourist attractions in the state. A total of 100 questionnaires were distributed to the sample populations, were 20 was given to staff of tourism board, 20 to federal polytechnic Bauchi staff, 20 to tour operators in Bauchi metropolises, 40 to tourist attractions. While secondary data were obtain through textbooks, magazines, and journals. 100% of the respondents indicated that tour operators are very significant in sustainable tourism development.60% of the respondent agreed that tour operators have some challenges such as lack of support from the public sector, lack of awareness between the operators and the products and services providers and lack of qualify manpower in the business. The researcher recommends the followings, public sector should be involved in tour operation business and there should be good publicity about the activities of the business in Bauchi state. In conclusions this research has revealed good fact about the need for stakeholder's relations in tour operations business and the public.

KEY WORDS-Prospects, Sustainable, Tourism, Development.

Analysis of a Redundant System with Maximum Repair Time and Priority

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GICICRST1703063

ABSTRACT
The main goal of the present study is to analyze a redundant system by using the concept of priority to operation over Preventive Maintenance (PM) and Maximum Repair Time (MRT). For this purpose, two stochastic models are developed. The concept of MRT is studied in the second model in addition to the assumptions of first model. There is a single server who visits the system immediately as and when required. The server takes the unit under preventive maintenance after a maximum operation time at normal mode if one standby unit is available for operation. If the repair of the failed unit is not possible up to an MRT, failed unit is replaced by new one. The failure time, maximum operation time and MRT distributions of the unit are considered as exponentially distributed while repair and maintenance time distributions are considered as arbitrary. Various measures of system effectiveness are obtained by using the technique of semi-Markov process and RPT. To compare the performance of stochastic models graphs for several reliability measures are drawn.

KEYWORDS: Redundant system, Preventive maintenance, Operation, Maximum Repair Time

Payel Choudhury
GICICRST1703064

Application of sustainable electrode material for bio electricity generation from waste water using Microbial fuel cell (MFC)

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Abstract

The paper will demonstrate the technical and economic feasibility of application of sustainable electrode material for bio electricity generation from waste water using Microbial fuel cell (MFC) which will evaluate the efficiency and effectiveness for power generation. The paper will cover the application of various sustainable electrodes in MFC for power generation which will be adopted to make an eco-friendly system. The purpose of application of various electrodes includes process modifications and engineering approaches. It comprises existing technologies with new advancement technology at all stages of the process.This paper also evaluate the reliability of technologies for small and large system to make the system cost-effective. It will also demonstrate how sustainable electrode will work and show that the "MFC for power generation" can operate with positive economical balance through application of sustainable electrode. Thus, future prospects of MFC should be directed not only how to economically improve waste water treatment but also demonstrate how to effectively commercialize such economically sounded 'sustainable electrode in different industries.
Keywords:
Sustainable electrode, bio electricity, waste water, Microbial fuel cell (MFC)

Dr. Monika Saini GICICRST1703067	**New Ratio Estimators Using Stratified Random Sampling and Stratified Ranked Set Sampling**

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Abstract:

The aim of this paper to proposes ratio estimators for the population mean by using auxiliary information efficiently under stratified random sampling (SRS) and stratified ranked set sampling (SRSS). We obtain the bias and mean square error (MSE) for the proposed estimators and show that the proposed estimator under SRSS is more efficient than the estimator under SRS. The results have been illustrated numerically through simulation study.
Keywords:
Finite Population Stratified Random Sampling Stratified Ranked Set Sampling, Auxiliary Variable Ratio Estimator Efficiency.

Mahmudah Salwa Gianti GICICRST1703068	**Fiber Grating Method in Fiber Optic Sensor as a Prototype of Mapping Sensor by Pressure Measurement**

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Global Research & Development Services

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Abstract
The development of smart-mat as a mapping sensor has the growing interest and influenced by a variety of human needs, from medical to smart-house . The main objective of this research is to point out the feasibility and effectivity of mapping sensor using pressure distribution by a surface load analysis. We developed the fiber optic sensor (FOS). The sensor used multimode optical fiber with a grating and arranged to form rows and columns that are perpendicular and embedded in rubber which called pad, as a small part of the smart mat. Grating method in optical fibers makes the sensor more sensitive to disturbance. Loss on the grating fiber increases with increasing of pressure value so that the intensity will decrease. Reduction in the intensity of light is then obtained mapping in areas exposed to the pressure caused by the load or force from outside. The results of this study has indicated that the fiber optic sensor can detect the position of the field that exerts a force on the pad.
Keywords :
 fiber optic sensor, grating, mapping, position, smart mat

Wenjing Wang GICICRST1703069	**Novel amine impregnated graphene/SBA-15 composite with good stability for CO2 capture**

