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**CONFERENCE
PROCEEDING**

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Proceeding of the Emerging Scientists-2019

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Prof. Rubina Hanif, Quaid-i-Azam University, Pakistan

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Conference Proceeding of Emerging Scientist

To adopt a profession as an Academic Research Scientist in Asia is not an easy choice. In today's world, the 'Early Career Researchers' – who are responsible for shaping the future of scientific discovery – face numerous challenges which includes, both, the ones which are similar to and different than those faced by their predecessors. Not only are they the newest modern wave of 'Emerging Researchers' but are also the largest.

“Emerging Scientist”- our brand new- Initiative was organized during 30-31st March, 2019 at Conference Hall- Asian Digital Library, Faisalabad, Pakistan; Aiming to outset this venture by concentrating precisely on this next generation of scientists.

This New Initiative of Asian Council of Science Editors “Emerging Scientist” was made efficacious with the ideas and support by SSP, ISMPP, ACE College, AnsiNet, ADL and ASCI Database. The 2 day conference was attended by more than 130 participants including ACSE members, Early Researchers (Graduate Students, Postdoctoral Researchers or Junior Faculty within 10 years of being awarded with their PhD) and Academic Professionals especially from Pakistan.

This two day National Conference engaged a diverse body of Pakistani researcher’s mainly from Lahore, Islamabad, Rawalpindi, Karachi, Faisalabad, Bahawalpur, Quetta, Wah Cantt Sargodha, Chiniot, Peshawar, Mardan, Swabi, Dera Ismail Khan, Jamshoro, Kotli, Mansehra, Sheringal Dir and Muzaffarabad. There were about 51 Oral and 39 Poster presenters covering our major Conference Tracks: Medical Sciences, Social Sciences, Environmental Sciences and Computer Science, Engineering & IT. The 3 Best Research Ideas were acknowledged and awarded with Incentives & Best Poster Award.

The participants of Emerging Scientist had a chance to meet and network with the matured, well-known and proficient Scientists and key note Speakers, who were invited to share their knowledge and success stories with the beginners in the research field. Not only did they learn from their area of expertise but also the value of their research was enhanced significantly.

01 Conference Track

Medical Sciences

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Session Chairs:



Prof. Muhammad Aslam
National University of Medical Sciences, Pakistan



Prof. Mudassir Asrar
University of Balochistan, Pakistan



Prof. Zabta Khan Shinwari
National Council for Tibb, Pakistan



ES2019

— EMERGING SCIENTIST —

March 30-31, 2019 | Faisalabad, Pakistan



Correlation of the Plasma Sphingoid Base Profile with Results from Oral Glucose Tolerance Tests in Gestational Diabetes Mellitus

Presenter

Dr. Abad Khan
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Pakistan

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Live DNA
92.26277

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Oral glucose tolerance test (OGTT) is usually fail to accurately predict the risk for type 2 diabetes mellitus (T2DM), it is therefore necessary to identify an additional biomarker that would most likely improve the accuracy of OGTT. The current OGTT was performed in 53 volunteers after ingestion of 75 g glucose in 250 ml water to each volunteer. Similarly the sphingoid base profile of these volunteers was explored using liquid-chromatography linked with mass spectrometer (LC-MS) and correlated with the different time-points glucose values of OGTT as well as with total area under the curve (tAUC), incremental area under the curve (iAUC), and positive incremental area under the curve (pAUC). The findings showed that 1-deoxysphinganine (1-deoxySA) was significantly positively correlated with the 1-hour, 2-hour, and 3-hour plasma glucose level as well as with total, incremental, and positive incremental AUC while 1-deoxysphingosine (1-deoxySO) was correlated only with 1-hour, 2-hour glucose level and tAUC of OGTT. The C18SA diene was highly negatively correlated with all-time points glucose values and AUCs followed by negative correlation of C18SO, C16SO and C17SO with 2-hour glucose and tAUC of OGTT. The ratios of 1-deoxySA and 1-deoxySO with respect to C18SA diene have shown significant correlation with 2-hour and AUCs. These ratios were higher in subjects with gestational diabetes when compared with normal subjects. These findings underlined that 1-deoxysphingolipids (1-deoxySLs) and their ratios with C18SA diene could be significantly correlated with the glucose load of OGTT and might be used as predictive biomarkers for the diagnosis and risk assessment of diabetes.

Keywords: Gestational Diabetes, Oral Glucose Tolerance Test, Basal Glucose, Area under the Curve, Correlation, Sphingoid-Bases



Effect of Methanolic Extracts of *Nepeta paulesenii* Plant on Carbon Tetrachloride Induced Liver Damage in Albino Rats

Presenter

Dr. Muhammad Adnan Iqbal
University of Agriculture,
Faisalabad, Pakistan



Live DNA
92.26283

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

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³Department of Zoology, Wildlife and Fisheries, University of Agriculture Faisalabad, Pakistan

Abstract

A massive medicinal research has been conducted on many species of genus nepeta in vitro or vivo but a little to no research has been conducted on plant *Nepeta paulesenii* so in this aspect the current study has been planned to explore the effect of methanolic extract of leaves of *Nepeta paulesenii* plant on carbon tetrachloride induced liver damage in albino rats. Nepeta species are used as diuretic, antitussive, anti-asthmatic, diaphoretic, sedative agents, insecticidal, anti-viral, anti-oxidant and anti-inflammatory. Carbon tetrachloride induce injury in liver is due to the production of free radicals. CCl_4 forms a CCl_3 and OCCl_3 radicals then theses radicals bind with PUFA and form peroxy and alkoxy radicals. These radicals produce injury in cell membrane, hepatic damage and altered the activity of different enzymes. So purpose of this study was evaluate the effect of methanolic extract of *Nepeta paulesenii* leaves on carbon tetrachloride induced oxidative stress using biochemical and histopathological parameters in rats. In this study, crude methanolic extract of *Nepeta paulesenii* plant characterized by Ultraviolet-visible spectroscopy and Fourier-transform infrared spectroscopy before biological testing on albino rats and then evaluated the activity of antioxidant enzymes (CAT, POD and SOD) and levels of serum markers (ALT, AST and ALP). The histopathological changes of liver sample in treated rats were compared with respect to control. Results showed that extract of *Nepeta paulesenii* leaves can be proposed to protect the liver against CCl_4 induced oxidative damage in rats and showed hepatoprotective effect.

Keywords: Medicinal Plant, Plant Toxicity, *Nepeta Paulsenii*



PROCEEDING Emerging Scientist 2019



Synthesis and Characterization of Biogenic Silver and Iron Nanoparticles Using *Phytolacca latbenia* and *Geranium wallichianum* Extracts

Presenter

Dr. Saira Nayab
Shaheed Benazir Bhutto
University, Pakistan

Naveed U. and Saira N.

Department of Chemistry, Shaheed Benazir Bhutto University, Sheringal Dir (Upper), Pakistan



Live DNA

92.26916

Type

Poster Presentation

Abstract

Nanoparticles synthesized using biological systems are referred to as biogenic nanoparticles. Compared to chemical, physical and microbe-mediated synthetic protocol, the current method is easy to handle, rapid and without utilizing harsh chemicals and solvents via green approach. The current study reports the synthesis of silver and iron nanoparticles (AgNPs and FeNPs) using the roots extract of *Geranium wallichianum* and leaves extract of *Phytolacca latbenia* as a cost-effective and eco-friendly method. The plant extracts served as a reducing as well as a capping agent. Change in solution colour act as an evidence for the confirmation of AgNPs and FeNPs synthesis. UV-visible spectra showed the strong absorption band for AgNPs and FeNPs in the visible region at 452 and 262 nm, respectively. The SEM images depicted that the silver nanoparticles were highly dispersed in the solution and found to be spherical with 10-20 nm in size, whereas the iron nanoparticles are slightly irregular shape with certain degree of aggregation. The crystalline nature of Ag/FeNPs were identified by XRD technique. FT-IR spectra portrayed the presence of functional groups of phytochemicals which are probably involved in the formation and stabilization of NPs. The plants used in the current study have potential anti-inflammatory, anti-viral and anti-rheumatic activities and could serve as a potent biological agents.

Track

Medical Sciences

Location

ADL Auditorium

Keywords: Biogenic nanoparticles, *Geranium wallichianum*, *Phytolacca latbenia*, SEM, Antimicrobial Activities



PROCEEDING Emerging Scientist 2019



Anti-diabetic Studies of *Taraxacum officinale*

Presenter

Dr. Saqib Ali
University of Kotli,
Pakistan

Saqib A., Zahid M., Muhammad A. and Muhammad I.

University of Kotli, Pakistan

 **Live DNA**
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Type

Oral Presentation

Abstract

Medicinal plants have played vital role in the life of humans, especially for their betterment and to sustain life. Natural products isolated from plants, to be considered as main sources for treating number of diseases. *Taraxacum officinale* belong to the family Asteraceae and its subfamily is Cichorieae, its tribe is Lactuceae. The entire parts of *Taraxacum officinale* locally known as "Hund" were collected from village Pirkot Tehsil Hajira District Poonch, in April 2017. Antidiabetic activity of *T. officinale* root, leaves, and flower fractions (n-hexane, ethanol, and water) was evaluated in diabetic mice. Fifty mice were distributed in 10 separate cages each having 5 mice and designated according to following arrangement. G-I considered as negative control, G-II considered as positive control or diabetic control. G-III considered as antidiabetic control and G-IV to G-X were considered as treatment groups. It was observed that all parts of the *Taraxacum officinale* showed activity against diabetes. These fractions decreased blood glucose level after administration of the extracts (n-hexane, ethanol, and water) of roots, leaves and flowers. But n-hexane fraction of flowers, water fraction of leaves and water fraction of roots showed remarkable antidiabetic activity.

Track

Medical Sciences

Location

ADL Auditorium

Keywords: Anti-diabetic, *Taraxacum officinale*, Various Fractions, Medicinal Plants



Establishing Spirometry Reference Ranges for Children/Adolescents of Karachi, Pakistan

Presenter

Dr. Sara Sadiq
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Pakistan

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² MBBS Students, Ziauddin University, Karachi, Pakistan



Live DNA

92.26805

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

"The accurate diagnosis" of respiratory disease requires a good interpretation of spirometry results that based on the availability of region specific reference range as there are many modifiable as well as non-modifiable factors that can affect lung function like age, sex, height, weight, ethnicity, socioeconomic status. This may be the reason for higher spirometry lung function among white children or adolescents. Looking over Pakistan, the children and adolescents are diagnosing on Polgar reference ranges which is the major reason behind false positive or false negative results. The objective of the study is to establish spirometry reference ranges for children and adolescents of Pakistan, considering height as an independent variable. The study design used was cross sectional done between April to October 2017. Modified form of International Study of Asthma and Allergies in Childhood (ISAAC) Questionnaire was used. Spirometry variables taken were Forced vital capacity (FVC), Forced expiratory volume in 1 second (FEV1), FEV1/FVC, Peak expiratory flow rate (PEF), Forced expiratory flow between 25% and 75% expired volume (FEF25-75). By normal distribution curve the reference values were established, mean \pm 2 SD were taken as significant. A Pearson's correlation coefficient was calculated for all pulmonary variables with height (cm). The linear regression models were calculated for all pulmonary variables with the age and height. Data with $p < 0.05$ were considered as statistically significant. A total of about 1085 participants were included in the study after following the exclusion criteria. The mean lung volumes for FVC, FEV1, FEV1/FVC, PEF and FEF25-75 were 2.21 ± 0.75 , 2.08 ± 0.73 , 92.9 ± 4.7 , 231.3 ± 70.5 and 2.68 ± 1.2 , respectively. The data report that lung volumes were directly increasing with height from children to adolescents. The scatter plots with regression lines displayed a strong positive correlation among height and pulmonary variables including FVC, FEV1, PEF and FEF25-75. Lung volumes and capacities are important for diagnostic as well as therapeutic purpose. The current study establishes a normative reference range along with prediction equation for children and adolescents of age group 7-18 years of Karachi. The present study reported a strong positive correlation of height with the spirometry variables, on the other hand it manifested higher values among boys as compare to girls.

