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## Raman, PL And Hall Effect Studies Of Cdse Thin Film Deposited By Chemical Bath Deposition

Bijumon C C, V.Senthil Kumar

CdSe thin films were fabricated on glass substrate by chemical bath deposition method. The films were deposited by keeping the deposition time a constant and also by keeping solution bath temperature a constant. Some of the deposited films were annealed . The as-deposited and annealed films were subjected to various spectroscopic studies such as Raman Spectroscopy and Photo luminescence spectroscopy. The hall effect measurement shows that CdSe is an n-type semiconductor and its resistivity decreases on annealing

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## Sample Preparation In Bioanalysis: A Review

Anjana Vaghela, Ashok Patel, Ajay Patel, Amit Vyas, Nilesh Patel

Bioanalysis is sub-discipline of analytical chemistry covering the quantitative measurement of drugs and their metabolites in biological systems. Whereas Liquid chromatography mass spectrometry is a technique which is widely used for the quantification of drug from biological fluid. This article reviews the most recent advances in sample preparation, separation analysis and different type of cartridge used in analysis of biological fluid. Further, this paper also discuss about the merits and demerits of solid phase extraction (SPE), liquid-liquid extraction (LLE) and precipitation.

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## **Effect Of Clomiphene Citrate On Hematology And Serum Biochemistry Of Nigerian Indigenous Chicken**

Urom, Scholastica Mgbo Otu Chukwu, Ukpabi, H., Alum, Eucharia Akanele, Oko, E.C.

The effect of different doses of clomiphene citrate on haematology and serum biochemistry of Nigerian indigenous chicken were evaluated at the poultry Unit, Department of Animal Science and Fisheries, Abia State University, Umuahia, using 48 sexually matured (26 weeks old) local cocks, each group was divided into 4 treatment groups of 4 matured chickens, in a completely randomized design with 3 replications. Four levels of Clomiphene citrate treatments represented as T1 (0mg), T2 (10.00mg) T3 (20.00mg) and T4 (30.00mg) were administered to the birds. Haematology and Serum biochemical indices of the treated birds were determined at the end of the study. The result showed that there were significant differences ( $P < 0.05$ ) among the treatment groups in haematology and serum biochemical parameters except for the following parameters: hemoglobin red blood cell, mean corpuscular volume of the birds. It was concluded that the administration of Clomiphene citrate (Clomid®) led to changes in haematology and serum biochemistry in Nigerian indigenous chicken which showed that clomiphene citrate can be considered safe for chicken. 10mg and 20mg levels of clomiphene citrate can bring about improved hematological indices of Nigeria indigenous chicken

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# Strategic Leadership And Organizational Performance In Not-For-Profit Organizations In Nairobi County In Kenya

Daniel Mwendwa Kitonga, Walter Okibo Bichanga, Benjamin Kyalo Muema

This paper sought to examine the link between strategic leadership practices and organizational performance in not-for-profit organizations. A survey assessing strategic leadership practice and organizational performance was completed by managers representing 328 not-for-profit organizations in Nairobi County in Kenya. The study established a significant positive relationship between strategic leadership variables and organizational performance. The results found R value of 0.730 and R<sup>2</sup> value of 0.532 that is 53.2% of corresponding change in the Organizational Performance of NFPs for every change explained by predictor variables. The findings demonstrate that if not-for-profit leaders use well the strategic leadership they are likely to improve their organizational performance significantly. This paper examined the practice of strategic leadership in not-for-profit organizations in Nairobi County in Kenya. Future research that seeks to replicate these findings is warranted. This paper proposes the study of strategic leadership as a way of enhancing not-for-profit organizational performance.

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# The Role Of Determining Strategic Direction On Not-For-Profit Organizational Performance In Nairobi County In Kenya

Daniel Mwendwa Kitonga, Walter Okibo Bichanga, Benjamin Kyalo Muema

This paper sought to examine the link between strategic leaders practice of determining strategic direction and organizational performance. An embedded mixed method research assessing the impact of strategic leadership variable determining strategic direction and

organizational performance was completed by managers representing 328 not-for-profit organizations in Nairobi County in Kenya. The study established a significant positive relationship between determining strategic direction and organizational performance. The results found r value of 0.676 and r<sup>2</sup> value of 0.457 that is 45.7% of corresponding change in the organizational performance of not-for-profits for every change is explained by the predictor variables. The findings demonstrate that if not-for-profit leaders clearly determine the organizations strategic direction, they are likely to improve their organizational performance significantly. This paper examined how determining strategic direction (strategic planning) in not-for-profit organizations in Nairobi County in Kenya. Future research that seeks to replicate these findings is recommended. This paper proposes the study of determining strategic direction (strategic planning) as way of improving strategic leadership practices hence enhancing not-for-profit organizational performance.

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## **Human Resource Predictive Analytics (HRPA) For HR Management In Organizations**

Sujeet N. Mishra, Dev Raghvendra Lama, Yogesh Pal

Human resource predictive analytics is an evolving application field of analytics for HRM purposes. The purpose of HRM is measuring employee performance and engagement, studying workforce collaboration patterns, analyzing employee churn and turnover and modelling employee lifetime value. The motive of applying HRPA is to optimize performances and produce better return on investment for organizations through decision making based on data collection, HR metrics and predictive models. The paper is divided into three sections to understand the emergence of HR predictive analytics for HRM. Firstly, the paper introduces the concept of HRPA. Secondly, the paper discusses three aspects of HRPA: (a) Need (b) Approach & Application (c) Impact. Lastly, the paper leads to the conclusion on HRPA.

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# The Factors Influence Intrapreneurship Behavior In Construction Company

Rojuaniah, Ernie Tisnawati Sule, Joeliaty, Sutisna

The intrapreneur is a person who focuses on innovation and creativity and who transforms a dream or an idea into a profitable business within the corporate environment. Intrapreneur spirited employees willing to take the risks and responsibility for their own decisions for all situational. This study aims to develop a conceptual model of intrapreneurship behavior by discussing the concepts and phenomena that occur in the construction company. The proposed model is intended to describe the phenomenon of the main factors intrapreneurship behavior in the construction company. This paper presents a model of the intrapreneurship behavior where factors are sourced from both internal and external organization. This paper provides a comprehensive analysis of existing models to develop a systematic approach to the process of formation of intrapreneurship behavior in organization. The results are a combination of study of various scientific papers, interviews to the practician in the construction business and resume of all questioners, especially in the construction company. The results can be a framework that can help organizations to identify potential strategies that could help intrapreneurial development. Based on the analysis results, we found eight (8) factors that can develop employee s intrapreneurship behavior on the construction companies. The eight (8) factors are : leadership, remuneration, organizational culture, communication openness, work environment, career development, personal traits and technological aspects.

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# Occurrence Of Bacteria In Some Contaminated Soil By Diesel Fuel In Baghdad-Iraq

Khalid Falih Hassan, Shaimaa Fakhri Jasim

Bacteria Bacillus apiarus, Bacillus laterosporus, Bacillus badius, Bacillus subtilis, Bacillus larve, Pseudomonas, Chromatium, Azotobacter, Staphylococcus, Streptococcus,, Ancalomicrobium, Butyrivibrio, were isolated and identified from eight different contaminated soils sits in Baghdad. Results showed concentrations of COD in contaminated soil by 2110-4000 ppm, TOC by 105-2300 ppm, TN by 63-110 ppm and TP by 36-63 ppm. Bacteria Bacillus and Chromatium showed occurrence by 100% in all soil samples while, the other bacteria showed occurrence by 37-62%.

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## **Steganography On Internet And Its Forensic Analysis**

Sadhana Rathore, Arundhati Walia

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## **Human Thermal Comfort In Residential House Buildings Of Jimma Town, Southwest Ethiopia.**

Chali Yadeta, Dante Santiago, Esayas Alemayehu

Indoor human thermal comfort is an important factor in indoor air quality assessment. Thermal comfort affects human health, work efficiency and overall wellbeing. Thermal discomfort in indoors lowers the emotional and physical health of the occupants. This paper targets to explore human thermal comfort in residential house buildings of Jimma town and state some possible mechanisms to improve the existing thermal discomfort in large number the houses. For the

study, 303 structured questionnaires were distributed to the residential houses in thirteen places of the town based on predetermined criteria. The study reveals that human thermal discomfort in residential houses Jimma town are mainly from poor architectural design and improper use of heat generating appliances in indoors. The uses architectural design that suites the present climatic conditions and use of materials that facilitates ventilations will enhance the realization of the required human thermal comfort in residential houses of the study area.