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Abstract
Carbon dioxide (CO2) is the major greenhouse gas that makes the largest contribution to global warming. Worldwide research activities have focused on developing different types of physical and chemical adsorbents for CO2 capture. Amine functionalized mesoporous silica combining the merits of physisorption and chemisorption is one of the most promising materials for CO2 capture. However, due to the low thermal conductivity of mesoporous silica coupled with high adsorption heat of chemisorption, the thermal stability and cycle stability are severe issues that should be considered for practical CO2 capture. The introduction of graphene with superior properties, large theoretical specific surface area of 2630 m2 g-1 and excellent thermal conductivities, could be an effective way to solve the problem of stability. SBA-15 is a mesoporous silica, which has well-ordered hexagonal mesopore structure. However, to the best of our knowledge, the feasibility of graphene introduction to SBA-15 for CO2 capture need further explore. In this work, novel nanocomposites of graphene(G) /SBA-15/hyperbranched polymer(HBP) were synthesized and texted as CO2 adsorbent. A capacity of up to 1.50 mmol g-1 was obtained by G/SBA-15/HBP (50), indicating the presence of graphene within the system increased the capacity of conventional SBA-15/HBP to adsorb CO2 by 51.51%. SEM images and N2 sorption analyse indicate the introduction of graphene reduced the agglomeration and HBP could disperse more evenly into G/SBA-15. What's more, G/SBA-15/HBP (50) was relatively stable for 10 thermal cycles. The presence of graphene in the nanocomposite efficiently stabilize HBP, improving cycle stability and adsorbent longevity.
Keywords
 CO2 capture, mesoporous silica, graphene, amine functionalization

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Muhammad Fadly GICICRST1703071	Low Resistivity Reservoir Evaluation on Air Serdang Field, Talang Akar Formation, South Sumatra Sub Basin

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JOB Pertamina-Talisman Ltd

Bayu Sapta Fitriana
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Abstract

The Air Serdang field is one of the hydrocarbon field that has been producing a big amount of crude oil which is owned by The Joint Operation Body Pertamina-Talisman Ltd. The Air Serdang field is located on The South Sumatra Basin, South Sumatra Province, Indonesia. One of the reservoir on the field is Talang Akar Formation which consists of six main facies. The determination of facies and their depositional environment were done by using the core and cutting data with the thickness of 43 meters at the depth of 1565 – 1608 meters which are the data from the well X-1, X-2, X-3, X-4, and X-5. The overall depositional environment of the formation is considered as a deltaic system. The litostratigraphic correlation shows an increasing thickness from the south to the north. Moreover, the reservoir in the research area is considered as the low resistivity reservoir with the high potential of hydrocarbon. The petrophysics analysis that have been done were Shale volume, Porosity, and Water saturation, by processing the wireline log data correlated with the core data. In addition, The Least Square Minimization method which is the modification of Simandoux method was also been done even though the water saturation using the Indonesian Equation results was better. Furthermore, according to the petrophysical properties, there are two facies that considered as a good hydrocarbon reservoir namely the high burrowing very fine sandstone and the fine sandstone with sligh mud drapes. The conclusion is that both facies has a low resistivity reservoir characteristics such as dispersed clays, burrowing filled with pirites, very high salinity of water formation, and the microporosity up to 4%.
Keywords:
facies, low resistivity reservoir, petrophysics.

Amy Balcita GICICRST1703073	Classification of Tropical Cyclone Related Tweets using Support Vector Machines