Keywords: Medical education, Learning Environment, Operation Theatre



PROCEEDING Emerging Scientist 2019



Modulation of Morphine Induced Addiction and Hyperalgesia by Buspirone

Presenter

Dr. Shazia Nawaz
University of Karachi,
Pakistan

Nawaz S., Tabinda S., Sumera G. and Darakhshan J. H.

Neuroscience Research Laboratory, Dr. Panjwani Center for Molecular Medicine and Drug Research, University of Karachi, Pakistan

 **Live DNA**
92.27084

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Morphine, a pharmacologically active alkaloid of opium poppy and other opioids are among the most effective prescription medications for the treatment of pain. Addiction and hyperalgesia associated with their long-term use limits the clinical utility of these drugs. In view of a role of somatodendritic serotonin (5-hydroxytryptamine; 5-HT)-1A receptors in addiction and analgesic effects of morphine, the present study concerns effects of co-use of buspirone, a partial agonist at the serotonin-1A receptor, on reinforcing, hyperalgesic, and metabolism of dopamine and 5-HT of morphine in rats. Metabolism of dopamine and 5-HT were also studied in the nucleus accumbens (NAc) and caudate nucleus (CN) of rats. A dose of morphine (7.5 mg/kg) producing moderate effects on motor activity and buspirone (doses of 0, 1.0, and 2.0 mg/kg) were injected intraperitoneally. Acute administration of morphine decreased motor activity and reduced pain perception. Repeated administration was reinforcing in the conditioned place preference (CPP) paradigm and was associated with hyperalgesia and tolerance in motor depressant effects of morphine. Co-administration of buspirone not only prevented rewarding effects of morphine, but its effects on the metabolism of dopamine and serotonin in the NAc and CN were also reversed. Co-use of buspirone also inhibited morphine induced hyperalgesia. Results suggest that 5-HT_{1A} receptor dependent modulation of dopamine neurotransmission in the CN and NAc is involved in the modulation of the rewarding effects of morphine in buspirone co-treated animals. The findings documenting an important role of 5-HT_{1A} receptors in drug addiction suggest that synthetic opioid drugs with agonist activity for 5-HT_{1A} receptors may prove non addictive analgesics.

Keywords: Morphine, Buspirone, Addiction, Analgesia, Dopamine, Serotonin, Pain, Reinforcing



PROCEEDING Emerging Scientist 2019



Hormonal Changes and Leptin Gene Polymorphism in over, under and Normal Weight Depressed Patients

Presenter

Dr. Sumera Gul
University of Karachi,
Pakistan



Live DNA

92.26919

Type

Distinguished Speaker

Track

Medical Sciences

Location

ADL Auditorium

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Abstract

Leptin, initially identified as an anti-obesity hormone, has been shown to produce depression lowering effects in preclinical studies. However, higher leptin levels occur in obesity and human data on leptin levels in depression is controversial. To understand a role of leptin in human depression, the present study is designed to investigate leptin concentration and leptin gene polymorphism in underweight, normal weight, overweight and obese depressed patients. Associated changes in circulating ghrelin and cortisol are also monitored. The study shows that depression is largely associated with obesity in both males and females but with anorexia in males only. Underweight males as well as females depressed patients and obese females but not males have lower leptin levels. Leptin gene polymorphisms rs36219260 is associated with obese moderate depression in males and underweight moderate depression in females. rs17151914 and rs17151922 are associated with overweight minimal depression in males and overweight severe depression in females. Underweight males and overweight females depressed patients have higher ghrelin levels. Ghrelin levels are lower in overweight depressed males. The present study provides an insight in the important role of leptin and leptin gene polymorphism in the modulation of responses to stress.

Keywords: Leptin, Gene Polymorphism, Obesity, BMI



PROCEEDING Emerging Scientist 2019



New Bioactive Alkaloid from *Psammogeton biternatum* Edge

Presenter

Dr. Uzma Khan
Hazara University,
Pakistan



92.26483

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

¹Masood F., ¹Uzma K., ²Wajiha K., ¹Abdul M., ¹Azhar H. S. ¹Rabia M., ¹Niaz A.,
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²Department of Environmental Sciences COMSATS, Abbottabad, Pakistan

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Abstract

With increasing resistance of bacteria, the need for new antibacterial therapies is more pressing than ever. Alkaloids are a large and structurally diverse group of compounds that have served as scaffolds for important antibacterial drugs such as metronidazole and the quinolones. Pakistan is rich in medicinal plants. *Psammogeton biternatum* Edgew. collected from District Bannu is rich in secondary metabolites. We were able to isolate a new antimicrobial alkaloid from this plant. The structure of the compound was determined by X ray crystallography. The alkaloid has shown good results against both Gram positive and Gram negative strains used in the study.

Keywords: *Psammogeton biternatum*, Quinoline Dione, Antibacterial activity



PROCEEDING Emerging Scientist 2019



Smoking: A Potential Factor for Prostatic Enlargement in Carcinoma Prostate?

Presenter

Dr. Zehra Naz
Bahria University Medical
And Dental College,
Karachi,



Live DNA
92.27290

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Naz Z.

Bahria University Medical and Dental College, Karachi

Abstract

Both smoking and prostate cancer are highly prevalent in Pakistan. Smoking has been found a causative agent in the development of prostate carcinoma. But as such no study has been conducted to see an association between smoking parameters and prostate volume. It was to find an association between smoking parameters and the volume of prostate gland. For this retrospective study of six months, thirty seven patients with carcinoma prostate were selected from cancer OPD of Urology department by non-probability based convenient sampling. Smoking parameters and prostate volume. There is no significant association between smoking parameters and the volume of prostate gland. Duration and number of cigarettes smoked per day were inversely related with prostate size. The negative correlation between the duration and number of cigarettes smoked per day with volume needs further investigation.

Keywords: Smoking, Prostate Cancer, Carcinoma Prostate, Prostate Volume, TRUS, Cancer Score, Gleason Scoring System, Gleason's Score



Evaluation of *Trapa natans* for its Anti-Oxidant, Anti-Microbial, Anti-Lipoxygenase and Anti-Cholinesterase Activity

Presenter

Mr. Ali Rizwan
The Islamia University of
Bahawalpur, Pakistan

Rizwan A., Saeed A. and Qaiser J.

Faculty of Pharmacy and Alternative Medicine, The Islamia University of Bahawalpur, Pakistan



Live DNA
92.27399

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

The indigenous edible medicinal plant, *Trapa natans L.*, commonly known as Singhara (Water chestnut) was screened for its pharmacological activities. The crude extract (TN) was prepared using 80 % aqueous methanol by cold maceration process and fractions were prepared in methanol, n-hexane, dichloromethane (DCM) and n-butanol. The extract and its fractions were evaluated for their antioxidant activity by 1-1-diphenyl-2-picrylhydrazyl (DPPH) radical scavenging method, the anti-microbial activity by disc diffusion method and anti-enzymatic activity against lipoxygenase (LOX), acetylcholinesterase (AChE) and butyrylcholinesterase (BChE). The results showed that the n-hexane fraction, at the concentration of 0.5 mg/mL, showed 80.47±0.63 % inhibition of DPPH radical; whereas, n-butanol fraction did not show any effect. The methanolic extract (10mg/disc) inhibited the growth of *E. coli* (8±0.38 mm) as compared to the standard antibiotic Ciprofloxacin (17.3±0.5 mm). Moreover, at the concentration of 0.5 mg/mL, the n-hexane fraction inhibited 70.12±1.53 % LOX enzyme when compared with the standard Baicallin (93.7±1.2 %). The methanol fraction showed 64.19±0.72 and 68.19±0.395 % inhibition of AChE and BChE, respectively, as compared with the standard drug Eserine which showed 91.2±1.2 and 82.8±1.0 % inhibition, respectively. However, the DCM and n-hexane fractions did not show any enzyme inhibitory activity. Therefore, it is concluded that the plant *Trapa natans L.* possesses different pharmacological activities that may be due to the presence of certain pharmacologically active compounds, especially the antioxidants.

Keywords: *Trapa natans L.*, Anti-oxidant, Antimicrobial, LOX, AChE, BChE



PROCEEDING Emerging Scientist 2019



Drug Addiction and its Control; Perception of Pharmacist Community

Presenter

Mr. Irfan Bashir
University of Central
Punjab, Lahore, Pakistan

Mahmood A., Irfan B., Tooba M., Naila T. and Rabia A.

Faculty of Pharmacy, University of Central Punjab Lahore, Pakistan

 **Live DNA**
92.26282

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Pharmacy is a quintessence of healthcare setting. Pharmacist is an intrinsic component of health system, performs massive duties in prescription monitoring; giving counseling and awareness related to certain affairs e.g. substance dependence, planning interventions and heedfully dispense and deliver category medications. Drug Addiction to (alcohol, cocaine, cannabis, opioids, benzodiazepines and other sedatives, antidepressants, nicotine) is a taxing situation in Pakistan. Addictive substance activate Nucleus accumbens (main rewarding system) responsible for causing compulsive use of drugs by stimulating certain receptors and neurotransmitters. Study aimed to assess the various reasons of increasing trends of addiction among community and pharmacist's knowledge about their roles in drug addiction control. This study highlights several roles and responsibilities of pharmacists, causes of drug addiction, prevailing areas for drug addiction in Pakistan, ensuring proper interventions and treatment plans (rehabilitation/vaccines) for drug addiction control and raising awareness regarding to drug addiction. Study was conducted using structured questionnaire. Study population included 1000 pharmacists of Lahore, Pakistan. Results showed addiction to narcotic substances heats up due to lack of knowledge (70%), easy hands on illicit drugs (65%), distance from religion (61%), poor income (58%), depression (74%), family problems (64%), lack of counselling/awareness (66%/92%) and bad company (54%). Drug addiction can be reduced by proper treatment plan, by ensuring of pharmacists in rehabilitation centers and by giving proper counseling to drug addicts and their families, giving awareness to local public about the importance of pharmacists in drug addiction control.