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## **Population Dynamic Of Rabbit Fish (*Siganus Canaliculatus*) In Gulf Of Bone Luwu Regency, South Sulawesi**

Irman Halid, Achmar Mallawa, Musbir, Faisal Amir

Rabbitfish (*Siganus canaliculatus*) is ones of coral reef inhabitants are exploited intensively and suspected population decline , so the necessary management measures was needed. The study aims to analyze aspects of the dynamics of rabbit fish populations in the Bone Gulf Luwu waters. Data was collected by Staratied Random Sampling, estimation of the size structure, the number of age groups and average length of fish per age group use a column diagram and Bhattacharya method. Population growth is analyzed using the Von Bertalanffy equation exponential growth, the value of  $L_{\infty}$ ,  $K$ , by Ford and Walford method and  $t_0$  by Pauly method. The total mortality, fishing mortality, the rate of exploitation and  $Y/R$  were estimated by methods of Beverton and Holt, and natural mortality by method of Pauly. The results showed that the population of rabbit fish in the waters of the Gulf of Bone Luwu consists of five age groups, has the average length and the lenth range of 8.0904 cm and 5.7 to 9.0 cm on the relative age of one year, 10.9222 cm and 9.0 to 12.3 cm on the relative age of two years, from 12.3 to 15.6 cm 14.1543 cm on the relative age of three years, 16.8949 cm and 15.6 to 18.9 cm on the relative age four years, and 19.4906 cm and 18.9 to 20.7 cm on the relative age of five years. Maximum length ( $L_{\infty}$ ) of 30.5814 cm and the growth rate coefficient ( $K$ ) of 0.1572 per year, while the  $t_0$  value of -1.4815 of year. The total mortality ( $Z$ ) of 1.6913 per year, the mortality ( $M$ ) of 0.6109, fishing mortality  $t$  1.0804 per year, the rate of exploitation ( $E$ ) of 0.6388 and optimal exploitation rate ( $E_{opt}$ ) of 0.50, the value of  $Y/R$  is now 0.0127 and the value of  $Y/R$  optimal 0.0150. The conclusion that the population is dominated medium sized fish, slow population growth as a result of the high mortality rate of the capture and exploitation as well as the recruitment process is not

optimal.

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## **Effect Of NPK Micro Doses Fertilizer On Leaf Area, Leaf Area Index And Pods And Hay Yield Of Six Genotypes Of Groundnut North Kordofan State-Sudan**

Yasir E. M. Ahmed, Ahmed A. M. Osman, Makeen A. Makeen, Tarig E. A. Suliman

This experiment was conducted at two locations, in North Kordofan under rain fed conditions for two consecutive seasons (2011/012 and 2012/013), to study the effect of NPK micro doses on leaf area, leaf area index, pod yield and hay yield of six groundnut genotypes. The tested genotypes were arranged in a Randomized Complete Block Design with four replications. Leaf area increased rapidly up to 90 days from planting. Thereafter, it started increase but at slower rate in all treatments. Non significant differences were observed among genotypes and treatments in leaf area at 30 days after planting. At this stage the highest leaf area of about 278.4 cm<sup>2</sup> was recorded by ICGV89171 without NPK treatment and the lowest of 149.5 cm<sup>2</sup> by ICGV93255 with NPK treatment. At sixty days after planting the significant differences in leaf area were observed, the highest recorded by genotypes ICGV89171 (1278.8 cm<sup>2</sup>) with NPK treatment while the lowest by line ICGV93255 (743.8 cm<sup>2</sup>) without treatment. At 90 days after planting the leaf area showed high significant differences among genotypes, the maximum leaf area 1570.1 cm<sup>2</sup> recorded by line ICGV92121 with NPK treatment. The Significant differences were record at 60 and 90 days after planting for leaf area index, NPK treatment increase the value 0.30 at all stages of genotypes. Significant varietal differences were observed for pod yield, hay yield, hundred seed weight, and number of pods per plant, while non significant differences were recorded in seeds per pod, shelling percentage and harvest index were not significant. The high significant correlation between leaf area and pod and hay yield were observed, with pod yield was 0.278 and with hay yield was 0.242 respectively.

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# Causes And Cost Consequences Of Financial Crisis In The USA 2007-2009

Saad Mofareh Alshahrani

Both American government and citizens suffered from the last financial crisis during 2007-2009, and, according to the Department of the Treasury, 8.8 million jobs were lost and \$19.20 trillion was lost household wealth. Although American government has attempted to develop the financial system, it has been impacting and costing them lots of money.

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# Effect Of Seawater On Physicochemical Characteristics Of Sumatra Lowland Peat

Sarifuddin, Zulkifli Nasution, Abdul Rauf, Budi Mulyanto

With an area of 21 million hectares, which is equivalent to almost 11% of Indonesia's land, Peatlands have significant potential as agricultural and plantations area despite having a lot of problems such as excess water and bulk density is low, acidity, the ratio of carbon-nitrogen and cation exchange capacity is high, availability of macro and micro nutrients are low and the presence of organic acids that are poisoned. On the other hand, as archipelago country, sea water is abundant and contain dissolved bases are high enough to be used as ameliorant for peat. This study was conducted by leached of peat soil that is placed in the PVC pipe with 10 cm in diameter and 50 cm in length by fresh water; sea water + fresh water (brackish) and sea water and incubating them for 4 and 8 weeks. The experiment use randomized block design non factorial and Duncan multiple range test in 1 and 5%. The results showed that leaching by flowed vertically of freshwater, brackish water and sea water on peat and incubated them for 4 and 8 weeks were able to increase the rate of decomposition is characterized by decreasing the ratio of C/N, decreasing CEC and rising exchange bases. But the acidity lowered more than 4

and EC also increase up to 4 dS/m.

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## **Improvement In The COP Of Thermoelectric Cooler**

Jatin Patel, Matik Patel, Jigar Patel, Himanshu Modi

This paper described the study for heat transfer through thermoelectric cooler (TEC) by use of multistage thermoelectric module. To satisfy the heat dissipation of modern electronic element, thermal designers have to increase fin area and fan speed to improve its cooling capacity. However, the increase of fin area is restricted by the space. Besides, the increase of fan speed would induce noise, which damages human health. So air cooling by fan is hardly to meet the requirement of modern electronic component. Recently, thermoelectric cooler (TEC) is applied to electronic cooling with the advantages of small size, quietness and reliability. A typical thermoelectric cooler consists of p-type and n-type semiconductor pellets connected electrically in series and sandwiched between two ceramic substrates. Whenever direct current passes through the circuit, it causes temperature differential between TEC sides. As a result, one face of TEC, which is called cold side, will be cooled while its opposite face, which is called hot side, is simultaneously heated. The main problem over the use of TEC is the limited COP and its thermal performance. But these can be eliminated by use of multistage thermoelectric cooler.

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## **Impact Of Exogenous And Endogenous Risks On Systemic Risk In Indonesian Banking**



Alfiana, Ernie Tisnawati Sule, Sutisna, Dian Masyita

Weaknesses of the Banking Pressure Index and Financial Stability Index as an early detection system were not to involve contagion and bank run. This study aimed at determining impacts of endogenous and exogenous risks on systemic risks. It was a descriptive verificatory study using monthly secondary data of 2011-2014 and multiple regressions. Utilizing credit risk, liquidity risk, market risk, capital adequacy risk, contagion, bank run, inflation, BI rate, exchange rate and systemic risk variables of the 2011-2014 period, it turned out that only endogenous risks of contagion and bank run variables impacted on systemic risk in Indonesian banking. The result showed that after the test of classical linear regression assumption, credit risk, capital adequacy risk, contagion, bank run and inflation variables simultaneously impacted on systemic risk and contributed to the movement of systemic risk. However, our findings suggested that only contagion (CONT), bank run (BR), and inflation (INF) variables significantly impacted on systemic risk in a positive direction.

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## **How E-Commerce Affects The Trading System**

Hussain Albinsaad

Electronic commerce is a commercial activity through computer systems and networks. E-commerce is not limited to selling but extends to include business operations, electronic data interchange and point of sale systems. Also, the associated growth of e-commerce relies on the growth techniques and security of financial transactions. This paper will help to show how e-commerce impacted the trading system by indication to some of its benefits and limitations.

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## **Media Influence On Public Opinion Attitudes**

## **Toward The Migration Crisis**

Joana Kosho

Many studies, or facts from the practical experience of many journalist, politicians and professors, show that the media impact on public opinion is enormous and essential. Many issues of everyday life, human crisis or mainstream policies, once covered and analyzed from the lenses of the media, become the main concerns of the citizens and have a meaningful impact on the attitudes of the public opinion. The migration crisis that is challenging the European countries nowadays is a big concern not only for the host countries citizens, but a life challenge for the immigrants themselves. This study will examine of the connection between media reports on immigration and public attitudes and actions, and how migration issues presented in the mainstream media impact the public and political discourse on international migration.

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## **LI-FI Has Just Been Tested In The Real World And It Is 100 Times Faster Than WI-FI**

Praneethkumar, Akhil, ShivaRohit, PavanKumar

Light Fidelity refers to Visible Light Communication systems using light-emitting diodes as a medium to high-speed communication in a similar manner as WI-FI. Now a days where internet has become a major demand, people are in a search for WI-FI hotspots. LI-FI is New Life of data communication is a better alternative to WI-FI in wireless communication. This paper proposes a survey on LI-FI Technology and analyzes its performance with respect to existing technology. The concept of LI-FI is data communication on fast flickering of light which is not detected by human eye but it is focused on photo detector which converts the on-off state into binary digital data. It has gained a huge popularity in two years of its invention. Such technology has brought not only greener but safer and cheaper future of communication.