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ABSTRACT

	The Philippines is subjected to an average of 20 tropical cyclones per year according to the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA). It is highly prone to disasters resulting from extreme natural events like tropical cyclones, monsoon rains, earthquakes, tsunamis and volcanic eruptions. Recently, social media services like Twitter have received much attention in the field of disaster response. During disaster, people through their tweets report about missing or found people, buildings or roads damaged, utilities or services interrupted, information about needs and shelters and supplies such as food, water, clothing, medical supplies, etc. In this paper, we perform tropical cyclone tweets classification using Support Vector Machines during the Super Typhoon Lawin and Typhoon Marce then analyze these tweets using text-mining methods and tools. The proponents were able to set up that it is possible to identify tropical cyclone victim-related tweets extracted in Twitter and Support Vector Machine is efficient enough to do so. The Phase 2 of this research involves more on the challenges of extracting location from the social media data to produce relevant information graphics/maps to support disaster response. We would like to find out if these infographics may help official responders develop stronger awareness of the disaster. Likewise, with the use of the maps, disaster managers may have an operational picture of the disaster and be able to act quickly in their response operations. **CCS Concepts** • Natural Language Processing → Data mining; **Keywords** Machine Learning, Disaster, Classification, Twitonomy
Stephan Upsch **GICICRST1703074**	**Characterization of valuable information from Social Media Networks during Natural Disasters** **Stephan Kupsch** **DMMMSU – North La Union Campus, Bacnotan, Philippines** **ABSTRACT** **Social Media Networks (SMN) is an invaluable source of almost any information that opens up access to an effective and irrepressible real-time mechanism to broadcast information all over the globe. Although some of the data may be very useful, the majority of social media data holds no actual weight for those who are searching for information. Intrinsically, the focus of the research is to identify and evaluate data on various SMN that are pouring into databases and to extract important information for a faster disaster recovery and response.** **Appropriate mechanisms must be in place to help both citizens and disaster management authorities to ensure about reliability and accuracy of information posted on social media. To directly respond to the problem, the main objective of the research is to develop an analysis tool with set of elements for use in machine learning calculations. Instructive refers to posts and tweets that would provide valuable and actual information to netizens, on the other hand, casual posts were defined as having no tangible information and it would not be deemed useful to anybody who could read the post or tweet. Furthermore, this study gathers instructive posts and tweets that shall be forwarded to the administration for possible rescue. Likewise, information gathered shall be utilized to queue the affected areas for possible help and organize their needs.** **Keywords:** **SMN, Natural Language Processing, Disaster Management, Sentiment Analysis**

Caren Ventayen **GICICRST1703075**	**Social Media Role In Education For Teachers In Lingayen, Pangasinan** **Caren Orlanda-Ventayen** **Student Researcher, Student in Master of Arts in Education** **Pangasinan State University, Open University Systems** **Abstract** The born of the digital age opens wide opportunity for users explore varied kinds of information and get connected through the use of Internet. Internet provides rich resources of informations and datas that could be very vital for users what ever purpose they have either in business, work, education and for staying connected to the world trends. As it continuously grow, born of different kinds of websites such as web 2.0, could have possible potential to improve quality of instruction in education. Some basic feature of social media could have a great impact to the development of teaching learning process. Connectivity or interactivity offered by social media is an enormous attribute that attracts audience to their websites. The key concept of sharing and posting in social media may serve as an instructor and facilitator of learning one's' topics are being posted, shared and worked out. Though these attributes, how does internet or the social media being utilize to facilitate learning and to instruction? This study will focus on the role of social media in education for teachers teaching in high school in Lingayen, Pangasinan. It sought to answer and discover the use of social media in teaching by providing the profile of the teachers in Lingayen, Pangasinan.,the role of social media in education in different school activities and acceptability for the Role and usage of social media in education.
Yan Zhang **GICICRST1703076**	**Optimal Asset Liability Management with Stochastic Appreciation in Liability and** **Levy Jump** **Yan Zhang** **Department of Mathematics, Faculty of Science, Mahidol University** **272 Rama Road, Phayathai District, Bangkok 10400, Thailand** **Abstract** This paper investigates asset liability management problem with stochastic appreciation in the liability under mean-variance criteria in a jump diffusion market. Specially, the author considers one risk-free asset, one risky asset and one liability, where the price of the risky asset is governed by exponential Levy process, the liability evolves according to a Levy process and its appreciation $\mu(t)$ is not a deterministic function of time t, instead, it evolves according to a mean-reverting stochastic differential equation. By applying the Lagrange duality theory, Hamilton-Jacobi-Bellman equation approach and stochastic dynamic programming techniques, we derive analytical closed-form expressions for optimal investment strategy based on the solution to a system of partial differential equations, and the efficient frontier. Keywords: Asset Liability Management; Mean-Variance Criteria; Levy Jump Model; Stochastic Appreciation in Liability; Hamilton-Jacobi-Bellman Equation

| Mohammed Sherfuddin GICICRST1703078 | **Review on Security and Privacy Management**

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Abstract-
Social networking sites such as Facebook and Twitter have gained more popularity in recent years. Because of its large user base, and large amount of information, they become a potential channel for attackers to exploit. Many social networking sites try to prevent those exploitations, but many attackers are still able to overcome those security countermeasures by using different techniques. Protecting personal information privacy has become a controversial issue among online social network providers and users. Most social network providers have developed several techniques to decrease threats and risks to the users' privacy. These risks include the misuse of personal information which may lead to illegal acts such as identity theft. This study aims to measure the awareness of users on protecting their personal information privacy, as well as the suitability of the privacy systems which they use to modify privacy settings. Survey results show high percentage of the use of smart phones for web services but the current privacy settings for online social networks need to be improved to support different type of mobile phones screens. Because most users use their mobilephones for Internet services, privacy settings that are compatible with mobile phones need to be developed. The method of selecting privacy settings should also be simplified to provide users with a clear picture of the data that will be shared with others. Results of this study can be used to develop a new privacy system which will help users control their personal information easily from different devices, including mobile Internet devices and computers. Social network users may not be aware of such threats. Therefore, this paper will present a survey on different privacy and security issues in online social networks. The issues include privacy issues, identity theft, social networks spam, social networks malware, and physical threats
Keywords
Social network, Privacy issues, Security issues, Threats, Identity Theft, Spam, Malware, Facebook worms, Twitter Worms |
| | **Support Vector Machine and Social Sensing for Disaster Response Assessment**