Keywords: Addiction, Narcotics Control, Rehabilitation, Psychoactive drugs, Methamphetamine



PROCEEDING Emerging Scientist 2019



Depression Among Medical Students of Karachi

Presenter

Mr. Muhammad Fazal
Hussain Qureshi
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Pakistan

Kumari U., Nakeeta D., Joti D., Muhammad F. H. Q., Fahad K. S. , Danish M., Zain J. A., Ayesha H. and Sara S.

Ziauddin University, Pakistan

 **Live DNA**
92.26578

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Depression is a mood disorder characterized by loss of interest in daily activity, feeling of hopelessness and helplessness, decreased appetite and anger or irritability. The risk factors which leads to depression include academic demands, daily habits, sleeping hours, sedentary lifestyle, inability to cope, helplessness, increased psychological pressure, mental tension and too much work load etc. The objective of current study is to find out the prevalence of depression among students of different medical colleges of Karachi and its association with symptoms, life style habits and coping mechanisms. A descriptive cross-sectional study was conducted in 6 months i.e. April 2018 to September 2018, using a self-designed, self-explanatory questionnaire which include Public Health Questionnaire (PHQ-9) for identification of depression. The coefficient of reliability including Cronbach alpha was 0.839 for the questionnaire. The data was analyzed by using mean with standard deviation and frequency with percentages while association was calculated by using Chi-square test. The mean age of participants was 21.43 ± 1.803 . Majority of participant about 2/3 were female and marital status of 3/4th of participants was single which has a significant relationship with depression scores ($p=0.018$). Symptoms of depression were compared with depression score, which showed strong positive correlation. Depression scores were also compared with lifestyle habits of participants, including sleeping hours, exercise, recent trauma and multiple coping mechanisms, presented significant association with depression scores ($p\text{-value} \leq 0.01$). It is concluded that depression is highly prevalent amongst medical student populations while the lifestyle habits, sleeping, physical activities, recent trauma and coping mechanism showed significant positive association with depression.

Keywords: Depression, Depression score, Medical Students, Coping Mechanism.



Antithyroidal Activity of *Abutilon indicum* Against Experimentally-Induced Hyperthyroidism in Male Albino Rats

Presenter

Mr. Muhammad Sohaib Khan
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Khan M. S., Ali R., Hafiz M. F. R. and Kaiser J.

The Islamia Univeristy of Bahawalpur, Pakistan

 **Live DNA**
92.27253

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Abutilon indicum (Ugc known as DYY] 6cch) is an indigenous medicinal plant with various pharmacological properties, and is used traditionally for the treatment of various diseases including hyperthyroidism. The aim of the study was to investigate the antithyroidal activity of the plant against thyroxine-induced hyperthyroidism. The crude extract, Ai.Cr, was prepared by macerating the whole plant of *A. indicum* in 70% aqueous methanol followed by evaporation using rotary evaporator. Ai.Cr was analyzed for the presence of phytochemical constituents and antioxidant potential. The animals weighing 150-250 g were intoxicated with thyroxine (600 µg/kg, p.o.) for 14 days to induce hyperthyroidism. The control group was given distilled water (5 ml/kg). After intoxication, the treatment groups were treated with different doses of Ai.Cr; i.e. 100, 300 and 500 mg/kg and the standard group was given Carbimazole (30 mg/kg, p.o.) for the next 14 days. At the end of study, all the animals were anesthetized with ketamine and xylazine (10:1), the blood samples were collected by cardiac puncture and sera separated. The thyroid gland of one animal from each group was dissected out for the histopathological studies. *A. indicum* showed the presence of flavonoids and phenols. Thyroxine increased the levels of T₃ (4.665±0.153 ng/ml), T₄ (9.142±0.078 µg/dl) and decreased the levels of TSH (0.138±0.009 µIU/ml) while, Ai.Cr, at the doses of 300 and 500 mg/kg showed significant decrease in the increased levels of T₃ (3.075±0.176, 2.92±0.220 ng/ml) and T₄ (7.880±0.245, 7.247±0.146 µg/dl) and increased the TSH levels; i.e. 0.345±0.014 and 0.465±0.053 µIU/ml respectively. Histological studies of intoxicated groups showed the decreased number of follicular colloids while treatment group showed the increased number of filled follicular colloids. The pharmacological effect of the crude extract could be because of its antioxidant activity or due to blockade of the receptors to which thyroid stimulating immunoglobulins bind or interference with sodium iodide symporter. However, the exact mechanism of action responsible for the antithyroidal activity of *A. indicum* needs to be explored.

Keywords: Antithyroidal, Hyperthyroidism, *Abutilon indicum*, Antioxidant



PROCEEDING Emerging Scientist 2019



Assay of Pesticide Residues on the Surface of Selected Fruits and Vegetables collected from Lahore, Pakistan

Presenter

Ms. Aleena Ahmed Sheikh
Kinnaird College for Women University,
Pakistan

 **Live DNA**
92.26799

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

¹Munir R., ¹Rahila H., ¹Aleena A. S., ¹Noman J. and ²Ayesha Roohi

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²Chemistry Department (C-Block), Forman Christian College, Ferozpur Road, Lahore, Pakistan

Abstract

Pesticides are pollutants which contaminate food, soil and water resources which is why it is vital that pesticide content in cultivated food is monitored and controlled. This research analyses the content of pesticide residue on surface of different food commodities in Lahore city to check if the amounts fall within or beyond the Maximum Residue Levels (MRLs) set by WHO. Eight samples of fruits and vegetables collected from markets and farms were analyzed for pesticide residues. The residue levels in the extracts were determined using Thin Layer Chromatography (TLC) and Gas Chromatography-Mass Spectrometry (GC-MS). The results showed absence of pesticide residues which lead to the conclusion that fruits and vegetables available in Lahore are safe for consumption.

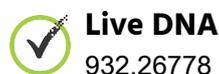
Keywords: Pesticide Residue, Assay, TLC, GC-MS



Study on Variation of Reaction Time and Reactant Concentration on Refractive Index of Synthesized Resols

Presenter

Ms. Amina Munim
Kinnaird College for
Women University,
Pakistan



Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Munim A., Rubina M., Rahila H., Ayesha R. and Sana M. S.

Department of Chemistry, Kinnaird College for Women, Lahore, Pakistan

Abstract

Phenolic resins are recognized as the cornerstone of the plastic industry in this era of robust growth of polymeric substances. Base catalyzed phenolic resins (Resols) were synthesized by the reaction of phenol with formaldehyde conducted through motor mechanical stirring and reflux condensation under alkaline conditions. The polymerization reaction was followed through varying the molar ratios of phenol and formaldehyde repeatedly. The synthesis of resols was carried out by varying the reaction time under controlled pH and temperature. The effect of reaction time and reaction concentration on the refractive index was investigated for the resulting resins.

Keywords: Refractive index, Resins, Polymerization, Reaction time



PROCEEDING Emerging Scientist 2019



High Fat Diet-Induced Weight Gain and its Prevention by Honey and Honey Proteins

Presenter

Ms. Atia Gohar
University of Karachi,
Pakistan

Gohar A., Muhammad S., Khalid M. and Darakhshan J. H.

H.E.J, Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Pakistan



Live DNA

92.27117

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Obesity is becoming a significant health concern throughout the world and is being considered as an epidemic of 21st century. Obesity has quite a complex etiology involving multiple systems of the body, due to which, many co-morbidities are associated with it, making it a metabolic syndrome. The greater intake of high-fat diet (HFD) increases the onset of obesity. Honey has been shown to improve obesity pathophysiology by decreasing plasma triglycerides, cholesterol and glucose. Honey possesses great nutraceutical value and has been used traditionally in treatment of a variety of ailments. In honey, proteins are in minute quantities, but have potent anti-inflammatory effect. In this work, we aimed to determine the anti-obesity effect of honey and honey proteins in HFD-induced obesity in rats. For this, honey (1g/kg and 0.5g/kg) and precipitated honey proteins (1.25mg/kg) were given to HFD-induced obese rats by oral and intra-peritoneal routes respectively for four weeks, and subsequently their body weights were measured before and after honey and proteins treatment. It was found that weight-gain was slowed in HFD rats treated with honey and honey proteins as compared to those treated with saline. The average body weight of HFD rats treated with honey (Low Dose) was 285 ± 11 g, honey (High dose) 276 ± 10 g and control 298 ± 12 , proteins 220 ± 17 g, and control 237 ± 17 g. These results show that honey proteins and high dose of honey controlled weight gain more effectively as compared to low dose of honey or saline.

Keywords: High-fat diet, Honey Proteins, Obesity, Precipitate



PROCEEDING Emerging Scientist 2019



Synthesis and Characterization of Mono-, Bis- and Tetrakis-NHC Silver(I) Complexes and Their Potential for Wound Healing

Presenter

Ms. Ayesha Riaz
The University of
Agriculture, Faisalabad

Riaz A., Haq N. B. and Muhammad A. I.

The University of Agriculture, Faisalabad, Pakistan

 **Live DNA**
92.27304

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Silver(I)-NHC complexes are important for their wide use in medicine and catalysis. Silver based bandages and ointments are currently being developed for wounds. In current study, various mono-, bis- and tetrakis benzimidazolium salts were synthesized using m-xylyl and ethyl linkers via multistep reactions. These benzimidazolium salts were reacted with Ag₂O to form respective acyclic Silver(I)-NHC complexes. All the benzimidazolium salts and respective silver(I) complexes were characterized by FTIR and NMR (¹H & ¹³C) spectroscopy. Pure single crystals of complexes were analysed by X-ray crystallography. Fourteen days in vivo wound healing study was done on rabbits to evaluate the potential of Ag(I) complexes in wound contraction. Three wounds per one animal were treated with each Ag(I) complexes for individual animal. Tetrakis-NHC Ag(I) complexes showed the highest wound contraction ability as compared to mono- and bis-NHC Ag(I) complexes and their %age wound contraction was found close to commercial contracting gel. However bis-NHC complex also showed good wound contraction ability. Results showed that the wound contraction ability of complexes increases with increasing number of silver(I) ions in the complex.

Keywords: Silver(I)NHC Complexes, Wound Healing, Tetrakis-NHC Silver Complexes, bis-NHC.