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# Factors Influencing Women's Career Progression To Leadership Positions In Harare City Council, Zimbabwe

Anella Tendai Machiridza, Dr Ephantus Kihonge, Dr Pamela Awuor Ochieng

This study examines the factors influencing women's career progression to leadership positions in Harare City Council. The specific objective was to determine the influence of gender roles on women's career progression to leadership positions in Harare City Council. The target population included management team and permanent staff in the Harare City Council. Data was collected using questionnaires as well as semi structured interviews. A sample size of 116 was determined by using 33% of the population. Data from interviews was analyzed by means of establishing recurring themes and providing narratives of key findings. The collected data from the questionnaires was analyzed using SPSS. The findings revealed that traditional gender roles made the balance between work and family difficult in such a way that some women would prioritize family responsibilities at the expense of focusing on their careers. Furthermore, it was revealed that gender roles affected the careers choices they make thus influencing the gender compositions in departments and divisions and consequently those in leadership positions. As a result of study findings the researcher recommends that civil society organizations implement gender deconstruction programs in societies such that women will not be confined to the traditionally expected roles. The researcher's expectation is that it will lead to society accepting the concept of stay-at-home-dads thus encouraging the acceptance of women as serious career women. It is also recommended that family friendly policies should be put in place in order to minimize the pressure that women experience in trying to balance between work and family. These policies should enable employees especially women to work from home without being physically present at their workplace but monitoring mechanisms should be in place to ensure that work deadlines are met. Furthermore, women are encouraged to implement personal strategies that will help them minimize the pressure of trying to balance between work and family life.

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# Optimization Of Microwave-Assisted Extraction Of Bioactive Compounds From *Anogeissus Leiocarpus* Guill. & Perr. Stem Bark Using Response Surface Methodology

R. K. T. Tsatsop, G. T. Djiobie, B. S. Kenmogne, K. R. Regonne, M. B. Ngassoum

The optimal conditions of Microwave-Assisted Extraction (MAE) of antioxidants from *Anogeissus leiocarpus* Guill. & Perr stem bark were determined. A second-order regression for central composite design (CCD) was used to investigate the effects of four independent variables, namely extraction time (s), irradiation power (W), solvent-to-solids ratio (ml/g) and methanol concentration (%) on the responses. The second-order regression for CCD consisted of 24 experimental points and 4 replications at the central point. Data were analyzed using Statgraphics software. The optimal conditions based on combination responses were: extraction time of 83 s, irradiation power of 538 W, solvent-to-solids ratio of 16.3 ml/g and methanol concentration of 51.84% according to the analysis of response surface. These optimum conditions yielded total phenolic contents (TPC) and total flavonoid content (TFC) of 498 mg Gallic Acid Equivalent (GAE)/ gDM and 3068 µg Quercetin Equivalent (QE)/gDM, respectively, with %DPPHsc of 53.21 % and total antioxidant activity (TAA) of 96206 µg Vitamin C Equivalent (VCE)/gDM. Close agreement between experimental and predicted values was found.

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# The Influence Of Customer Handling On Brand Image In Building Customer Loyalty

Ryan Kurniawan, Sucherly, Surachman

Complaint handling influences brand image which will influence customer loyalty in the future.

This research is aimed to find out how the complaint handling is capable to influence against the brand image in building the customer loyalty of Indomaret Minimarket with the study case of Indomaret Minimarket. This research also aims to find out how the complaint handling is conducted by Indomaret Minimarket, the brand image of service on Indomaret Minimarket as well as the customer loyalty of Indomaret Minimarket. This research using questionnaire as an instrument in collecting the data. The analysis type of this research is descriptive analysis and causal. The sample used as many as a 165 respondents with purposive sampling techniques. This research uses 33 indicators that will be counted with analysis technique SEM (Structural Equation Modelling). The result of this research is that the complaint handling conducted by Indomaret Minimarket has been good but the aspect of speed in complaint handling is considered as not good. Besides, the brand image and loyalty have been good enough. The customer loyalty is influenced by the complaint handling and the brand image by 32.7%. The complaint handling has a significant influence against the customer satisfaction, but the complaint handling does not influence against the customer loyalty. The brand image significantly influences against the customer loyalty. Then, complaint handling influential not directly to customers trough loyalty of customer satisfaction. In addition, the necessary integrated system, standardization compensation and to rejuvenate issue at regular intervals to improve complaint handling that can give the effect to customer loyalty through brand image.

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## **Risk Of Loss Of Productivity In Workplaces**

Wafi Assiri

In every organization there exist some unavoidable cost when running any business. However, these costs can be minimized by managing the factors that contribute to increased business cost and finding ways to prevent risks before they occur. This paper examines one of these factors which is loss of productivity in the workplace. The paper examines the risks of loss of productivity, what causes these risks and in what ways will the business be affected by them. This paper also present the various ways a business can manage the risks by providing ways on how the business can prepare for any incidents with regards to the risks. And because it is impossible to manage anything that you can't measure, ways in which productivity can be measured have been addressed. Finally, the paper addresses ways in which the business can improve its workplace productivity to achieve the business goals and ensure continuity of the business.

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## Compounding Of Ac Compressor Using Waste Heat Recovery From Exhaust Gas

Bheshma Yogendra Kiran, Surya, Annamalai Rajesh, Kandhasamy

This project works on the theme of turbocharger in which a low pressure high speed turbine is placed in the exhaust gas manifold. The exhaust gas from the engine is made to rotate the turbine where the thermal power of exhaust gas is converted into rotary motion through turbine. This rotary motion from turbine is given to the turbocharger compressor which compresses the refrigerant vapor. So through this air conditioning effect is obtained without loss of any crankshaft. The kinetic energy extracted from the turbine is used to run the AC compressor by planetary gear train.

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## Cryptosystem Based On Finger Vein Patterns Using Vas Algorithm

G.Kanimozhi, Dr. A. Shaik Abdul Khadir

Cryptosystems based on biometrics authentication is developing areas in the field of modernize security schemes. Elastic distortion of fingerprints is one of the major causes for false non-match. While this problem affects all fingerprint identification function, it is especially dangerous in opposite identification function, such as note list and reduplication function. In such function, malicious possessors may purposely distort their fingerprints to evade identification. Distortion rectification (or equivalently distortion field estimation) is viewed as a regression problem, where the input is a distorted fingerprint and the output is the distortion field. The current document deals with the application of finger veins pattern as an approach for

possessor confirmation and encryption key generation. The design of the optical imprison scheme by near infrared is described. We propose a step for the location of the vein crossing points and the quantification of the angles between the vein-branches, this information is used to generate a personal key that allows the possessor to encrypt information after the confirmation is approved. In order to demonstrate the potential of the suggested approach, and model of figure encryption is developed. All action: biometric imprison, figure presetting, key generation and figure encryption are performed on the identical hidden platform adding an important portability and diminishing the execution time.

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## **Type Ii Diabetes Mellitus Related Foot Problems And Knowledge, Practices Related To Foot Care Among Type Ii Diabetes Mellitus Patients Who Attend To Diabetes Clinics In General Hospital Kurunegala**

Dr. I. P. Wickramasinghe, Dr. T. L. S. S. Siritunga

Introduction: Diabetic foot problems account for many hospital admissions and if they are not treated properly can lead to life threatening amputations. Moreover they are preventable by self-care practices, early diagnosis and proper management. Therefore, patient's knowledge and practice regarding foot care remains a mainstay of management. Objective: To describe the level of knowledge and practice of foot care among patients with Type ii diabetes. Methodology: A group of Patients having diagnosed with Type Ii diabetes (N=384) were selected from diabetic clinics of General Hospital Kurunegala for this descriptive cross sectional study. Data were collected by interviewer administered questionnaire and check list. Patient's knowledge and practice on diabetic foot care were inquired. A scoring system ranging from 0-36 was utilized to analyze the responses given for level of knowledge and practice. Results: Mean age was 58.2 years (SD ±10) and male to female ratio was 1:3. Diabetes was diagnosed >11 years among 37.8%. Majority (72%) of study sample have not undergone foot examination at the clinic during previous year. 74.4% had diabetes related foot problems. There were 72.4% presented with neuropathic signs and symptoms and 27.6% presented with ischemic signs and symptoms. Regarding foot care knowledge, the mean score was 14.6, 42% had scored above >50% of total

knowledge score. Regarding foot care practices, the mean score was 12.5, 89.8% participants had scored <50% of total practice score. A Statistically significant association exists between the foot care knowledge and practice scores ( $p < 0.05$ ,  $\chi^2 = 15.9$ ). Conclusion: According to results, knowledge on diabetic foot care was not up to the standard; however their practices of foot care were further unsatisfactory. Therefore patient education on self-care management of foot should be incorporated into the routine care of patients with diabetes both in the clinic and in the community. Examination of foot by clinic team, counseling, providing information and education during clinic sessions would help to improve this situation.