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ABSTRACT
Social sensing is based on the idea that communities or group of people can provide a set of information similar to those obtainable from a sensor network. Classifying this huge information, produced during and after disaster could greatly help the government in making an informed situational assessment for relief operation. Support Vector Machine (SVM) were used to classify tweets from typhoon Melor using an tf-idf as an implementation of bag of words model for data representation. The tweets were gathered using the Twitter Search API, they were filtered using |

	several hashtags and keywords. Gathered tweets were preprocess and duplicate tweets were removed, the cleansed data were used to train the SVM following a ten-fold cross validation technique. This study will be helpful in identifying, analyzing, monitoring and evaluating basic needs of the affected communities, in order for the decision makers to take necessary actions and respond to the needs of the people. Keywords Data Mining, Disaster Management, Natural language processing, Social Sensing.
Dr. Asha Gupta **GICICRST1703080**	**ALMOST COMPACT SETS AND ALMOST CONTINUOUS MAPS** **KAMAL KISHORE** **ASHA GUPTA** **Associate Professor,PEC University of Technology,Chandigarh, INDIA** **Abstract** The purpose of this paper is twofold. Firstly, sufficient conditions are given under which in a regular or normal space an almost compact set becomes closed and an arbitrary union of closed sets is closed. Secondly, the conditions are investigated under which a map becomes almost continuous. Mathematics Subject Classification 2010: 54C08, 54C10, 54D30, 54D45 Keywords: Almost continuous, almost compact.
Andi Muhammad Sadat **GICICRST1703084**	**Trust in Information Sources, Prior Experience and Switching Intention;** **The examination of three competing models in service sectors** **Andi Muhammad Sadat** **Department of Business and Management** **Southern Taiwan University of Science & Technology, Taiwan** **Mei-Lan Lin** **Department of Hospitality Management** **Southern Taiwan University of Science & Technology, Taiwan** **Abstract** The main purpose of this study is to clarify the nature link of prior experience and trust in sources of information on switching intention. Investigating the relationship among those variables is essential for marketers to get valuable information about consumer decision process to switch. However, there are few empirical studies examining and comparing the relation of these variables in service based context. The present study attempts to develop and test alternative competing models which reflect divergent causal processes in telecommunication business provider in Indonesia. The hypotheses are examined through a Smart PLS2.0 using data from a sample of 287 customers in five areas in Jabodetabek-Indonesia. The results provide some evidences that both prior experience and trust in sources of information were significant predictors for switching intention. Trust in sources of information has moderation effect rather than mediation effect of prior experience on switching intention. Theoretical and managerial implications are discussed. Keywords: Trust in information sources, Prior experience, Switching intention