ASPM Not the Underlying Causative Gene for 20 Families Affected with Autosomal Recessive Primary Microcephaly

Presenter

Ms. Aysha Saeed
Kinnaird College for
Women University,
Pakistan



Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

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³Department of Biochemistry, Kinnaird College for women, Lahore, Pakistan

Abstract

Primary microcephaly (MCPH) is a rare autosomal recessive neurodevelopmental disorder with high prevalence in Pakistan owing to greater than global consanguineous rates. Pakistan, with more than 70% consanguineous marriages, has higher prevalence of most rare genetic disorders, primary microcephaly being one. Autosomal recessive primary microcephaly is a rare genetic disorder of neurogenic mitosis with clinical findings of reduced occipitofrontal head circumference (OFC) being less than 2 standard deviations below the age and sex mean. The other characteristic features of primary microcephaly are small (mostly) sloping head with non-progressive mental retardation. Genetic diversity is well established in microcephaly with twenty four loci (MCPH1-MCPH24) reported so far. The gene for MCPH5 namely, ASPM (abnormal spindle-like primary microcephaly associated) remains to be the most common underlying culprit for microcephaly. More than 100 mutations have been identified in this gene till date and ASPM mutations account for as much as 50% of microcephalic cases reported from Pakistan. For the current study, twenty families affected with autosomal recessive primary microcephaly were identified and sampled from different regions of Punjab, Pakistan. All the relevant clinical information and venous blood samples of the families were collected. The genomic DNA was extracted using standard phenol-chloroform method. ASPM was the obvious choice for genetic characterization of the affected families, owing to its highest prevalence in Pakistan. Exclusion analysis was performed by polymerase chain reactions using microsatellite markers (D1S1660, D1S2655, D1S306, D1S518 and D1S373) flanking the ASPM gene. When the amplified products were analyzed on 8% polyacrylamide gel, no plausible linkage for any the recruited families was observed with ASPM. These results indicate towards the increasing genetic heterogeneity of MCPH and these families should be further screened for all the remaining known loci via linkage analysis or next generation sequencing. In case no gene/mutation is identified, these families will be subjected to genome wide association study to identify the underlying gene responsible for the disease phenotype. Identification of novel genes will help us conduct carrier screening and genetic counseling of recruited families to limit the prevalence of this disorder in our population.

Keywords: ASPM, Primary Microcephaly, Consanguinity, MCPH, Occipitofrontal head circumference (OFC)



PROCEEDING Emerging Scientist 2019



Exploration of Nutraceutical Potential of Cinnamon to Formulate Functional Food Product

Presenter

Ms. Filzah Manzoor
The University of
Faisalabad, Pakistan

 **Live DNA**
92.27250

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Manzoor F.

The University of Faisalabad, Pakistan

Abstract

Proximate and mineral composition of *Cinnamomum zeylanicum* was explored to determine their nutritional profile. The results manifested that all the examined nutritional characteristics of the cinnamon powder differentiated significantly ($P < 0.01$). The outcomes of the proximate analysis showed that the cinnamon comprised Nitrogen Free Extract (0.003), protein (0.007), ash (0.023), fat (0.001) and fiber (0.009). The elemental analysis divulged that potassium and magnesium level in cinnamon are high. Muffins were prepared by using varying concentration of cinnamon powder to develop different treatments; T (Control), muffins with cinnamon powder were T_1 (1g), T_2 (2g) and T_3 (3g). The results obtained from the sensory evaluation varied significantly ($P < 8.97$) and evaluated that T_3 attained highest scores and can be selected as the most acceptable treatment. Consequently, values of texture analysis revealed that muffins with 3g cinnamon powder were better in texture than others. 3 g of cinnamon powder was palatable quantity when incorporated in a single serving of cereal such as muffins and substantial amount of the functional food for the treatment of diseases.

Keywords: Nutritional profile, Cinnamon powder, Muffins, Sensory evaluation, Texture analysis



Pharmacological Evaluation of Anxiolytic, Antidepressant and Antiepileptogenic Potential of *Neurada procumbens*

Presenter

Ms. Hafiza Maida
Arshad
The Islamia University of
Bahawalpur, Pakistan



Live DNA
92.27251

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Arshad H. M., Ahmed A. K. and Qaiser J.

Department of Pharmacy, The Islamia University of Bahawalpur, Pakistan

Abstract

Current study was undertaken to establish the scientific basis for the use of 70% aqueous methanolic extract of *Neurada procumbens* (Np.Cr) for the treatment of anxiety, depression and epilepsy. Light/Dark Exploration, Elevated Plus Maze and Hole Board Models, were used to assess the anxiolytic potential. Forced swim and Tail suspension tests, were used to assess the antidepressant potential of Np.Cr. Normal Control group was treated with normal saline. Positive control group with Diazepam (1 mg/kg) for anxiolytic and Fluoxetine (10 mg/kg) for antidepressant activity. Treatment groups were treated with different doses; i.e. 50, 100 and 200 mg/kg of Np.Cr. Decrease in behavioral despair were observed in Np.Cr treated groups. Pentylentetrazole (PTZ) induced convulsion and Chemical kindling models were used to assess the antiepileptogenic effects of Np.Cr. Two groups were treated with normal saline; one of them served as normal control, while other as intoxicated; i.e. treated with PTZ. Treatment groups received three different doses; i.e. 300, 500, and 750 mg/kg of Np.Cr. Positive control received Diazepam (7.5 mg/kg). In PTZ-induced convulsion model the animals of all the groups except normal control group received convulsive dose of PTZ (90 mg/kg) 40 minutes after respective treatment. Mice of intoxicated group quickly reached onset of jerks, rear and falling, hind limb tonic extension and died, expressing 100% mortality. Np.Cr (750 mg/kg) showed significant delay in the onset of jerks and completely protected hind limb tonic extension (only 16.6% mortality). In chemical kindling model, all the groups except normal control group received pentylentetrazole (50 mg/kg) on alternate days. Mice of intoxicated group reached stage 4 seizure score at 12th dose of PTZ treatment. Np.Cr significantly delayed the development of epileptogenesis, and only reached stage 2 seizures at 12th dose of PTZ. It was concluded that the *Neurada procumbens*, has significant anxiolytic, antidepressant and anti-epileptic potential. These effects may be due to a single or multiple chemical constituents. However, further studies are required to isolate the chemical constituents and to evaluate their exact mechanism(s) of action.

Keywords: Antidepressant, Anxiolytic, Epilepsy, *Neurada procumbens*, Pentylentetrazole



PROCEEDING Emerging Scientist 2019



Development of Rose Petal Tea and Determination of Anti-Oxidant Power of Dry Rose Powder Against Obesity

Presenter

Ms. Humna Mateen
The University of
Faisalabad, Pakistan

 **Live DNA**
92.27249

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Mateen H.

The University of Faisalabad, Pakistan

Abstract

The species of Rosa extensively manipulated as a non-domesticated plants that conventionally utilize as a remedial blend for the cure of a spacious diversity of many ailments. The curative power of the Rosa species is basically rely on its antioxidant property that is all because of their phytochemical makeup that mainly involves the healthy fatty acids, phenolic compounds and the inclusion of vitamin C to the relative redox status. The dedicated studies over the past years, and the considerable interest in the health benefits reveal that the absolute, curative attentiveness of the Rosa has ultimately extend the analyzers that has considered its likely petition as the ministration for many diseases or can be used as a functional food or functional food additive but as a consequence of this research project, the therapeutic approaches of Rosa to treat the etiology of obesity associated to the permissive role of well known pro-inflammatory cytokines will be evaluated, focusing on its potential benefits due to the presence of trans tiliroside a glycosidic flavonoid against obesity or liver fat accumulation. Proximate and mineral composition of Rosa powder was explored to determine their nutritional profile. The result manifested that the mean values are significantly different ($P \leq 0.05$). The outcomes of proximate analysis showed that rose petal powder contains (5.43 ± 0.43) moisture content, crude protein (36.1 ± 1.1), ash (4.2 ± 0.15) and crude fiber (19.67 ± 0.65). The predominant minerals in Rosa powder is potassium ($96-105\text{mg}/100\text{mg}$) and magnesium ($25-29\text{mg}/100\text{g}$). The cookies were prepared by varying concentrations of rose powder to develop different treatments; T (Control) cookies with rose powder were T_1 (1g), T_2 (2g), T_3 (3g). The results obtained from sensory evaluation varied significantly ($P \leq 0.01$) and demonstrated that T_2 attain the highest score and selected as the most acceptable treatment.

Keywords: Rose powder, Phyto-chemical makeup, Pro inflammatory cytokines, Obesity, Liver fat accumulation, Proximate, Sensory evaluation



Appraisal of Invigorating Ramification of *Citrus aurantifolia* Dehydrated Peel Crumb on Hyperuricemia

Presenter

Ms. Mehak Rasheed
Ms. Nizwa Itrat

The University of
Faisalabad, Pakistan

 **Live DNA**
92.27247

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Rasheed M. and Nizwa I.

The University of Faisalabad, Faisalabad, Pakistan

Abstract

Citrus aurantifolia (Kaghazi lime) is a fruit from Rutaceae family which is cultivated extensively in tropical and sub-tropical regions. They retain a wide spectrum of phytonutrients serving as anti-oxidants, boosting immune system, inducing protective enzymes in liver and blocking damage to genetic material. As these plants belong to natural origin and their use poses minimum side effects, therefore, they can be used as an alternative or as an assistant to drugs like uricosuria or allopurinol, used to treat hyperuricemia. The proximate analysis of *C.aurantifolia* showed moisture 8.4 ± 0.08 , protein 5.4 ± 0.16 , fat 3.88 ± 0.09 , fiber 11.99 ± 0.8 , ash 4.89 ± 0.16 and minerals to be 3.17 ± 0.01 . The present study constructed the repercussion of dried peel powder of *Citrus aurantifolia* on serum uric acid concentrations. Hyperuricemic non-smoker, non-diabetic, non-hypertensive males and females of age group 20-40 years were provided with 15g/day of dried lime peel crumb as a ministration for 15 days. Afterwards serum uric acid levels were assessed by blood test and found a significant decline in serum uric acid concentrations with f value to be 2.6. The results of the efficacy study interpreted the fact that lime peel have a potent potential in lessening serum uric acid concentrations and can be administered as supplementation in pharmacological interventions.

Keywords: Uricosuria, Allopurinol, Hyperuricemia, Uric Acid, Pharmacological Interventions



Expidition of Nutraceutical Prospective of Turmeric and Black Pepper to Formulate Functional Food Product

Presenter

Ms. Memoona Rashid
The University of
Faisalabad, Pakistan

Rashid M., Nizwa I. and Shams U. D.