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## **Enron: Flaws In Organizational Architecture And Its Failure**

Nguyen, K. Q. Trung

A series of corporate scandals at the beginning of last decade has given rise to the doubt on the efficiency of corporate governance practice in the United States. Of these scandals, the collapse of Enron has exceptionally captured the public concern. It was the once seventh-largest company in the United States [1]. It was rated the most innovative large company in America in Fortune's Most Admired Companies survey [2]. In August 2000, its stock reached a peak of nearly \$70 billion [3]. However, within a year, its stock had become almost useless papers [2]. It just was unbelievable for many people. What went wrong? Was it due to the failure of corporate governance in general? Actually, the central factor leading to the collapse of Enron was the failure in its organizational architecture. This paper starts by providing an overview of corporate governance system with an emphasis on the corporate organizational architecture as its important facet. Then, it discusses flaws in the organizational architecture of Enron and argues that these eventually led to the breakdown of the whole corporate governance system at Enron. Finally, some implications and lessons for the practice of corporate governance are presented.

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# Synthesis Of Three Analogues Of Trypsin-Modulating Oostatic Factor (TMOF) And Screening Of Their Insecticidal Properties Towards Cabbage Cluster Caterpillar

Rani Maharani, Ari Hardianto, Safri Ishmayana, Eka Fitri Yanti, Devia Irma Melati, Daniel Sihotang, Lindung Tri Puspasari, Danar Dono

Three analogues of TMOF, [PP (H-Pro-Pro-OH), PPTPPP (H-Pro-Pro-Pro-Pro-Pro-OH), and APPTPPP (H-Pro-Pro-Pro-Pro-Pro-OH)], were successfully synthesised and screened for their insecticidal properties against cabbage cluster caterpillar (*Crocidolomia pavonana*). All compounds were prepared through Fmoc-based solid-phase peptide synthesis (SPPS) method. The synthesis employed chlorotrityl resin as solid support. A combination of N,N-diisopropylcarbodiimide (DIC) and ethyl 2-cyano-2-(hydroxyimino)acetate (oxyma) was chosen as coupling reagent in the synthesis. The peptide was cleaved by using TFA cocktail. All peptide crudes were purified by using reversed-phase flash chromatography with octadecyl silane (ODS) as stationary phase. All purified peptides were characterized by using TOF-ESMS and their purity was analysed using thin layer chromatography and analytical RP-HPLC. The synthesised TMOF analogues, together with TMOF, were biologically tested towards the (*C. pavonana*) at 1000 ppm. The results indicated that TMOF and the analogues were less effective for the cabbage cluster caterpillar, compared to previously reported activity of TMOF towards *Aedes aegypti*.

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# Dating Of Remains Of Neanderthals And Homo Sapiens From Anatolian Region By ESR-US Combined Methods: Preliminary Results

Samer Farkh, Abdallah Zaiour, Ahmad Chamseddine, Zeinab Matar, Samir Farkh, Jamal Charara, Ghayas Lakis, Bilal Houshaymi, Alaa Hamze, Sabine Azoury

We tried in the present study to apply the electron spin resonance method (ESR) combined with uranium-series method (US), for dating fossilized human teeth and found valuable archaeological sites such as Karain Cave in Anatolia. Karain Cave is a crucial site in a region that has yielded remains of Neanderthals and Homo sapiens, our direct ancestors. The dating of these remains allowed us to trace the history, since the presence of man on earth. Indeed, Anatolia in Turkey is an important region of the world because it represents a passage between Africa, the Middle East and Europe. Our study was conducted on faunal teeth found near human remains. The combination of ESR and US data on the teeth provides an understanding of their complex geochemical evolution and get better estimated results. Our samples were taken from the central cutting where geological layers are divided into archaeological horizons each 10 cm. The AH4 horizon of I.3 layer, which represents the boundary between the Middle Paleolithic and Upper Paleolithic, is dated to  $29 \pm 4$  ka by the ESR-US model. Below, two horizons AH6 and AH8 in the same layer I.4 are dated respectively  $40 \pm 6$  and  $45 \pm 7$  ka using the ESR-US model. In layer II, where a stalagmite floor was taken, we made two U-Th dating, at the base and on the top, ages oscillated around 120 ka. Since human remains were collected from AH3 horizon for Homo sapiens and AH5 and AH7 horizons for the Neanderthal man, so the dates obtained in AH4, AH6 and AH8 represent maximum ages. Thus they provide the disappearance of Neanderthal man between 45 and 40 ka and the appearance of Homo sapiens in 29 ka in Anatolia region. Undoubtedly, there is a chronological gap between the Middle and Upper Paleolithic, represented by the disappearance of Neanderthals and the appearance of sapiens, and none of our results confirm the contemporaneity of these two species in this region.

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## **Textural And Mineralogical Studies Of Two Tunisian Sedimentary Phosphates Or Carbonated Fluorapatite Used In The Process Of Production Of Phosphoric Acid**

Ahmed Chaabouni, Chaker Chtara, Ange Nzihou, Hafed El Feki

Tunisian phosphate is a sedimentary rock and is the second major expense in producing phosphoric acid which is used mainly in fertilizer field. Phosphate is a mesoporous solid and has very large specific surface areas which often lead to greater activity due to increased dispersion of the active sites. The reaction between phosphate rocks and acids is essentially a surface reaction. Within the framework of valorization of Tunisian natural phosphate which is a carbonate fluorapatite or francolite and to establish the relations between the reactivity of phosphate rock and their physico-chemical properties. Two Tunisian's deposits of phosphate were selected. Several techniques were used such as the SEM, physisorption for textural study, X-ray diffraction technique and Infra Red Spectroscopy for the mineralogical study. From the textural study, we note that the two samples of phosphate have a mesoporous texture and all phosphate rocks contain many impurities. From the mineralogical study we note that the two main constituents of sedimentary phosphate rocks are apatite and calcium carbonate. The results obtained show a slight difference in physico-chemical properties between the two types of sedimentary phosphates and the dependence between the chemical reactivity and the structure of these phosphates.

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## **DC Vs AC - War Of Currents For Future Power Systems: A HVDC Technology Overview**

Anil K. Rai, Chandra Shekhar Sharma

DC vs AC discussion began in 1880s with development of first commercial power transmission in Wall Street, New York. Later, when AC technology came into notice by efforts of inventor and researcher Sir Nicola Tesla, soon the advantages of AC transmission and AC devices overtook the DC technology. It was hoped that DC technology had lost battle of currents. Today, with researches going on FACTS devices and bulk power transmission, HVDC has again gained a reputation in power sector. Solution of this centuries old debate is to develop HVDC systems that assists HVAC systems for better performance, stability and control

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# Potentiality Of Stressed Alfalfa Plants To Modify Soil Traits

Bardees M. Micky, Muhammad A. Abbas, Omar A. El-Shhaby

Leguminous plants play a key role in the sustainability of agricultural systems. Nevertheless, it is to somewhat scarce to find investigations about the interaction of such plants with the soil in which they grow under stress. A pot experiment was conducted to investigate the influence of graduated water regimes on the chemical features of different soil types, varying in sand proportion, before and after their cultivation with alfalfa (*Medicago sativa*) plants. The results indicated that soil cultivation with the studied plants, whether water-satisfied or not, generally increased the amount of soil ammonia, nitrate, peptide, total soluble and total nitrogen. On contrary, the amount of soil amino, amide, nitrite and protein nitrogen generally decreased after cultivation. Concerning soil ionic composition, the post-planting values of soil sodium, calcium, magnesium and sodium potassium ratio were significantly lower than their pre-cultivation synonyms. Furthermore, the percentages of decline caused by cultivating well-watered plants were higher than those caused by their moderately-droughted relatives which were in turn higher than those caused by severely-droughted ones. For soil chloride, potassium, sodium adsorption ratio and potassium adsorption ratio, culturing water-unstressed plants reduced these ionic fractions while droughted plants markedly favored such values. As a general feature, the maximum titers of all soil nitrogenous and ionic constituents were recorded for soil with the least sand proportion. The other chemical soil characteristics (pH, electric conductivity, organic carbon, organic matter, calcium carbonate, bicarbonates, sulphates and total soluble salts) were all fluctuated in a random fashion among the various soil types before and after planting water-stressed or control alfalfa plants. Thus, the results obtained herein recommend alfalfa as a pioneer plant that can be introduced to infertile and/ or dry lands with a paramount efficacy to enhance soil chemical properties.