Shriharsh Dixit GICICRST1703085	**WASTE TO WEALTH: RICE HUSK** **Reducing the use of Fossil fuel and Carbon footprint** **Ar. Shriharsh Dixit** **Faculty of Architecture (FOA), Manipal University** **Manipal, Karnataka, India** **Abstract:** **India is second largest rice producing nation in the world. However major attention is given on the final Rice quality whereas waste generated during this process is cornered. Rice husk is a co-product generated in the rice milling procedure. This husk contains around 22% of the total rice crop weight. This rice husk is disposed off by open-air burning or dumping which causes momentous local pollution. Burning consumes large amount of fossil fuel, affecting the fertility of the soil concurrently. Indian government is promoting the use of biomass for energy purposes to substitute the fossil fuel utilization and to reduce the environmental impact caused by them. To find solution for the Rice husk disposal, it becomes essential to ensure that the process used is harming the environment least way. The site area selected for the study is Gorad village, (approximately 6 acres) located in a rural area consisting of 6 tribal padas. Research aims to use the rice husk to generate electricity in a most environmental friendly way to satisfy the electrical demands of Gorad village. To achieve this, the research is divided into three main stages- Properties, contents and potential uses of rice husk; Data collection; and Data analysis using Life Cycle Analysis approach. Assorted methods such as literature review, questionnaires and interviews with the villagers contributes in the final design output. Results from the above stages are analysed in the context of necessary policy demands, the local government guidelines, the production process of generating electricity from rice husk, the infrastructure availability and distribution practicality of the electricity.** **Keywords:** **Biomass, Electricity, Environment, Fossil fuel, Off- Grid electrification, Rice crop, Rice husk.**
Nourelhouda Mohamed GICICRST1703086	**Detection of Coastal Changes in Alexandria Governorate Using Remote Sensing Techniques** **Nour El-Houda Ahmed Mohamed** **Prof. Dr. Mohamed Sadek Eladawy** **Department of Sanitary Engineering, Faculty of Engineering, Alexandria University** **Prof. Dr. Waled Abdelazem Ibrahem Elbarky** **Department of Sanitary Engineering, Faculty of Engineering, Alexandria University** **Ass. Prof. Mamdouh El- Hattab** **Department of Natural Resource surveys, Institute of Environmental studies and Research, University of Sadat City** **Abstract** **Coastal change detection is critical in coastal zone application, so accurate detection and proper monitoring of the coast is very essential to understand the coastal process and dynamics of various coastal features which will be helpful in accessing the dynamic nature of coast .This study deals with the coastal change detection of Alexandria Governorate using two Landsat multitemporal imageries acquired in**

2002 and 2014. The study consists of several steps, the first one is the unsupervised classification which is carried out using ISODATA algorithm then separability analysis techniques using both of mean plot and divergence matrix was performed to obtain the final classes representing land cover in the study area. As a following step, the supervised classification training sites is merged with the unsupervised classification to yield a final hybrid classification images. The accuracy assessment of the classification was found to be 82.35% and 85.48% in 2002 and 2014 respectively. The change detection was performed through classification algorithms using post classification technique. The result showed an increase in water turbidity, wetlands and urban classes in addition to a loss in limestone and barren land areas.

Keywords:
Alexandria, image classification, accuracy assessment, change detection.

Prof.Dr. Y. V. Rami Reddy
GICICRST1703061

Green synthesis of Cu(OH)2 nano materials using Nymphaea Rubra leaves extract and their antibacterial activity

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ABSTRACT

The present study gives the eco-friendly green synthesis for the preparation of copper hydroxide nano materials [CuHNMs] using Nymphaea Rubra leaves extract. Bio-molecules were the responsible for the formation of CuHNMs and they found to play dual role of both reducing as well as capping agents. The synthesized CuHNMs were characterized by Fourier Transform Infrared spectroscopy (FTIR), Ultraviolet-Visible spectrometer (UV-Vis), X-ray Diffraction (XRD), Scanning Electron Microscopy (SEM), Electron Diffraction Spectrum (EDS) and Dynamic Light Scattering (DLS).

Characterization data reveals that the CuHNMs were crystalline in nature, Orthorhombic shape with an average size of 19.4 nm and Zeta Potential(Mean) was -10.0mV. The green synthesized CuHNMs were examined for its antibacterial activity and the results showed that these materials exhibits effective anti-bacterial activity against Bacillus subtilis when campared to Pseudomonas aeruginosa, Staphylococcus

aureus and Escherichia coli.
Keywords:
Green synthesis, CuHNMs, Nymphaea Rubra leaves extract, characterization and anti-bacterial activity.

Jayalalitha
Sathiyamoorthy
GICICRST1703062

EXPRESSION OF TOLL -LIKE RECEPTOR (TLR) 3, 4, 9 IN ORAL SQUAMOUS CELL CARCINOMA – ROLE IN TUMORIGENESIS

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Abstract
Oral Squamous Cell Carcinoma (OSCC) is a subtype of Head and Neck Squamous Cell Carcinoma. Annually 3, 00, 000 new cases of OSCC are diagnosed all over the world and over 20 per 1,30,000 population in India succumb to oral cancer every year. Toll – like receptors (TLRs) class of protein play an important role in innate immune system and recognise highly conserved structural motifs known as pathogen associated molecular pattern (PAMPs) which are exclusively expressed by microbial pathogens. TLR's play an important role in some of the cancers including OSCC, but the mechanism of TLR in OSCC is unclear. So, we therefore investigated the TLR 3, 4, 9 expression in OSCC using Immunohistochemistry (IHC). IHC was performed in Formalin fixed paraffin embedded (FFPE) OSCC tissue samples (n =50) with TLR 3, 4, 9 antibodies and counterstained with haematoxylin stain. The results revealed that all the above TLRs mentioned were expressed in OSCC patients. However, TLR-4 expression was comparatively higher than TLR 3 and TLR 9. Thus the Expression of TLR-4 reflects progression of OSCC, which suggests that TLR may play an important role in tumorigenesis and thus it could be used as an important therapeutic target for OSCC.
Keywords:
Oral Carcinoma, Toll-Like receptor, Tumorigenesis