The University of Faisalabad, Pakistan

 **Live DNA**
92.27248

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Background: Turmeric and black pepper provide effective treatment for various heart diseases such as hyperlipidimia and hypertension. Alkaloid piperine present in black pepper increases the efficiency and bioavailability of curcumin present in turmeric upto 2000%. Black pepper and turmeic is not preferred for consumption in fresh form because of its bitter and punget taste, Therefore its use can be enhanced by making turmeric and black pepper cookies. Objective: The purpose of this study was to produce a novel, beneficial and consumer acceptable product Turmeric and black pepper cookies as a functional food to utilize its nutritional potential and increase the bioavailability of essential nutrient in the body. Methodology: The preperation of cookies will involve four different treatments T as control T₁ (4 gram turmeric + 20mg black pepper powder), T₂ (6gram turmeric + 40 mg black pepper powder) and T₃ (8 gram turmeric + 60 mg black pepper powder) addition of oatmeal porridge powder and honey to make the product acceptable for population. And then cookies is checked for sensory evaluation .Proximate and mineral analysis of turmeric and black pepper powder were examined to evaluate the nutritional values and the obtained data was also analyzed statistically to check the level of signifiencce amoung different attributes. Results: The results of the analysis shows that it contains (8.92±4.23 %) moisture content, (2.85±0.12 %) ash,(9.42±2.78 %) crude protein, (4.60±2.3 %) crude fibre, and (6.85±1.3 %) fat. Whereas, the mineral showed highest of zinc 22.9, calcium 8.2 followed by iron 2.3 mg/100g On the other hand, black pepper powder proximate analysis shows that it contains protein (8.449.±18%), carbohydrate (51.37±53.74%), fat (12.77±15.05%), fibre (5.135±.50%). The results of sensory evaluation demonstrated that T₃ attained highest marks and was selected as most acceptable treatment. Consequently, values of texture analysis depicts that T₃ cookies have good texture than other treatment cookies. Most palatable quantity of turmeric and black pepper unveiled was 8 grams and 60mg respectively, when incorporated in single serving of cereals such as cookies and able to give immense amount of functional food to improve hypertension and lipid profile of an individual.

Keywords: Hyperlipidmia, Hypertension, Curcumin, Piperine



PROCEEDING Emerging Scientist 2019



Synthesis and Antibacterial Activity of Anisidyl Azomethines

Presenter

Ms. Naima Tariq
Kinnaird College for
Women University,
Pakistan



Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

¹Munir R., ¹Naima T., ²Noman J., ¹Ayesha R., ¹Rahila H. and ¹Anam H.

¹Department of Chemistry, Kinnaird College for Women, Lahore, Pakistan

²Chemistry Department (C-Block), Forman Christian College, Ferozpur Road, Lahore, Pakistan

Abstract

A series of fifteen pure azomethines has been synthesized by condensing three isomeric anisidines with different substituted aromatic aldehydes. The reactions have been carried out in acidic, basic and neutral media and the effect of medium has been studied on the yields of the resulting Schiff bases after the optimization of conditions. The structures of the synthesized products have been confirmed by spectroscopic techniques like UV-Visible, Fourier Transform Infrared, Nuclear Magnetic Resonance Spectroscopies and elemental analysis. The results have shown that neutral and acidic media favor Schiff base formation in lesser time with higher yields whereas reaction in basic medium gives lower yield in longer reaction time. The inhibitory activity of the synthesized compounds has been tested against two bacterial strains *Staphylococcus aureus* and *Escherichia coli* by Disc Diffusion method. A few compounds have shown moderate activity while others have been found inactive.

Keywords: Schiff base, Antibacterial activity, Azomethines, *E.coli*, *S.aureus*



Ameliorative Potential of *Cymbopogon citratus* Leaf Powder in Attenuation of Hyperlipidemia

Presenter

Ms. Nizwa Itrat
Ms. Sara Waheed

The University of
Faisalabad

 **Live DNA**
92.27246

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Anwaar L., Nizwa Q., Sara W., Tashfa J., Nida I. and Syed J. H.

The University of Faisalabad, Pakistan

Abstract

This study was designed to compare the ameliorative effect of both *C. citratus* leaf powder and lipid-lowering drugs (statins) in hypercholesterolemic patients and to carry out the compositional analysis of sun-dried *C. citratus* leaf powder. Its dried and pulverized powder contains moisture, ash, crude fat, crude protein, crude fiber and nitrogen free extract (NFE) 10.00, 8.10, 1.28, 2.47, 3.56 and 74.59% respectively. Hyperlipidemic, non-smoker males (age 25 to 50 years) were divided into four groups (G_1 , G_2 , G_3 and G_4) in this study, each faction embodied 10 subjects. First three sets were given deliberated amounts of *C. citratus* powder (4g, 8g, and 12g, respectively) for 30 days. Fourth group (G_4) was prescribed the use of lipid-lowering medications simvastatin and atorvastatin. The cholesterol reduction for both G_2 and G_3 were from 235.90 ± 33.20 to 187.30 ± 47.37 and from 230.60 ± 37.43 to 182.50 ± 35.16 mg/dL, respectively. Levels of TG diminished most significantly in G_4 (26.6%). LDL reduction in both G_2 and G_3 were nearly same (G_2 ; 15.1% and G_3 ; 15.7%). Similarly, G_2 and G_3 raised HDL content of male volunteers substantially (G_2 ; 10.4% and G_3 ; 19.4%). However, G_4 lowered the HDL level considerably from 55.30 ± 10.91 to 35.80 ± 4.66 mg/dL. *C. citratus* attenuated the serum lipid parameters dose dependently hence, it can be considered as an arsenal for fighting against the health problems that have raised from elevated levels of lipid markers.

Keywords: *C. citratus*, Pulverized Powder, Lipid Markers, Lipid-Lowering Medications



PROCEEDING Emerging Scientist 2019



Metformin Prevents Acute Stress Behavioral Deficits in Rats

Presenter

Ms. Rushda Afroz
University of Karachi,
Pakistan

Afroz R., Shazia N., Tabinda S. and Darakhshan J. H.

Neuroscience Research Laboratory, Dr. Panjwani Center for Molecular Medicine and Drug Research, ICCBS, University of Karachi, Pakistan

 **Live DNA**
92.26906

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Metformin, an FDA-approved biguanide, is one of the most widely used insulin sensitizer against peripheral insulin resistance and has been demonstrated to confer health and lifespan benefits in diabetic patients. Studies on mice show that it reduces oxidative stress and inflammation. In addition to its anti-diabetic activity, metformin has been shown to produce neuro-protective effects. It can cross blood brain barriers to facilitate hippocampal neurogenesis and treat neuroinflammation. Preclinical studies show that it could improve learning and memory deficits associated with diabetes, high fat diet and Alzheimer like neuropathies. The present study investigates effects of metformin (50 mg/kg) on behavior of rats exposed to 2 h restraint stress. We found that cumulative 24 h food intake and body weight were not altered in saline treated stressed group. Food intake in metformin treated stressed or unstressed groups, were comparable but body weight were smaller in metformin treated stressed than unstressed group. Stress exposure decreased open field activity in saline treated rats, but the differences were not significant. Metformin injected animals exposed or not exposed to restraint stress exhibited greater exploratory activity in open field and values in the two groups were similar. Stress effects on anxiety did not occur in metformin treated group. The results tend to suggest that metformin can relieve stress effect on behavior.

Keywords: Metformin, Restraint stress, Anxiety



PROCEEDING Emerging Scientist 2019



Preference of Home Deliveries over Institutional Deliveries by Women Coming to Allied Hospital Faisalabad

Presenter

Ms. Sadia Khan
Faisalabad Medical
University, Pakistan

¹Khan S., ¹Tabinda H., ¹Saira M., ¹Zainab K., ¹Sana M. and ²Sarwat A.

¹ Faisalabad Medical University, Faisalabad, Pakistan

² Continental Medical College, Lahore, Pakistan



Live DNA

92.27293

Type

Oral Presentation

Abstract

According to Pakistan demographic health survey 2012-2013 maternal mortality rate (MMR) of Pakistan is 178 per 100 000 live births. Among the factors contributing to such a high MMR is lack of skilled birth attendance. The purpose of this study is to find out the factors which encourage pregnant ladies to prefer home deliveries over institutional deliveries. It is a qualitative cross-sectional study. A purposive convenience sampling was used to select a group of 100 ladies, who have had undergone at least 1 home delivery in last 15 years. Questionnaire was used to explore the reasons behind their choice of place of delivery. Sociodemographic variables which might have had influence while making such a decision were also considered and they were probed regarding satisfaction and problems faced during home and institutional deliveries (if they had any experience of it). The most common factor discovered was feasibility (74%) followed by trust in TBAs (69%), traditional views (49%) and limited financial resources (44%). Among the sociodemographic variables, majority of those who had opted for home delivery possessed poor educational status and were unemployed. While only 11% of women had any dissatisfaction with their experience of home delivery, 52% of the women said that hospital is a much better and safer option. Comparing our results with researches done in the past suggests that 2nd delay in maternal mortality i.e. delay in reaching care has been overcome, at least to some extent. Focus of policy makers should now shift to 1st delay i.e. delay in seeking health care. And, in view of accessibility, affordability and feasibility of home based delivery maximum effort should be employed to make it much more safer and better than it presently is.

Track

Medical Sciences

Location

ADL Auditorium

Keywords: Maternal Mortality Rate (MMR), Millennium Development Goal 5 (MDG 5), Traditional Birth Attendants (TBAs)



Atropine Ameliorates Fear Associated PTSD Symptoms by Impairing Brain Reconsolidation in Rats

Presenter

Ms. Shafiq Naeem
Rajput
University of Karachi,
Pakistan

Rajput S. N., Zehra B., Sahar R., Darakhshan J. H. and Saida H.

Neurochemistry and Biochemical Neuropharmacology Research Unit, Department of Biochemistry, University of Karachi, Pakistan

 **Live DNA**
92.27083

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

Abstract

Atropine, an anticholinergic drug is a cholinergic muscarinic receptor antagonist. It has numerous cholinergic effects. The present study was designed to evaluate the effects of atropine on reconsolidation of newly formed fear memory in rats using pavlovian fear conditioning apparatus. It has been reported that central or systemic administration of anticholinergic drugs such as atropine causes fear memory impairment during reconsolidation. In reconsolidation, stored information is rendered labile again after being reactivated, pharmacological manipulations at this stage result in an inability to retrieve the fear memories, suggesting that they are erased or persistently inhibited. This fear memory impairment phenomenon can be valuable to treat post traumatic stress disorders (PTSD). To evaluate the effects of atropine on reconsolidation of newer fear memory by development of animal models of PTSD, 12 rats were taken and divided into control and atropine groups and subjected to pavlovian fear conditioning trials in order to develop animal model of PTSD. To evaluate the reconsolidation impairment of fear memory by atropine, PR-STM and PR-LTM tests were performed to evaluate short term and long term memory after conditioning. The present findings suggest that atropine at dose of 1mg/kg significantly decreases freezing behavior thus successfully diminishes the fear memory in rats. These results suggest that atropine when given shortly after a traumatic experience can impair the reconsolidation process by erasing fear memory traces which may help in preventing Post Traumatic Stress Disorders.

Key words: PTSD, Memory , Atropine, Fear



Neurochemical, Behavioural and Molecular Level Studies of Methylphenidate in Rats

Presenter

Ms. Tabinda Salman
University of Karachi,
Pakistan

 **Live DNA**
92.26582

Type

Oral Presentation

Track

Medical Sciences

Location

ADL Auditorium

^{1,2}Salman T., ¹Rushda A., ¹Khalid M., ¹Shazia N., ¹Darakhshan J. H. and ²Shamshad Z.