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## Handicapped Steering Cycle

Ajit Tiwari, Rahul Mishra, Abhishek Sharma, Amitesh Sharma, Purushottem Mishra

Traditional manual wheelchairs require considerable use and control of both arms for operation, thus adaptations are required for individuals with asymmetrical use of their arms. Building upon previous projects, the goal of this project was to create an accessory, to be installed on a standard wheelchair, which would allow full control of the wheelchair with only one arm/hand while addressing areas lacking in commercial products and previous designs, such as manufacture ability, attendant control, user comfort and ergonomics. After preliminary testing and analysis of three one-arm propulsion designs, the project team developed a design for a removable, lever-operated accessory which could be adapted to fit a range of the most popular standard wheelchair models. The propulsion system, connected to the main lever by a coupler link, consists of a dual gear-pawl assembly in which the desired direction of motion is chosen by moving a shifter to engage one of the two gears press-fit around clutches, each of which allows motion in only one direction, either forward or reverse. By including a neutral pawl position in which neither clutch is engaged, this design allows an attendant to propel and control the chair.

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## **Land Registration In Information Technology Perspective A Basis Of Basic Agrarian Law In Indonesia**

Darwin Ginting

Land registration is basically intended to provide a legal certainty to land objects, subjects, and title statuses and also legal protection of land owners. The concept of land registration is effected by population growth, social- economic condition. It is a series of activities including land measurement, mapping, and recording, land title registration, and issuance of land certificate. To the purpose, a publication principle, i.e, anyone is allowed to find out any land title (rights) and legal action on lands, is adopted. There are two different publication systems, positive and negative ones, with some differences in both legal practices and consequences. In a positive publication system, the truth of what are contained on the land subject and object is ensured. On the other side, in negative publication system an owner of registered land title isn't secured by law. The national land registration system, according to Article 19 of UUPA (Basic Agrarian Law) and PP (Governmental Regulation) No. 24 of 1997, adopts a negative but positive-tended

system. The problems in the field are that a registration process is time consuming and relatively costly. Besides, very often double certificates of the same object are discovered. Land registration system that adopts a negative but positive-tended publication synergized with the development of technology, in this case Continuously Operating Reference Station (CORS), may accelerate land registration at high accuracy and low cost and provide legal certainty on land objects, subjects, and titles as well as protection of real land owners.

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## **Assessing Profitability Of Selected Agro-Ecological Intensification Techniques In Sorghum And Cassava Based Cropping Systems In Yatta Sub County, Kenya.**

Wango V.N., Mburu J., Onwong a R., Nyikal R.

As the world population increases there is pressure on agriculture to supply more food, fiber and fuel. This has led to the continual expansion of agricultural land in to arid and semi-arid lands (ASALs) resulting in land degradation. In particular, in sub-Saharan Africa, low soil fertility is one of the most constraining factors to agriculture productivity. Initiatives to address soil fertility through use of inorganic fertilizers have yielded below average results in increasing productivity. Agro-ecological intensification (AEI) technique uses alternative knowledge and local materials to improve soils and increase productivity. This study assesses the economic returns of using AEI techniques compared to simplified conventional agricultural systems. Data was collected from on farm experiment that involved mono cropping, crop rotation and intercropping and application of organic inputs. Survey was used to collect data on farmers costs of production, yields and commodity prices from a sample of 140 households in Yatta, Kenya. Both plot and survey data showed that significantly greater revenues were attained with the application of the AEI practices. Using legumes in intercrop system with application of farmyard manure had the highest profit while crop rotation without application of organic input had the least. At least 28 percent of farmers that adopt all components of the AEI technique attained significantly higher profits than farmers without any organic inputs. The study concludes AEI is a profitable soil fertility management technique. Thus policy should recognize and promote its uptake.

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## **Caravan Routes And Creating A System Of Historical And Contemporary Destinations Service**

A. O. Khasanov TACI

The present article considers the history stages of the development of roadside objects in the Great silk road and on the bass of the experience of the foreign countries, it studies the problem of the shaping modern marhalas.

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## **Detecting Blind Spot By Using Ultrasonic Sensor**

T. S. Ajay, R. Ezhil

Safety remains a top concern for automobile industries and new-car shoppers. Detection of Blind Spots is a major concern for safety issues. So automobiles have been constantly updating their products with new technologies to detect blind spots, so that they can add more safety to the vehicle and also reduce the road accidents. Almost 1.5 million people die in road accidents each year. Blind spot of an automobile is the region of the vehicle which cannot be observed properly while looking either through side or rear mirror view. To meet the above requirements, this paper describes detecting blind spot by using ultrasonic sensor and controlling the direction of car by automatic steering. The technology embedded in the system is capable of automatically steer the vehicle away from an obstacle if the system determines that a collision is impending or if the

vehicle is in the vicinity of our car.

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## **Approximate Solution For Time-Space Fractional Soil Moisture Diffusion Equation And Its Application**

Bhausahab R. Sontakke, Veena V. Sangvikar (V. P. Kshirsagar)

The purpose of this paper is to develop an implicit finite difference method for time-space fractional soil moisture diffusion equation (TSFSMDE). We prove a detailed analysis of the scheme and generate the discrete model. Also, we prove the scheme is unconditionally stable and convergent. As an application of the scheme we solve some test problems and their solutions are represented graphically by powerful software Mathematica.

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## **Education In Harmony Multicultural Society Tana Poso**

Asyer Tandapai, Hamka Naping, Supriadi Hamdat, Ansar Arifin

This study aimed to get an explanation: (1) How is the development of education in multicultural communities in Tana Poso. (2) What are the cultural values of harmony in the implementation of education. This study took place in Poso with development focus Harmony Education in multicultural society. The idea of Education lists different types of responses to the context of a society that experienced violent conflict in the transition towards 21st century civilization In the



midst of life that concern, a group of beings education moved to initiate, formulate, and realizing the educational model is expected to be space to cultivate a peaceful life. The education personnel representing Alkhairaat Education Foundation, Education Foundation Muhammadiyah and Christian Education Foundation and accompanied by educational practitioners who are competent in their respective fields. This type of research follows the pattern phenomenological study with a qualitative approach. Finally, the substance of the research results are mixed within the framework of structural-functional. Harmony Education is character education that emphasizes balance (equilibrium) of the basic values of human self that harmony in the relationship with the Creator, Harmony Fellow covers the relationship between mankind and the environment harmony human relationships with the natural environment.

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## **An Audio Based Bus Proximity Indicator For Visually Challenged People**

Thamodhiran. V, Ponvannan.V, Jino James Joseph, G.V.Jason Jebasingh

It is always good to know a bus commuter waiting at a stop gets to know how far a bus is. Based on the investigation about daily activity characteristics and modes of the blind, the study found that the main difficulties encountered in a trip of the blind included walking on the road, finding way, taking a bus and looking for usual life-area. If his route of travel happens to be common for more than one bus- route number, it is even better for him to know which is the nearest bus or the earliest arriving bus. This will enable him to opt for the bus or some other mode of commuting. This becomes very useful for the physically challenged commuter, as after knowing in advance the bus arrival he/she will be ready to accommodate in the bus. A thought of project Bus Proximity Indicator is the best solution for the above situation and is best suitable for the visually challenged people. In this a wireless RF linkage between a certain bus and a bus stop can be used for determination of the bus proximity that help s commuter to know how far his bus is and to identify the bus number through audio signal from audio playback recorder.

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207-210

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# **Job Insecurity As Moderating Employee Engagement Toward Intention To Quit At Government Bank In Bandung City**

Deddy Rusyandi

The purpose of this research was to demonstrate the importance of employee engagement and its relationship to employee intent to quit with moderated by job insecurity on employees frontline state bank in Bandung City Indonesia. The method used is explanatory survey method that this study took a sample of the population with a questionnaire and interview techniques as the primary means of data collection. The subjects of the study were also as the unit of analysis in this study is the frontline employees (teller and customer service) that serve the general customers, where the position is vulnerable to employee turnover, whereas they are the spearhead or the forefront (frontline) that connects to the customer's bank (the customer ). A randomly selected sample of 4 bank was used in this study. A total of 270 respondents participated. Data were analyzed using Smart PLS 2.0. The linear regression analysis indicated there was a significant, strong, and negative linear relationship between employee engagement level and employee intent to quit rate. The results of this research promote employee engagement is a significant negative effect amounted 41,42% of the intention to quit, while the variable job insecurity is not proven significantly. The conclusion from this study is that the employee engagement give significant influence on the intention to quit and variable job insecurity is not a variable moderation.

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## **To Analyse The Effects Of Process Parameters On Ig & Dd Of Ti-3al-2.5v Titanium Alloy (Grade 9) On Wedm Using Taguchi Approach**

Mohit Gulati, Rajiv Bharti, Dr. Raj Kumar

WEDM is the most important machining method with which complex and complicated geometries can be easily machined. Based on exhaustive literature survey, it has been found that limited work has to be done on machining of Grade 9 Titanium alloy Ti-3Al-2.5V. Grade 9 Titanium alloy Ti-3Al-2.5V plate of 150mm×150mm×6mm is used for experimental purpose. The input process parameters pulse on time, pulse off time, spark gap set voltage and peak current are investigated to check their effects on performance characteristics like gap current & dimensional deviation. The ranges of process parameters are selected based on the literature survey. The experiments were designed using L9 orthogonal array with variation in process parameters. In this study MINITAB 15.0 software is used for designed the number of alternative experiments. The main aim of study is to check the effect of various process parameters on performance parameters.