Randy Joy Magno

Multilingual Detection and Analysis of Emergency and Disaster Related Tweets in Social Media

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Abstract
Philippines is considered as a disaster-prone country in Southeast Asia. Today, social media such as twitter serves as a communication outlet and majority of the post are written in English. This is a problem or gap to those who are not well-versed in foreign language or cannot even read or understand English. This study promotes the

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Ventayen GICICRST1703065	use of local language by translating the keyword using the specified language of the identified region. It will enhance and bridge the gap between the major speaking language from the local areas of the country specifically in the Ilocos Region. The tool will search disaster and emergency related keywords in local language for extraction. Social network's API and tools will be used for community detection and extraction of data. This shall analyze the properties of the community structure detected from Filipino social media users who posted about disaster in the local language. This study will determine the geo-location and community structure of the disaster and emergency related post based on the tweet's coordinates, and analyze community structure formed and compare it to actual patterns of disaster affected areas. Maps will be utilized as a crowdsource to identify the disaster and emergency related tweets in Ilocos Region. This will also improve the development and use of the tool through the multilingual Twitter data and in real-time detection of disaster-related tweets so that appropriate action may be done promptly. This paper presents the possibility of affected community which gives bigger changes of possible projecting the exact location for a reliable report to the government for faster responds.

Job Satisfaction of Teaching and Non-Teaching Personnel of Selected Higher Educational Institution

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Abstract
Employee satisfaction and retention have always been important issues for any organization. High levels of absenteeism and staff turnover can the bottom line. Few practices have made job satisfaction a top priority, perhaps because they have failed to understand the significant opportunity that lies in front of them. Satisfied employees tend to be more productive, creative and committed to their employers. Companies who can create work environments that attract, motivate and retain hard-working individuals will be better positioned to succeed in an environment that demands quality and cost-efficiency. In the light of the foregoing study, the following conclusions were drawn. Majority of the employees of an educational institution are teaching which serve as the framework of the organization, mostly dominated by females and are usually married with 1 to 3 children. Most of the respondents hold a bachelors' degree earning a salary above minimum wage within the range described by the labor department. There are some factors which involve job satisfaction other than socio-economic factors The study shows further that the areas of concern were advocated from the perspective not only of the researcher but of the teaching and non teaching personnel as well. The proposed action plan can improve the level of job satisfaction and reduce employee attrition rate of the teaching and non teaching personnel.

Anti-Cancer activity of Phytosome Loaded with Diallyldisulfide containing MethanolicAllium sativum Extract

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14th International Conference on Researches in Science and Technology (ICRST), 16-17 June 2017, Singapore
Nanyang Technological University, Nanyang Executive Centre, Singapore

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Sudarshana Deepa Vijay Kumar GICICRST1703072	**ABSTRACT** Vesicular drug delivery system like phytosomes is a widely adopted section of pharmaceutical inventions. It improves therapeutic efficacies of drug by controlled and sustained action. It aims to deliver the drug at a rate directed by need of body during the treatment period, and channel the active entity to the site of action. This is also used to improve the therapeutic index, solubility, stability and rapid degradation of drug molecules. Phytosomes are made of phytoconstituents of herbal extract that is surrounded and bounded by one or more concentric spheres of lipid layers. The purpose of this study is to synthesize economical phytosomes which will also be an effective alternative to the current medications of cancer. Methanolic extract of Allium sativum containing Diallyldisulphide along with other phenolic compounds were used for the preparation of phytosomes as it has the ability to cure and prevent the growth and division of cancer cells. Bioactive compounds present in the extract were examined by phytochemical analysis. Antioxidant activity of the extract was carried out by DPPH assay that showed that the extract was rich in antioxidants. Presence of Diallyldisulfide having the anti-cancer activity was confirmed by HPLC and GC-MS analysis. The surface morphology and the functional groups of the prepared phytosomal complex were studied by SEM and FT-IR analysis respectively. The prepared phytosome showed 100% toxicity against the cancer cell line (MCF 7) at 108.5 μg/ml. Hence, we claim that the Diallyldisulphide containing methanolicAllium sativum encapsulated in phytosome can be an effective alternate for the cancer therapies and this findings can also be extrapolated to active targeting of tumour site by attaching the targeting moiety on the surface of the phytosome. **KEYWORDS:** Vesicular drug delivery system, Phytosome, Diallyldisulfide, methanolic extract, Allium sativum, Breast Cancer, MCF-7
Autcha Hattayananont GICICRST1703081	**YARN DEVELOPMENT FROM RICE STRAW TO COMMERCIAL** **Autcha Hattayananont** Department of Fashion Clothing and Textile Design, Faculty of Home Economics, Rajamangala University of Technology Phra Nakhon, Bangkok 10300, Thailand **Praparnporn Theeramongkol** **Bussara Sioyraya** **Abstract** This research studied the process of seperating fibers from rice straw. To study the physical properties of fibers from rice straw and the process of manufacturing yarn from rice straw fibers. It was analyzed by physical textile testing laboratory. It has been developed as woven and develop into commercial products. The process of separating fibers from dried rice straw and to select the rice straw fiber length at least 30 cm. to subtract and peel off the joints of the lower end by hand. Then, Rice straw fiber was in the physical laboratory, it is cellulose fibers, tensile strength (Newton) at 28.18, elongation (percent) is at 2.01. There are metals plenty of CADMIUM and LEAD at 0.1 mg/kg, CHROMIUM (TOTAL) / (VI) and COPPER at