¹Dr. Panjwani Center for Molecular Medicine & Drug Research, International Center for Chemical & Biological Sciences, University of Karachi, Pakistan

²National Center for Proteomics, University of Karachi, Pakistan

Abstract

Methylphenidate (MPD) is widely prescribed drug for the treatment of attention deficit hyperactivity disorder (ADHD). Despite its therapeutic importance, there is growing evidence that patients treated with MPD develop an addiction to their therapy. The drug is also used as a cognitive enhancer to improve academic performances. It is therefore important to monitor abuse potential of clinically useful doses of MPD and molecular mechanism associated with its cognition enhancing and reinforcing effect. The present study is designed to study abuse potential, if any, of clinically relevant doses of MPD. The levels of dopamine (DA), Dihydroxyphenyl acetic acid (DOPAC), Homovanillic acid (HVA), 5-Hydroxytryptamine (5-HT), 5-Hydroxyindole acetic acid (5-HIAA), and Noradrenaline-hydrochloride (NA-HCl) are monitored in the hippocampus and caudate. In view of role of 5HT-1A receptor in cognition as well as addiction, the expression of 5-HT1A receptors in the prefrontal cortex and nucleus accumbens is monitored in rats repeatedly treated with MPD. We report that lower doses (0.5 and 2.5 mg/kg) of MPD enhance learning acquisition and memory retention in a dose dependent manner in Morris water-maze test. Higher dose (5 mg/kg) of MPD however impairs these. The drug administered repeatedly at dose of 2.5 mg/kg is reinforcing in Conditioned place preference paradigm. Sensitization like effect produced transient and are not consistently shown. Result shows an increase in 5-HT metabolism in the hippocampus as well as caudate. Effects of DA metabolism are not consistent. HVA levels are decrease markedly in hippocampus but are increases in the caudate. The expression of 5HT-1A receptor attenuated markedly in the nucleus accumbens, but no effect on 5HT-1A receptor occurs in the prefrontal cortex. The results strengthen our previous studies of a role of 5HT-1A receptors in addiction. The findings may be of use in improving therapeutics in ADHD and developing non addictive cognitive enhancers.

Keywords: Methylphenidate, Learning Acquisition, Memory retention, Dopamine, Serotonin



PROCEEDING Emerging Scientist 2019



Synthesis and Antibacterial Screening of Toluidine-Based Anils against *Escherichia coli* and *Staphylococcus aureus*

Presenter

Ms. Zirwa Tul Islam
Kinnaird College for
Women University,
Pakistan



92.26776

Type

Poster Presentation

Track

Medical Sciences

Location

ADL Auditorium

Islam Z. T., Ayesha R., Rubina M., Rahila H., Aroosa A. and Anam H.

Department of Chemistry, Kinnaird College for Women, Lahore, Pakistan

Abstract

Ten different anils have been synthesized by condensation reaction between isomeric toluidines and substituted aromatic aldehydes in acidic, basic and catalyst free media and best yield has been obtained in acidic media. The completion of reaction and purity of compound have been monitored by TLC. These compounds have been characterized by using FTIR, UV-Visible spectroscopy and Elemental analysis. Synthesized compounds have been screened for their antibacterial activity by disc diffusion method against *Escherichia coli* and *Staphylococcus aureus*. Among the compounds tested, three compounds exhibited good antibacterial activity against *Escherichia coli* and the rest of the compounds have slight effect on the growth of *Escherichia coli* and *Staphylococcus aureus*.

Keywords: Antibacterial, Toluidine, Schiff base, *E.coli*

02 Conference Track

Social Science

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Session Chairs:



Dr. Rubina Hanif
Quaid-i-Azam University, Pakistan



Dr. Najma Malik
University of Sargodha, Pakistan



ES2019
— EMERGING SCIENTIST —

March 30-31, 2019 | Faisalabad, Pakistan



PROCEEDING Emerging Scientist 2019



Impact of Weight Stigmatization on Mental Health of Obese University Students: Role of Weight Bias Internalization and Emotion Regulation

Presenter

Dr. Rubina Hanif
Quaid-i- Azam University,
Islamabad, Pakistan

Rafeh A. and Rubina H.

National Institute of Psychology, Quaid-i- Azam University, Islamabad, Pakistan

 **Live DNA**
92.11364

Type

Poster Presentation

Abstract

The objective of the present study was to examine the relationship between perceived weight stigmatization and positive mental health and to investigate the role of weight bias internalization and emotion regulation in this relationship using sample of 300 university students with obesity. Results supported the significant association between perceived weight stigmatization and positive mental health. Furthermore findings indicated that after controlling gender, body mass index and family monthly income, perceived weight stigmatization turned out to be stronger predictor of positive mental health along with cognitive reappraisal and weight bias internalization. Moreover, weight bias internalization was found to mediate the relationship between perceived weight stigmatization and positive mental health.

Track

Social Sciences

Keywords: Weight Bias Internalization, Weight Stigmatization, Emotion Regulation

Location

ADL Auditorium



PROCEEDING Emerging Scientist 2019



Marital Adjustment and Social Support as Predictors of Hopelessness and Infertility Related Problem among Under Treatment Infertile Women

Presenter

Dr. Najma Malik
University of Sargodha,
Pakistan

Afia S. and Najma I. M.

Department of Psychology, Ghazali Block, University of Sargodha, Pakistan

 **Live DNA**
92.27270

Type

Distinguished Speaker

Abstract

The present research explored the predictive nature of marital adjustment and social support for hopelessness and infertility related problem among purposively selected 169 under treatment infertile women of Lahore hospitals within the age range of 20 to 40 years (mean age = 28.29). Revised Dyadic Adjustment Scale (Busby, Christensen, Crane, & Larson, 1995), Hopelessness and Depression Symptoms Questionnaire (Metalsky & Joiner, 1991), Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988) and Fertility Problem Inventory (Newton, 1999) were administered to measure the construct of the study. Results of Regression analysis showed that marital adjustment was significant negative predictor of hopelessness; social support was significant negative predictor of perceived infertility related stress and hopelessness; whereas it was positive predictor of marital adjustment. The findings of the study further revealed that older infertile women were high in hopelessness as compared to younger infertile women adults; moreover infertile women who had longer marital duration showed higher hopelessness as compared to shorter marital duration infertile women. It was also evident from the study results that women of primary infertility experienced high perceived social support as compared to women with secondary infertility. The findings from current research carry significant implications for future researchers and health professionals.

Track

Social Sciences

Location

Meeting Room 1 - ADL

Keywords: Marital Adjustment, Perceived Social Support, Hopelessness, Stress, Infertility, Primary Infertility, Secondary Infertility, Family System, Marital Period



PROCEEDING Emerging Scientist 2019



Aggression in Adolescents: A Comparative Study of Gender Differences

Presenter

Dr. Sobia Aftab
University of Karachi,
Pakistan

Aftab S. and Erum A.

Associate Professor, Institute of Clinical Psychology, University of Karachi, Pakistan



Type

Distinguished Speaker

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

Aggression in adolescents is of considerable importance and a widely explored phenomenon. Existing studies conducted in Western countries demonstrate significant differences between male and female in expression of aggression. Contemplating, the present study examined whether there are any gender differences on different forms of aggression i.e. physical aggression, verbal aggression, anger, and hostility in adolescents within Pakistani Cultural context. The sample of 200 adolescents was recruited from various Private and Government Colleges of Karachi, Pakistan. The ages of the participants ranged from 17-20 years with the mean age of 18.17 years and their educational level was from Intermediate to BS. They were administered Aggression Questionnaire (AQ; Buss & Perry, 1992) along with Demographic Form. Descriptive Statistics and t-test were computed to interpret the data in statistical terminology. The analyses reveal statistically significant differences between the scores of male and female adolescents on the variable of physical aggression ($t=-2.640$, $df=198$, $p<0.05$), anger ($t=-2.811$, $df=198$, $p<0.05$), hostility ($t=-3.717$, $df=198$, $p<0.05$), and total aggression ($t=-3.357$, $df=198$, $p<0.05$). However, no differences on the variable of verbal aggression ($t=-.969$, $df=198$, $p>0.05$) are found. These findings emphasized the unique patterns that needs to be taken in consideration while formulating gender sensitive prevention interventions.

Keywords: Aggression, Gender, Differences, Adolescents



PROCEEDING Emerging Scientist 2019



Effectiveness of Training on Banking Sector of Balochistan with Special Reference to Quetta

Presenter

Dr. Muhammad Shafiq
University of Balochistan,
Pakistan

¹Shafiq M., ²Asma A. and ³Tahira R.

¹Department of Commerce, University of Balochistan, Quetta, Pakistan

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³Multan post graduate College, Multan, Pakistan



Type

Oral Presentation

Abstract

The study was conducted during the year 2017 and the Purpose of this research was to measure the effectiveness of training on banking sector in Balochistan with special reference to Quetta which is the capital city of province Balochistan. This study was focused on effect of training on employees working efficiency and their behavior. It investigates the effectiveness of training on banking sector of Balochistan in order to evaluate increase in productivity of organization through training. It also examined that training plays a vital role in achievement of goals of firm because it enhance the skills of employees. Training is an important tool of any organization because it enhances the capabilities or skills of employees. Organizations invest a large amount or sum on Employees training & development. Organizations want to achieve their targets and goals so for this purpose they want to prepare their workers for day to day activities. They invest money on employees training and in return they want benefits from their employee's .Training and development now days become a major factor of global world. The main purpose behind training of employees is to improve the efficiency of work of employee's. The results indicated that training had significant positive influence on productivity of organization, competitive advantage, enhance skills and job satisfaction. Training positively effects on employees working efficiency, prepare them for upcoming tasks. Training is an independent variable support the data of this research. It played a vigorous role in achievement of goals of banking sector. It is an empirical study which emphasis that empirical indications of impact of training on banking sector. Furthermore training increase the efficiency of work of employees. Study provides the guidelines to help the subordinates, managers, and employees to gain maximum profit from these trainings in way to enhance skills of employees, earn maximum profit and expends business of banking industry. The main rationales to stress, banking sector covers the wider business area due to large market shares in Balochistan economy. The current data will used as guidelines and establishment for other studies in future. This study will also helpful for those organizations who want to create value for the sake of profit maximization from effective training and considered training as an important tool.

Track

Social Sciences

Location

Meeting Room 1 - ADL

Keywords: Training, Productivity of Organization, Employees Performance, skills, Efficiency, Competitive Advantage, Job Satisfaction



PROCEEDING Emerging Scientist 2019



The Perception of Maternal Autonomy Support and Adolescents' Well-Being

Presenter

Dr. Sajid Iqbal Alyana
University of Karachi,
Pakistan

 **Live DNA**
92.26923

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Alyana S. I. and Sobia A.