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## **Bibliographic Citations: With Special Reference Indian Bibliographic Standard**

Reshmi Sarkar

Bibliographic citation is playing an important role today to ensure the completeness of all research activities. They occupy an integral part as a reference in all types of resources need. The author, while writing a paper takes the references from a number of documents and finally quotes them with its bibliographic details to recognize the work of earlier authors in the same field of study. With the virtually exponential growth in the research literatures throughout the 20th century, it has become clear that the larger the literature, the more difficult are the problems caused by poorly crafted bibliographic references. Scholarly societies, like publishers of research journals, have either produced their own or have endorsed common bibliographic style manuals or standards. In this study we have studied several style manuals and standards for bibliographic referencing and several editorial guidelines for this purpose to compare them. Indian bibliographic standard gets special attention.

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225-228

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# Diversity And Distribution Of Odonata In University Sumatera Utara, Medan, Indonesian

Ameilia Zuliyanti Siregar, Darma Bakti

A total of nine stations randomly selected study sites around the University Sumatera Utara area conducted during a month (16 January 2016 until 16 February 2016) for identified of Odonata. Odonata are insect which function as bioindicator and conservation of an environment status in the area. The sampled were collected using a sweep net (400  $\mu\text{m}$  mesh, 60 cm x 90 cm) with six times the swing starts at 0900 until 1200 noon hour and identified in the laboratory. Consist of two sub-orders, 4 families, 24 genera, 32 species and 156 individuals identified dragonfly. *Orthetrum sabina*, *Pantala flavescens* and *Agriocnemis femina* are the kinds of dragonflies dominant, while two types of *Vestalis/Arethystira amoena* and *Tholymis aurora* is found only in the Station 3. As much as 54% relative abundance of family Coenagrionidae dominated, followed by Libellulidae (35%), Gomphidae (8%) and the smallest recorded from family Calopterygidae (35). The calculation of the value of the index is done, includes diversity Shannon, evenness and varied of Jaccard index ( $H'=2.48-3.79$ ,  $E=0.70-0.85$ ,  $CJ=0.45$  to 1.00). Based on the conservation status, calculated the percentage of attendance dragonfly, divided into four groups of species that are rare (6.28%), there are species (54.24%), many species (24.78%) and very many species (14.70%). This study shows diversity and distribution of Odonata can used as potential as predators and conservation status of ecosystem University of Sumatera Utara areas.

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# Extraction And Isolation Of Lycopene From Solanum Lycopersicum And Citrullus Lanatus For Bioplastic Colouring

Vrinda Nair, Simran Lilwani

Lycopene is a carotenoid pigment and phytochemical found in tomatoes, water melon and other fruits mostly red coloured. Due to its structure, lycopene gives its deep red colour owing to its strong colour and non- toxic in nature. Lycopene is non-polar in nature due to which it stains any porous material including plastic. Lycopene diffuses into plastic, making it difficult to remove with hot water or detergent. Since lycopene is insoluble in water but can be dissolved in organic solvent and oil. Extracting lycopene from natural source like tomato and watermelon which contains the highest amount of lycopene leads to a non-toxic colouring agent which can be used in bioplastic colouring. Identification of lycopene was carried out using UV-Visible spectrophotometer and HPLC. The lycopene content was found to be 5.50 and 11.1 (mg/kg fresh wt) in tomato and watermelon respectively. The peaks of lycopene in UV-Visible spectrophotometer were found at 459 nm and 468 nm for tomato and watermelon respectively. HPLC of lycopene was carried out which showed the  $\lambda_{Max}$  at 473 nm for tomato and 471 nm for watermelon. The extracted lycopene was added while preparing the bioplastic as the colouring agent. Hence, lycopene proves to be a potent biocolour for the bioplastic colouring.

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235-238

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## **Facility Location Selection For Seasonal Product: A Case Study For New Business And A Comparative Study Of AHP And ANP**

Shahed Mahmud, Dewan Sabbir Ahammed Rayhan, Tanvir Ahamed

Decision making and choosing the right decision is one of the main activities of businessmen. Taking a decision without proper knowledge and methods the performance of the business will reduce and businessmen will fail to earn optimum profit. Facility location selection is the fast and foremost decision of businessmen when starting a new supplying business. Without a proper, accurate and standard method for selecting the most profitable facility location for supplier business, the performance of this business will affect. Rajshahi is a city of mangoes in Bangladesh and a seasonal business of mangoes held here every year. Supplying of mangoes can become a profitable business by selecting the best location for supplying mangoes to the different areas of the country. But due to the wrong selection of the location, most suppliers fail

to earn the maximum profit. The objective of this case study is to provide a decision support system to select the facility location for mango supplying business. Moreover, for conducting this investigation a survey data is collected of 37 samples to identify the criteria and sub-criteria of the mango supplying business. In order to resolve the case, AHP and ANP the two MCDM techniques are used for resolving this decision making problem. This investigation also demonstrates a brief look at the foundation of AHP and ANP and their major differences.

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## **Evaluation Of International Tourist Satisfaction In Weh Island Indonesia Using HOLSAT Model**

Dr. Syafruddin Chan

The purpose of this research is to examine international tourist satisfaction in marine tourism, especially diving and snorkeling, in Weh Island Indonesia using Holsat Model. The data for this study come from survey in the field, by using questioners and interview, not only to tourists but also to other stakeholder such hotel owner, government officials, international NGO officers and other related parties. 200 Respondents were drawn from four (4) locations most tourists concentrated in Iboih, Sumur Tiga, Kota and Gapang by using stratified random sampling. The data was tabulated and processed by using Holsat Model that was developed by Tribe and Snaith (1998) as a research instrument for measuring holiday satisfaction. The international travelers were not really satisfied when visited Weh Island. This was because most of the attributes used to measure their satisfaction were still below their expectation. Thus, this finding is important for service providers like restaurants, travel agents, hotels, and tourist information centers in Weh Island to improve all the poor indicators rated by tourists. Furthermore, the findings demonstrate the usefulness of the HOLSAT model in three aspects: First; this study identifies tourists sense of satisfaction or dissatisfaction in terms of the various attributes of Weh Island as a holiday destination. Second; this study provides insights on how Weh Island is perceived as a holiday destination by international tourists. Third; this study provide a better approach to understanding of tourist behavior while they are visiting Weh Island, Based on the results of the comparison between expectations and experiences.

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## **Meaning Of Work And Work Ethos Amungme In Pt Freeport Indonesia In The District Mimika**

Agustina Ivonne Poli, Pawennari Hijjang, Muh Yamin Sani, Muhammad Basir

This article aims to describe how Amungme interpret the concept of work and work ethics in view of its culture, and how the process works undertaken by Amungme in his involvement in the company of PT. Freeport Indonesia. This study used a qualitative descriptive approach, where researchers try to capture the meaning of work and the work ethic Amungme in the company. The results showed that the formation of the meaning of work it is dependent on how their perceptions about her experiences during the interaction with the various circumstances that exist at the location where they work. This could be explained if our starting point on the premise that the meaning of work that is basically identical to the value that is believed to be someone on the activities of the operation, in which these values are acquired and developed from one's experience.

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## **Case Study Of Leech Application In Varicose Ulcer**

Samaranayake G.V.P., Pushpakumara A.A.J., Waliwita W.A.L.C.

Varicose ulcers are wounds that are thought to occur due to improper functioning of venous valves, usually of the legs. They are the major occurrence of chronic wounds, occurring in 70% to 90% of leg ulcer cases. In Sushrut Samhita, where get the most scientific description of wound and its management. Similarly, Sushrut has given the almost importance to Bloodletting therapy

and considered leech as the most unique and effective method of bloodletting even in infected wounds and abscesses. Aforesaid description let us to try leech therapy in venous ulcer was advised to continue weekly application of leech around the ulcer which was followed by dressing with Seethodaka oil and Dashanga lepa. This leech therapy proved very effective and the ulcer healed completely within 30 days. However further evaluation is required to be done by taking a large samples size to prove its' significant in treating Venous ulcer.

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## **Google Glass - Dazzling Yet Brittle Technology**

Saideep Koppaka

In today's digital world, everyone's carrying a mobile phone, a laptop and a tablet. All the devices mentioned above need to be carried by an individual in his bag or in his pocket. Google tried to bring up a wearable revolution with the introduction of Google glass. It is a wearable computer with an optical head mounted display that is worn like a pair of glasses. This paper will discuss the technology, working, benefits and concerns over the first wearable computer.