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	0.5 mg/kg. The fiber cross-section is oval and clearly. Its length is smooth and transparent when viewed from the side to see the clarity of the fiber. Rice straw fiber weave in plain structure. Warp yarn uses a special brown, cream and brown flat yarns. There are 2 warps yarn and using natural color without blench. When woven as a fabric to develop for 4 products prototype : table lamps, tablecloths in Japanese style, potted plants and Accessories Box. Keywords: yarn development, rice straw, commercial
Praparnporn Theeramongkol **GICICRST1703082**	**Design And Development Of Banana Fiber Textiles With Graphic Printing And Decoration Nano Innovation To The Economic Communities Commercial** **Praparnporn Theeramongkol** **Department of Fashion Clothing and Textile Design, Faculty of Home Economic Technology, Rajamangala University of Technology Phra Nakhon, Bangkok 10800, Thailand** **Bussara Sioyraya** **Department of Fashion Clothing and Textile Design, Faculty of Home Economic Technology, Rajamangala University of Technology Phra Nakhon, Bangkok 10800, Thailand** **Autcha Hattayananont** **Department of Fashion Clothing and Textile Design, Faculty of Home Economic Technology, Rajamangala University of Technology Phra Nakhon, Bangkok 10800, Thailand** **Kingkarn Pijukkana** **Faculty of Architecture and Design, Rajamangala University of Technology Phra Nakhon, Bangkok 10800, Thailand** **Darunrat Pigunthong** **Faculty of Architecture and Design, Rajamangala University of Technology Phra Nakhon, Bangkok 10800, Thailand** **Abstract** This research is Design and development of banana fiber textiles with graphic printing and decoration Nano innovation to the Economic Communities Commercial. The results were found that Innovative nano-fiber cloth decorated banana fabric can be antibacterial at 99.95% and staphylococcus bacteria klebsiella pneumonia at 99.93% and water reflection / water level of 80 percent water, which can be absorbed into the cloth and wet it a bit. The mostly respondents were All have been satisfied at maximum average and highest level of satisfaction that with an average 4.91 percent to 98.24 satisfaction is at the highest level. Execution Technology, The workshop schedule for the two days workshop on 17 - 18 September 2559 at the Chedi district office in Suphanburi province,THAILAND, 25 people. Most of the participants were satisfied with the level, in Graphics and decorative nanotechnology innovation, most every question. Keywords: Products Design Graphic Printing Banana Fabric Nano Innovation Communities Commercial

Hamidreza Rahimi GICECG1703069	**Using travertine in pervious pavement to control urban-flooding and storm water quality** Hamidreza Rahimi PhD candidate at Civil Engineering Department of Xi'an Jiaotong-Liverpool University.

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ABSTRACT

The conventional methods for controlling urban-flooding are to build raceway networks to transfer flood water away as quickly as possible. However, due to fast increase of urban population, the conventional methods are facing some problems especially when rainfall intensity is higher than design expectation. The main reason for such problems is due to impervious surfaces. Therefore, pervious pavements, such as porous asphalts or pervious concrete blocks, are now recommended to use by environmental engineers. Compared with conventional pavement surfaces, pervious pavements have lots of benefits although they are relatively expensive to build. This paper introduces the mineral rock of Travertine as the materials for pervious pavements, and describes an experimental model to determine the inflation patterns and storm water quality improvement in flood precipitating simulation.

The results indicated that Travertine pavement can not only decrease more than 90%of Copper, Lead and Zinc but also play an important role in urban-flood management with a 50% decrease of storm water.