Institute of Clinical Psychology, University of Karachi, Pakistan

Abstract

The aim of the present study was to explore the sole influence of parents especially mother's on adolescents' well-being through the perspective of Self-Determination Theory. Self-determination theory suggests that experiencing autonomy support in close relationships is thought to promote adolescents well-being. Perceptions of autonomy support from parents especially from mother have been found to be associated with lower levels of depressive symptoms in adolescents. This study examines the relative contribution of perceived autonomy support from mother in relation to adolescents depressive symptoms. It was hypothesized that: Perceived maternal Autonomy Support will be the significant predictor of well-being (i.e. depressive symptoms) in adolescents. A total sample of 508 adolescents was selected randomly from different public and private educational schools and colleges situated in Karachi-Pakistan. Out of these 508 students, 265 (52.2%) were boys and 243(47.8%) were girls. The participant's age range was between 15-19 years. The Perceptions of Parents Scales (Robbins, 1994) was used to measure the perception of maternal Autonomy support and Reynolds Adolescents Depression Scale 2nd Edition (RADS-2; Reynolds, 2002) was used to measure the depressive symptoms in adolescents. Linear Regression Analysis was applied to explore the predictive relationship of perceived maternal autonomy support and wellbeing in adolescents. All statistical computations were done through statistical package for social sciences (SPSS, V. 25). The results indicate maternal autonomy support to be a significant predictor of depressive symptoms in adolescents

Keywords: Adolescents, Autonomy Support, Wellbeing, Maternal



PROCEEDING Emerging Scientist 2019



Moderating Role of Gender in Relation between Intimacy and Marital Satisfaction

Presenter

Ms. Anam Khan
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Pakistan

Khan A., Najma I. M. and Adnan A.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27187

Type

Poster Presentation

Abstract

The aim of the present study was determined the moderating role of gender between Intimacy and marital satisfaction. The sample comprised of 150 married couples (N=150) through convenient sampling technique. Sternberg Love Style Scale (Sternberg, 1986) and Marital Satisfaction Scale (Fowers, & Olson, 1993) were used to measure the construct of present study. Result suggested significant correlations among present study variables in expected directions. Linear Regression analysis suggested that the intimacy was significant positive predictor of marital satisfaction. The moderation analysis showed that relationship between intimacy and marital satisfaction was strengthen among women as compare to men. Implications of the study and suggestions for further research were discussed.

Track

Social Sciences

Keywords: Love styles, Marital Satisfaction and Mental Wellbeing

Location

ADL Auditorium



PROCEEDING Emerging Scientist 2019



Impression Management and Job Satisfaction Among University Teachers: Moderating Role of Gender

Presenter

Ms. Anam Khan
University of Sargodha,
Pakistan

Khan A. and Sadia M.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27187

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

Current study was an attempt to discover the moderating role of gender between the relationship of impression management and job satisfaction among university teachers. Convenient sampling technique was used to draw the sample of 170 teachers (85 males and 85 females) from different private and government universities of Lahore and Sargodha. Impression management of employees was assessed by using the Impression Management scale developed by Bolino and Turnley in 1999. Job Descriptive Index (JDI), which focuses on the five facets of satisfaction. Brayfield and Rothes (1951) job satisfaction scale was used to measure job satisfaction. Hierarchical regression analyses revealed that gender is playing moderating role between the impression management and job satisfaction. Correlation showed the there was positive relationship of impression management and job satisfaction. The result of simple linear regression analysis showed that overall impression management has been proved to be best predictor of job satisfaction, whereas among sub constructs of impression management only exemplification and supplication are the most significant positive predictor of job satisfaction. Results showed that male strengthens the positive relationship between impression management and job satisfaction whereas female strengthen the negative relationship between impression management and job satisfaction. Conclusions limitations and suggestions have also been discussed.

Keywords: Impression Management, Teaching Assistants, Job Satisfaction, Gender



PROCEEDING Emerging Scientist 2019



Perceived Social Support, Psychological Distress and Psychological Well-Being Among Single Mothers

Presenter

Ms. Anam Tahir
University of Sargodha,
Pakistan

Tahir A. and Najma I. M.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27138

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

The present correlational research was designed to investigate perceived social support, psychological distress and psychological wellbeing among 120 purposively selected single mothers having age range between 31 to 56 years ($M = 37.2$, $SD = 8.5$) from Sargodha city. Multidimensional Scale of Perceived Social Support (MSPSS; Zimet *et al.*, 1988), Kessler Psychological Distress Scale (K-10; Kessler & Mroczek, 1994), and Ryff Psychological Wellbeing (RPWBS; Ryff, 1989) were used to assess constructs under study. Results revealed that perceived social support was not only positively correlated wellbeing but also was significant positive predictor of psychological wellbeing. It was further found that psychological distress and psychological well-being were negatively related to perceived social support. Perceived social support was significant negative predictor of psychological distress. Findings of the present study further indicate that divorced single mothers had more psychological distress as compared to the widowed single mothers. Similarly urban single mothers had high psychological wellbeing as compared to the rural single mothers. Additionally it was also found that single mothers living in joint families have more family support as compared to those living in nuclear family system. Present findings implicate the significance of perceived social support, psychological distress and psychological wellbeing among single mothers that would be helpful for the government authorities, policy makers, sociologist and mental health professionals.

Keywords: Perceived Social Support, Psychological Distress, Psychological wellbeing, Single Motherhood



PROCEEDING Emerging Scientist 2019



Moderating Role of Family Functioning in Relationship of Identity Styles and Risk Taking Behaviour Among Adolescents

Presenter

Ms. Anila Afzal
University of Sargodha,
Pakistan

Afzal A., Najma I. M. and Mohsin A.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27203

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

The current study was designed to examine the role of family functioning in the relationship between identity styles and religious orientation among sample of adolescents (N = 558). Identity style inventory (Berzonsky, 2013), The general functioning sub-scale (Dehan *et al.* 2014) and Urdu version of religious orientation scale (Khan, Ghous, & Malik (2016) were used to measure the constructs of present study. Pearson correlation was computed to have an insight in relationship pattern among variables. Moderation analysis revealed positive family functioning as significantly moderator in relationship between informational identity style and extrinsic religious orientation, positive family functioning significantly moderated between the relationship of normative identity style with extrinsic and intrinsic religious orientation. Positive and negative family functioning both were found to be significant moderators between the relationship of avoidant identity style and extrinsic religious orientation. Limitations, suggestions and implications for future empirical endeavors have also been discussed.

Keywords: Family Functioning, Extrinsic religious orientation, Intrinsic Religious orientation, Informational identity style, Normative Identity style, Avoidant Identity Style



PROCEEDING Emerging Scientist 2019



Mental State Talk: Assessment Through Wordless Picture Book Reading

Presenter

Ms. Hafsa Khalil Toor
Quaid-i-Azam University,
Islamabad, Pakistan

 **Live DNA**
92.27337

Type

Poster Presentation

Track

Social Sciences

Location

ADL Auditorium

Toor H. K. and Rubina H.

National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

Abstract

Mental state language involves words that describe the mental world of individuals; and are about thoughts, feelings, desires, intentions, and emotions. There has been dearth of research in Pakistan assessing the parents' use of mental state vocabulary in conversation with young children, commonly because of lack of assessment tool that are employed to measure the mental state talk in Pakistan. The present study focused on wordless picture book reading as one of the various methods devised for mental state talk assessment; which facilitates interactions between parents and their children. For validation, Indigenous picture story books were selected and face and content validity were established through committee approach (subject experts and parents). Wordless picture books were selected for the purpose to which contained rich reference about the mental states of others conveyed through the interplay of pictures only; that provided explicit and elaborative information about the mental state process of story character; that where narrator attributed mental state to story characters and engaged the child, and that had cultural relevance and appropriateness of the story characters, clothing, or situation so that child can relate to story characters. Furthermore, the present study suggested that reading picture books with rich mental-state contents stimulate rich discourse on mental-state elements. Parents and teachers should be directed in how to utilize their unique knowledge and relationships with their children and students to facilitate their social, cognitive and emotional development.

Keywords: Mental State Talk, Parent Child Relationship, Book Reading



PROCEEDING Emerging Scientist 2019



Relationship of Job Crafting and Workaholism: Mediating Role of Energy Management Strategies

Presenter

Ms. Irsa Fatima
Makhdoom
University of Sargodha,
Pakistan



Live DNA
92.27160

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Makhdoom I. F., Najma I. M. and Mohsin A.

Department of Psychology, University of Sargodha, Pakistan

Abstract

The present study focused on relationship of illness cognition with depression, anxiety and stress among purposively selected 120 elderly patients within the age range of 65 to 82 years. Illness Cognition Questionnaire-18 items (Evers & Kraaimaat, 1998) and Depression, Anxiety and Stress Scale (DASS-21, Lovibond & Lovibond, 1995) were used. The results revealed that illness cognition had significantly positive relationship with depression, anxiety and stress. Moreover, it was observed that depression, anxiety and stress were positively associated with each other. Linear regression analysis demonstrated that illness cognition was positive predictor of depression, anxiety and stress among elderly. Results further showed significant gender differences among illness cognition, and depression. Results of present study will help to improve mental well-being of elderly patients.

Keywords: Illness Cognition, Depression, Anxiety, Stress



PROCEEDING Emerging Scientist 2019



The Relationship of Personality Types, Selfitis, OCD and BDD: Moderating Role of Self Esteem

Presenter

Ms. Jawaria Zafar
University of Sargodha,
Pakistan

Zafar J. and Najma I. M.

Department of Psychology, University of Sargodha, Pakistan



Live DNA

92.27158

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

The present study investigates a relationship between personality types, selfitis, OCD and BDD among conveniently selected 600 young females with age range of 16 to 22 from different girls college and university of Sargodha. The s Big Five Inventory-10 (Rammstedt & John, 2007), Selfitis Scale (Amjad, 2017), Obsessive-Compulsive Inventory - Revised (Foa, Salkovskis, Coles, & Amir, 2002), Appearance Anxiety Inventory (Veale *et al.*, 2013), and Rosenberg Self-Esteem Scale (Rosenberg, 1965) were used to measures variables of study. Pearson correlation revealed that all variables of present study significantly correlates with each other. Multiple regression analysis indicates that neuroticism is the significant positive predictor of selfitis, OCD and BDD whereas conscientious significantly negatively predict selfitis. Regression analysis also indicate that extraversion significantly negatively predict OCD. Moderation analysis show that self-esteem significantly moderates the relationship between personality trait and selfitis. It indicate that high level of self-esteem were strengthen the existing relationship among personality trait and selfitis. Self-esteem also significantly moderate the relationship between personality trait and OCD; personality trait and BDD. Moreover, the effect of different demographic variables was also determined. Findings from ANOVA and t-test depicted significant main effect of age and education on present study variables. The implications and suggestions for future researches were included which would be beneficial for future studies.