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## **Spread And Environmental Impact To Presence Of Sulawesi Endemic Butterfly Graphium Androcles Boisduval (Lepidoptera : Papilionidae) In Bantimurung-Bulusaraung National Park**



Harlina, Adi Basukriadi, Amran Achmad, Djunijanti Peggie

Swallow Tail butterfly (*Graphium androcles* Boisduval) is the one of endemic butterfly from Bantimurung-Bulusaraung National Park, South Sulawesi. Currently, *G. androcles* very difficult to find in their natural habitat. The purpose of research is to study spread and environmental impact to presence of *G. androcles*. The research was conducted in April 2014 to March 2015 on two areas : Bantimurung and Pattunuang. Our observation was used Cruise Methods and data analysis with descriptive methods. The result was showed total number of butterfly about 57 individuals divided into: Bantimurung (12 individuals) and Pattunuang (45 individuals). Based on Pearson's analysis, temperature ( $r = 0.716$   $p=0.009$ ) and rainfall periods ( $r=0.676$ ,  $p=0.016$ ) has strong correlation with presence of *G. androcles*. On the other hand, no correlation with humidity ( $r=-0.888$ ,  $p=0.786$ ) and light intensity ( $r=0.172$ ,  $p=0.593$ ) in the presence of butterfly. We find more *G. androcles* in the beginning of dry season (end of Juni until November 2014) on the river area and open field. Commonly the activity of butterfly was started 11.00 until 14.00 am. The range of temperature, light intensity and humidity is 29 - 31oC, 45 - 1.735 and 55 - 70%, respectively. Our conclusion is *G. androcles* activity as the behavioral response to adapted in their environment.

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## The Ability And Factors Affecting The Students To Use English Gerund

Arham R

This research actually provides a description about the ability of the Second year students of Senior High School Tamalatea Makassar to Use-ing from as gerund. The problem statement of this research refers to the students' ability to use-ing form as gerund and the factors that affect the students to learning form as gerund. The writer applied a descriptive method in verifying the arguments of this thesis. The objective of this research is to find out the ability of the Second Year students of Senior High School Tamalatea Makassar to use-ing form as Gerund and the factors affecting them to learning form as Gerund. In collecting the data the writer used two kinds of instruments namely-, test (objective test) that is used to know the students' ability to use English Gerund and questionnaire which is used to know the factors that affect the students to learn English gerund. The data obtained from the test were firstly tabulated and then analyzed

into percentage and mean score analysis. Finally, the writer inferred the conclusion. Based on the test result, it discovered that the Second year students of Senior High School Tamalatea Makassar have low mastery in using-ing form as gerund. The factor that may affect them are: lack of motivation, low frequency of practice or exercise, lack of literature that support them to learn and the teacher's method in teaching is not acceptable by students.

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## **The Patterns Of Selected Antibiotics Sensitivity And Resistance To Staphylococcus Aureus Isolates**

Stanslaus Kiilu Musyoki, Stephen Mwaura Kariuki, Kemoi E.K, Elias Mbogori

Complications of Staphylococcus aureus infection have greatly increased in recent past because of the many invasive procedures, increased cases of immunocompromised individuals, and the uprising trends in increased antimicrobial resistance of S. aureus strains. Despite of these available information and by contrast with developed countries, S. aureus associated disease are ranked low on the public-health agenda in Kenya and other developing countries. Therefore there is due reason to undertake an investigation and report the trends and patterns in a thorough manner, majorly and especially regarding the antimicrobial resistance. The aim of this study was thus to determine the levels of drug resistance of Staphylococcus aureus to various classes of antibiotics. This data is of significance in improving baseline data on antibiotic resistance of S. aureus isolated from human clinical specimens for the prudent use of antibiotics and the coming up with policies on control programs. All culture isolates were confirmed as Staphylococcus aureus genus by various tests, That is, gram staining, catalase and oxidase. Catalase positive, gram positive and oxidase negative isolates were defined as Staphylococcus. Further analyses by mannitol salt agar fermentation of the isolates and positive coagulase tests indicated Staphylococcus aureus. The area of clearance of sensitivity and tolerance was measured in millimeters and categorized as sensitive, resistant or intermediate. The present study reported that, S. aureus was most sensitive to Azithromycin, whereby 46 (61%) samples were sensitive. Penicillin on the hand was least sensitive showing 29% level of sensitivity. Methicillin, Gentamicin had more than 50% level of sensitivity, That is, 41 (55%) and 40 (53%) respectively. Other antibiotic drugs including ampicillin, augmentin and tetracycline demonstrated less than 50% sensitivity, That is, 29 (39%), 32 (43%) and 33 (44%) respectively. Drug resistance for S. aureus was therefore reported to be highest in penicillin (59%) and least in Azithromycin (25%).

Based on results of this study we conclude that drug resistance of Staphylococcus aureus may vary with the antibiotics being used.

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## **Assessment Of The Availability And Utilization Of Icts For Teaching And Learning In Secondary Schools - Case Of A High School In Kwekwe, Zimbabwe.**

Sibanda Mavellas, Mapenduka Wellington, Furusa Samuel

This paper looked at the availability of common educational Information communications Technologies (ICTs) in secondary schools, using a high school in Kwekwe, Zimbabwe as a case study. Such technologies include computers, radios, televisions, networks, wireless technologies, interactive boards, internet, email, eLearning applications, video conferencing and projectors, just to mention, but a few. It further assessed whether the available ICTs are being utilized by teachers and students, looking at such usage activities as preparation for lessons, lesson delivery, issuing of assignments, research and communications. The research further identified the factors that are hindering the ICT utilization in these schools, among them lack of power supply, insufficient resources, fear of technology, lack of interest, ICT skills deficiency, higher ICT cost and poor physical infrastructure. The findings were tabulated and analyzed. Recommendations were put forward on how to improve ICT availability and utilization at the school and schools in general for the betterment of teaching and learning. Conclusions were drawn from the findings.

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## **An Analysis Of Delivery Methods And Outcome Of Child Birth: Case Of South-**

## Western Nigeria

Alatise Olufemi Ebenezer

This research work studied the trend of the methods involved in child delivery, where methods involved in child delivery are: normal delivery, elective caesarean section and emergency caesarean section. Data about delivery from University College Hospital Ibadan in Nigeria were used for all the analysis involved, data based on these three methods and their outcomes was sourced from the record units of the hospital under consideration. The data used for the analysis spread through 2012 and 2013, where 1000 units of delivery records was randomly taken and the trend at which women request delivery through elective method was obtained. The comparison of the outcomes of the three methods was carried out, in other to see their contributions to the risk at birth. The major risk at birth considered is Death, both the perinatal and maternal mortality. The dependency of the outcomes of the methods with variables: mother's age and methods of delivery, was determined and also discover which of these variables having highest contribution to death during child delivery. The analyses were carried out using chi square, multinomial logistic regression and simple percentages, while Statistical package for social sciences was used for the analysis. Through analysis, other women age groups has 99.9% less contribution to death than age group  $\leq 17$ . Normal delivery has highest number of delivery likewise age-group 30 and above, elective caesarean section is more likely to contribute to death than emergency caesarean section when compare to the normal delivery.

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## Baburs Creativity From Central Asia To India

Rahimov Laziz Abduazizovich

this report explores about Babur's Mughal architecture. Additionally, the new style of architecture has made and brought in by Babur in India. As we found out that during those days, in India, the Islamic architecture was developed, however, despite the fact Babur wanted to bring in to that sector his new idea about Timurid style because Indian style of building did not gave pleasure to Babur. Therefore, after the victory over the Lodi he started to change the Indian style

and started to build in Temurid scheme. As there are, three mosques and it doubted which one has built by Babur and after making research we have found it in detail. In addition, it has displayed in more detail in the following. Lastly, we followed how Baburid architecture has begun and its development over the years, as well as, it has given an evidence supporting our points.

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## **Oxidation Degradation Study And Use Of Phenol And Amina Antioxidant Compounds In Natural Rubber Cyclical**

Arofah Megasari Siregar, Eddyanto, Basuki Wirjosentono, Ameilia Zuliyanti Siregar

The research was conducted research into the use of commercial antioxidants Irganox 1010 (wingstay) to inhibit the oxidative degradation of cyclic polymers of natural rubber and polypropylene nanocomposite with commercial montmorillonite (PP / MMT-Clay). Proces mixing nanocomposit PP/MMT using commercial compatibiliser PP-g-MA (PB3200) made in an internal mixer at a temperature of 180 C for 10 minutes and 65 rpm rotor speed. Hyndered phenol antioxidant effectiveness was analyzed using Fourier Transform Infra Red (FTIR). Analysis of infrared is done by measuring the broad index absorption of the carbonyl group ( $>C=O$ ) at a wavelength of 1700  $cm^{-1}$  and a broad index uptake hydroxyl group at a wavelength of 3400  $cm^{-1}$  before and after heated in an oven temperature of 125oC with variations in exposure time. The results indicate the use of antioxidant Irganox 1010 in nanocomposite PP / MMT with a stabilizing factor of 5.5. Further commercial antioxidants will be used to restrain the rate of oxidation degradation of the natural rubber products cyclical (CNR).