KEYWORDS:
Pervious Pavement, Pollutants, Travertine, Urban flooding, Water quality.

Amara Naseer GICICRST1703088	**Cloud Computing Security Threats and Attacks with their Mitigation Techniques**

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Abstract

Cloud computing has emerged as a new computational paradigm for facilitating services to its consumersover the internet. Cloud computing offers many attractive promises to the general public or big companies like Amazon, Google, Microsoft, IBM etc., to maintain and upgrade their position in fast growing cloud computing environment and to enhance their services for a large number of users. However, apart from the enticing offerings of cloud computing the development of this technology is still in its infancy and many issues need to be resolved with security being the strongest barrier to its adoption. Security concerns is an active area of research, which needs to be addressed properly to avoid security threats and attacks which are disasters for both service providers and service consumers. This paper

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highlights cloud computing key concepts, its architectural principles, essential characteristics for cloud computing, key security requirements, security threats in cloud computing, security attacks in cloud computing, and future research challenges.

Keywords

Cloud computing, Security Threats, Security Attacks, Mitigation Techniques

CHARACTERISATION OF THE PHENOTYPE AND FUNCTIONAL TRAITS OF TUMOUR ASSOCIATED MACROPHAGES (TAM) IN VITRO

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Abstract

Macrophages are innate myeloid cells that derive from monocyte precursors circulating in the blood. When monocytes enter tissues, they differentiate into macrophages. These macrophages are also found abundant in tumour associated cells hence termed as tumour associated macrophages.

A tissue culturing of mouse macrophage cell line RAW 264.7 was subjecting to various cytokines associated with Th1 and Th2 (T-Helper cells lymphocytes) like Bacterial endotoxins like lipopolysaccharide (LPS) and interferon gamma (IFNγ) and interleukins like IL- 4 or IL- 13 – which differentiated the macrophages into M1 and M2 (Tumour associated macrophages). Then their phenotypic characters were examined by direct staining of the actin cytoskeleton with Phalloidin-TRITC; observed under fluorescent microscopy, their surface markers expression by FACS staining: CD11b-FITC, F4/80-PE, CDllcPE-Cy7, CD38-APC, followed by FACS analysis (FlowJo). Mannose receptor (MR) expression by western blotting technique and functional assay of phagocytic activity by Zymosan-fluorescein (fluorescein conjugated yeast beads).

M1 and M2 Tumour associated macrophages truly comprehend to be different in their phenotypic characters, expression of various surface markers and phagocytic activity – It concludes with new breakthrough in science as - "Phagocytosis is not the macrophage function that contributes to M1- anti-tumoural or M2- tumour promoting activity."

Keywords:

Macrophages, Tumour associated macrophags, FACS Staining, Mannose Receptor Expression, Cytokines,T-helper cells, Phagocytosis.

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List of Conferences

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» 15th International Conference on Envirotech, Cleantech and Greentech (ECG),
23-24 June 2017, Kuala Lumpur

» 15th International Conference on Researches in Science and Technology
(ICRST), 23-24 June 2017, Kuala Lumpur

» 16th International Conference on Envirotech, Cleantech & Greentech (ECG), 14-
15 July 2017, Bali, Indonesia

» 16th International Conference on Researches in Science & Technology (ICRST),
14-15 July 2017, Bali, Indonesia

» 17th International Conference on Envirotech, Cleantech & Greentech (ECG), 21-22 July 2017, Bangkok, Thailand

» 17th International Conference on Researches in Science & Technology (ICRST), 21-22 July 2017, Bangkok, Thailand

» 19th International Conference on Researches in Science & Technology (ICRST), 27-28 July 2017, Barcelona, Spain

» 21st International Conference on Researches in Science & Technology (ICRST), 08-09 September 2017, Bali, Indonesia

» 22nd International Conference on Researches in Science & Technology (ICRST), 13-14 Sept 2017, London, UK

» 23rd International Conference on Researches in Science and Technology (ICRST), 12-13 Oct 2017, Dubai, UAE

» 24th International Conference on Researches in Science and Technology (ICRST), 10-11 Nov 2017, Singapore

» 25th International Conference on Researches in Science and Technology (ICRST), 17-18 Nov 2017, Kuala Lumpur

» 26th International Conference on Researches in Science and Technology (ICRST), 22-23 Dec 2017, Dubai

» 27th International Conference on Researches in Science & Technology (ICRST), 29-30 Dec 2017, Bangkok, Thailand

» ICRST (2017) XIIth International Conference on Researches in Science & Technology, 24-25 Nov 2017, Thailand

» ICRST (2018) IIIrd International Conference on Researches in Science & Technology, 20-21 Feb 2018, Dubai

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