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## **Corporate Board And Firm Value:**

# Perspective Two-Tier Board System In Indonesia

Leni Susanti, Sulaeman Rahman Nidar

This study aimed to investigate whether the effect of board commissioners and board of directors toward firm value at companies listed in Indonesia Stock Exchange. Secondary data is used and collected based on time series and cross section from 2010 until 2014, among 184 companies as unit observation. This study uses data panel regression analysis techniques with Generalized Least Square (GLS). Chow test and Hausman test show that the model used as a fixed effect estimation technique. The results show simultaneously the board of commissioners and board directors have a significant effect on firm value. Furthermore, partially the board of commissioners has a negative and significant effect toward firm value. The board of directors has a positive and significant effect toward the firm value.

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# The Influence Of Quality Services And The Human Resources Development To User Satisfaction For Accounting Computer Study At Local Government Officials Depok West Java

Asyari

The benefit that is felt directly by the customer in using a computer accounting program into an expectation of users to a product produced by an accounting information system . the existence of accounting system will provide convenience in processing accounting data into an output of financial statements . investors and the public will be easy to read and profit earnings results thanks to sales of computer usage accounting . This study intends to seek clarity from the

influence of quality of services and human resource development of the accounting computer user satisfaction . object of research is the environment of local government officials Depok, West Java . The results showed that the effect on the service user satisfaction . And development of employees a significant effect on user satisfaction

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## **New Concept For Alarm Structure And Management In Dcs Systems**

Mohammed Hegazy

The objective of this paper is to set new standard for good design and best practice to applied when any DCS Manufactures/Suppliers configure process alarm system in any oil refining, oil and gas production, gas-handling facilities, gasification plant or any chemical processing plant and thereby to optimize/minimize unnecessary alarms from reporting to operator workstations CAD (Control Alarm Display). These views based on the experience acquired and implemented during involvement with the commissioning and startup of two DCS projects in Mina Al-Ahmadi Refinery, Kuwait.

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## **Effectiveness Of UVC Lights Irradiation To Improve Energy Saving**

Sameer A. Bilal

HVAC (Heating, Ventilation and Air conditioning) is the largest consumer of energy in commercial and industrial buildings. HVAC systems account for an approximated 50% of

energy use in buildings. The sources of contamination and odour comes from the growth of bacteria, mold and fungus that accumulate and develop on wet surfaces of HVAC coils and drain pans ,causing respiratory infection, cough, tight chest and wheezing. Besides the effects on human health, Fungal contamination that adheres to the fins of cooling coil of air handling unit ( AHU ) cause a significant increase in pressure drop across the coil and decrease in heat exchange efficiency , which Leads to loss of cooling capacity and additional energy use. To prevent the fungal and microorganism growth on the cooling coil and drain pan of HVAC systems, many studies conducted but not all these solutions were sufficient to remove microbial organism from the HVAC 100 %. The UV-C light options, through a process known as UVGI ( Ultraviolet germicidal irradiation ) is a technology showed a significant impact to produce clean air and improve indoor air quality [16]. UVGI lights produce short wavelength light kills microorganisms, including viruses, bacteria, mold and many other fungi by disrupting their DNA. The effectiveness of UVGI installed inside HVAC systems depends on many factors and the application Methods in HVAC systems. A few studies showed whether the use of (UVGI) results in energy saving. The objective of this study is to find the effect of fungal growth on the cooling coil surface by using field measurements at actual operating conditions of heat transfer and air flow for a non-irradiated coil in comparison to irradiated coil .Hence evaluate if there would be an enthalpy change at the coil and document the effectiveness of UVGI coil cleaning on restoring cooling capacity and save energy.

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## Change Management

Motab Raja Aljohani

Managing change within organizations is a core challenge for the HR professionals, as any change concerns people working within the organization. The study of Human Resource Management is based on achievement of goals through corporate strategy and effective management of change within the organization. Change can be successful when it links people, job satisfaction and productivity within an organization. Effective change management can result in greater productivity, higher work life quality and improved readiness for future changes. Most HR professionals are regularly being asked for developing attitudes and personal skills for change implementation as technical understanding of applying the tools for managing change. This article will outline the challenges faced by Human Resource managers in change implementation. The well-known theories and literature will also be discussed to share light on the importance and change management for HR. Also, recommendations and suggestion will be provided for improving change management process within an organizational context.



Keywords: Change Management, Human Resource Management

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# Synthesis Of Three Analogues Of Trypsin-Modulating Oostatic Factor (TMOF) And Screening Of Their Insecticidal Properties Towards Cabbage Cluster Caterpillar

Rani Maharani, Ari Hardianto, Safri Ishmayana, Eka Fitri Yanti, Devia Irma Melati, Daniel Sihotang, Lindung Tri Puspasari, Danar Dono

**Abstract:** Three analogues of TMOF, [PP (H-Pro-Pro-OH), P P P P P P (H-Pro-Pro-Pro-Pro-Pro-Pro-OH), and A P P P P P P (H-Pro-Pro-Pro-Pro-Pro-Pro-OH)], were successfully synthesised and screened for their insecticidal properties against cabbage cluster caterpillar (*Crociodolomia pavonana*). All compounds were prepared through Fmoc-based solid-phase peptide synthesis (SPPS) method. The synthesis employed chlorotrityl resin as solid support. A combination of N,N-diisopropylcarbodiimide (DIC) and ethyl 2-cyano-2-(hydroxyimino)acetate (oxyma) was chosen as coupling reagent in the synthesis. The peptide was cleaved by using TFA cocktail. All peptide crudes were purified by using reversed-phase flash chromatography with octadecyl silane (ODS) as stationary phase. All purified peptides were characterized by using TOF-ESMS and their purity was analysed using thin layer chromatography and analytical RP-HPLC. The synthesised TMOF analogues, together with TMOF, were biologically tested towards the (*C. pavonana*) at 1000 ppm. The results indicated that TMOF and the analogues were less effective for the cabbage cluster caterpillar, compared to previously reported activity of TMOF towards *Aedes aegypti*.

**Index Terms:** Trypsin-modulating oostatic factor, TMOF, *Aedes aegypti*, *Crociodolomia pavonana*, solid-phase peptide synthesis, 2-chlorotrityl chloride resin, DIC/Oxyma.

## 1 INTRODUCTION

Studies on trypsin-modulating oostatic factor (TMOF) (Fig. 1), a decapeptide (YDPAPPPPPP) isolated from ovaries of the female *Aedes aegypti*, have been reported by some researchers and has become our research interest [1, 2]. TMOF with its insecticidal activity towards the mosquito larvae was found to inhibit the trypsin- or chemotrypsin-like enzyme biosynthesis in the mosquito [3]. Borovsky stated that TMOF is potential as a future biorationale larviside [2]. TMOF is considered to be environmentally friendly and effective. It is also deemed that TMOF can replace current resistance insecticides. Some analogues of TMOF have been synthesised and screened for their insecticidal properties against *A. aegypti* [2]. The result showed that some analogues have a better activities against *A. aegypti* compared to the TMOF.

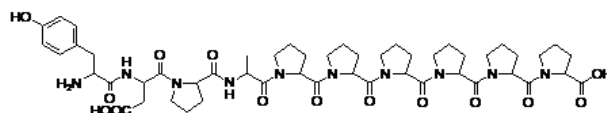


Fig. 1. Structure of TMOF (YDPAPPPPPP).

In our current studies we are interested to explore insecticidal activity of TMOF and its analogues against another insect, *C. pavonana*. The lepidopteran *C. pavonana* is known as cabbage cluster caterpillar in agriculture field. It is becoming enemies for farmers including farmers in Indonesia. Currently, we are interested in studying TMOF and analogues for their biological properties against *C. pavonana*. Since some Lepidoptera such as *Heliothis virescens* and *Plutella xylostella* have been found to use trypsin to digest food,[3] the study is aimed to test if TMOF and analogues could also control trypsin biosynthesis in *C. pavonana*. The chemical synthesis of TMOF has been reported by our research group[4] and in the present paper, we are going to describe the synthesis of the analogues and also to report the result of biological assays of the synthesised products in a comparison with the insecticidal activity of TMOF against *C. pavonana*. Solid-phase peptide synthesis method was chosen over solution-phase peptide synthesis. TMOF analogues were synthesised by using the same strategy of the synthesis of TMOF [4]. They were prepared on chlorotrityl resin. This selection was based on the fact that the resin does not have a tendency towards diketopiperazine formation particularly during the attachment of the first two residues on resin. This is particularly the case when proline is present as the C terminus of the peptide. Chlorotrityl resin has also been shown to be able to avoid extensive racemization during the attachment of the first amino acid particularly in Fmoc-based peptide synthesis [5]. The synthesis was based on Fmoc strategy and employed DIC/oxyma as coupling reagent. DIC (N,N'-diisopropylcarbodiimide) is one of carbodiimide reagents

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