Keywords: Personality Traits, Selfitis, Obsessive Compulsive Disorder, Body Dysmorphic Disorder



PROCEEDING Emerging Scientist 2019



Relationship Among Psychological Distress, Body Image and Mental Well-Being Among Working and Non-Working Woman during Pregnancy: Role of Social Support

Presenter

Ms. Quratulain
University of Sargodha,
Pakistan

Quratulain, Najma I. M. and Rabia F.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27161

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

The research aimed to examine the relationship among psychological distress, body image and mental wellbeing in working and non working woman during pregnancy: Role of social support. The research study was carried out in two phases. First phase dealt with the translation of Body Shape Questionnaire 16-A Form into Urdu. The psychometric properties of translated scale and already translated scales; Kessler psychological distress scale (Kessler, 1994), Multidimensional Scale for Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988) and Warwick-Edinburg Mental Well-being scale (Stewart-Brown, Tennant, Platt, Parkinson & Weich, 2009) were assured. In the second phase main study was carried out to see the relationship between study variables. Study was carried out on a sample of 213 pregnant women in which there were 102 non-working and 111 were working women. Sample was selected through convenient sampling. Results indicated that there was significant, negative correlation existed between psychological distress and mental wellbeing in non- working women. There was a significant positive relationship between body image and mental well being in working pregnant women. To assess moderating role of social support among study variable moderation analysis was carried out. Result of moderation analysis indicated that social support has significant moderating effect on body image and mental well being in non working pregnant women and significant moderating effect of social support between psychological distress and mental well being and body image and mental well being in working pregnant women. Finding indicated that there was significant mean difference found among working and non working women in term of their mental well being.

Keywords: Pregnancy, Working Women, Psychological Distress, body Image, Mental Well Being, Social Support



PROCEEDING Emerging Scientist 2019



Emotional and Behavioral Dysregulation in Relation to Callous Unemotional Traits Among Young Adults; Role of Parenting Styles

Presenter

Ms. Rabia Fatima
University of Sargodha,
Pakistan

Urooj B., Najma I. M. and Rabia F.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27188

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Abstract

The present study was conducted to find out the relationship between emotional and behavioral dysregulation and callous unemotional trait among young adults and effect of parenting practices on them. To collect data from (N = 300) young adults, convenience sampling technique was used and to measure the study variables Emotional Dysregulation Scale short version (Bradley, Weston & Defife, 2010), Aggression Questionnaire (Orpinas & Frankowski, 2001; Orpinas, Horne, & Staniszewski, 2003), Inventory of Callous Unemotional trait (Frick, 2001) and Parenting Style Questionnaire (Buri, 1991; Babree, 1997) were used. In order to assure the psychometric properties and to test the hypothesis of the study descriptive statistics, alpha reliabilities, Pearson correlation and independent samples t test were used. Results revealed that authoritative style have significant negative correlation with behavioral problem and callous unemotional trait. Furthermore, t test analysis showed higher level of aggression in female as compared to male. Limitations, suggestions and implications were also discussed.

Keywords: Emotional and Behavioral Dysregulation, Callous Unemotional Trait, Parenting Practices, Young Adult



PROCEEDING Emerging Scientist 2019



Achievement Goals as Predictors of Fear of Failure and Academic Stress: Role of Demographics

Presenter

Ms. Rabia Fatima
University of Sargodha,
Pakistan

Shabbir F., Najma I. M. and Rabia F.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27188

Type

Poster Presentation

Abstract

The present study aimed to find out relationship between achievement goals, academic stress and fear of failure among students. For this purpose data of (N = 262) college students was collected through convenience sampling technique in which both male (n = 131) and females (n = 131) students were present. Achievement goal questionnaire (Elliot & Church, 1997), Performance Failure Appraisal Inventory (Conroy et al., 2001), and Undergraduate Stressors Questionnaire (Spiridon & Evangelia, 2015) were used in order to measure the study variables. Results of the present study revealed that achievement goal have significant positive correlation with academic stress and fear of failure. Study indicated that mastery goals and academic stress are positively correlated with each other. Result indicated that performance goals along with performance avoidance goals were having positive correlation with academic stress. Furthermore analysis showed that mastery goals, performance goals and performance avoidance goals also have significant positive correlation with failure fear. Results further indicated that female students scored higher on academic stress and fear of failure as compare to male students. Whereas, Achievement goals and academic stress higher among undergraduate students than the graduate students. Limitations and significance of the study has also been discussed.

Track

Social Sciences

Location

ADL Auditorium

Keywords: Achievement goals, Academic stress, Fear of Failure



PROCEEDING Emerging Scientist 2019



Self Silencing and Personality Traits in University Students

Presenter

Ms. Raiha Aftab
Quaid-i- Azam University,
Islamabad, Pakistan

Sial G. and Raiha A.

National Institute of Psychology, Quaid-i- Azam University, Islamabad, Pakistan

 **Live DNA**
92.23329

Type

Poster Presentation

Track

Social Sciences

Location

ADL Auditorium

Abstract

The present study was designed to explore the phenomenon of self-silencing and personality traits. The objectives of this research were to establish whether the phenomenon of Self- Silencing exists in the local population through administration of the Silencing the Self-Scale (STSS), to examine the differences in scores on the Silencing the Self-Scale between male and female university students, and to examine the relationship between scores on the Silencing the Self-Scale and various domains of the NEO Five Factor Inventory. The study consisted of 90 participants, 48 males and 42 females belonging to different universities in Islamabad. The age range of these participants was 19-23 years. Two scales were used for this purpose: Silencing the Self Scale (Jack, 1992) to measure self-silencing and NEO Five Factor Inventory (Costa & McCrae, 2004) to assess different personality traits like, Extraversion, Agreeableness, Openness, Neuroticism, and Conscientiousness. The results revealed that boys self-silenced more than girls ($t=2.083$, $p<0.001$). The Conscientiousness subscale on the NEO Five Factor Inventory was found to correlate the most with the Silencing the Self Scale ($r=0.335$, $p<0.01$). The Neuroticism subscale correlated significantly negatively with the Silencing the Self Scale ($r=-0.321$, $p<0.01$). The Agreeableness, Openness and Extraversion subscales on the NEO Five Factor Inventory correlated with the Silencing the Self Scale as ($r=0.198$, $p<0.01$), ($r=0.054$, $p<0.01$), and ($r=-0.278$, $p<0.01$) respectively.

Keywords: Silencing the Self-Scale, Conscientiousness subscale, Self-Silencing, Personality Traits



PROCEEDING Emerging Scientist 2019



The 'Spatial Turn': Implications for Education, Pedagogy and Classroom

Presenter

Ms. Ramsha Abdul
Karim
Habib University,
Pakistan



Live DNA
92.26913

Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Karim R. A.

Habib University, Karachi, Pakistan

Abstract

During the 1980s, the social sciences underwent a 'spatial turn', a paradigmatic shift which holds that space is not just a 'container or receptacle' or the determinant of human activity but it is a product of human activity. The social construction of space, which was mostly emphasized by geographers until then, was also adopted in the larger discourse of social sciences. The discourses of education and pedagogy were also impacted by this change. Scholars have been increasingly interested in investigating the implications of considering the notion of 'space' for education, specifically pedagogy and the classroom environment. Marxist theorists, such as Henri Lefebvre (1991), have argued that space and society are mutually constitutive: space is both the product of social relationships and is involved in the production of those relationships (in Morgan, 2006). This paper aims to discuss the spatial turn in social sciences, particularly education; and discuss some of the implications of such paradigmatic shift on pedagogy and classroom learning. It will firstly elaborate the concept of 'space' and discuss the impact of the 'spatial turn' on social sciences, particularly education. Secondly, it will discuss the impact of the spatial theories on Critical Pedagogy and lastly, the implications of new 'spatial theories' for classroom. Lastly, it will suggest the adoption of a critical pedagogy in classrooms in Pakistan.

Keywords: Spatial turn, Space, Classroom, Education



PROCEEDING Emerging Scientist 2019



Perceived Stigma, Perception of Burden and Psychological Distress Among Parents of Intellectually Disable Children: Role of Perceived Social Support

Presenter

Ms. Saima Shafique
University of Sargodha,
Pakistan



Type

Oral Presentation

Track

Social Sciences

Location

Meeting Room 1 - ADL

Shafique S. and Najma I. M.

Department of Psychology, University of Sargodha, Pakistan

Abstract

This correlational study explored the relationship of perceived stigma, perception of burden and psychological distress among 250 purposively selected parents of intellectually disable children. The study also aimed to explore the moderating role of perceived social support on all the variables of study. The Affiliated Stigma Scale (Mak & Cheung, 2008) and Care Giver Burden Inventory (Novak & Guest, 1989), Kessler Psychological Distress Scale (K10, Kessler, 2003), and Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988) were used. Correlation analysis revealed positive relationship among perceived stigma and psychological distress and perception of burden and psychological distress. Linear regression analysis further showed that perceived stigma and perception of burden were positive predictor of psychological distress. The study did not show the moderating role of perceived social support among variable of present study. Major limitation of the study is sample size and major implication is awareness regarding problems of parents of intellectually disabled children.

Keywords: Perception of Burden, Perceived Stigma, Psychological Distress, Social Support, Intellectual Disability



PROCEEDING Emerging Scientist 2019



Geriatric Depression and Executive Dysfunctioning

Presenter

Ms. Saira Javed
Quaid-i- Azam University,
Islamabad, Pakistan

 **Live DNA**
92.27335

Type

Poster Presentation

Track

Social Sciences

Location

ADL Auditorium

Javed S. and Rubina H.

National Institute of Psychology, Quaid-i- Azam University, Islamabad, Pakistan

Abstract

The current study sought to determine the significant association of geriatric depression and executive dysfunctioning with addition to in-depth exploration of sub-components of executive dysfunctioning i.e., deficits in attention shifting, task inhibition and working memory. Through convenient and purposive sampling technique, data for this cross-sectional study were collected from 500 community dwelling older adults on measure of geriatric depression scale-short form and Smartphone-based Stroop Test i.e., Encephal App. Results of the study revealed positive and significant correlation between geriatric depression and executive dysfunctioning ($r = 0.78$, $p < 0.01$) and were with deficits in attention shifting, task inhibition and working memory ($p < 0.05$). Multiple linear regression was run to reveal the predictive value of sub-components of executive dysfunctioning i.e., deficits in attention shifting, task inhibition and working memory ($p < 0.05$). Results concluded that there was a clear relationship between geriatric depression and executive dysfunctioning and that all sub-components of executive dysfunctioning appeared to be affected by geriatric depression. The implication of these findings suggests problem solving therapy, talk therapy, family-focused therapy, assertive community treatment and psycho education.

Keywords: Cognitive decline, Geriatric depression, Psychotherapy, Psychosocial treatment



PROCEEDING Emerging Scientist 2019



Influence of Interparental Conflict on Adolescent Behaviour Problems: The Mediating Role of Parent-Child Relationship

Presenter

Ms. Sana Bukhari
Quaid-i-Azam University,
Islamabad, Pakistan

Bukhari S. and Sobia M.

National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan

 **Live DNA**
92.27331

Type

Poster Presentation

Track

Social Sciences

Location

ADL Auditorium

Abstract

The purpose of this paper is to explore the relationship between interparental conflict and child behaviour problems in adolescents. More specifically, the paper studies a simple mediation model in the context of a developing country and assesses the role of parent-child relationship in explaining how adolescents exposed to more extreme forms of conflict at home are more prone to behavioural problems. The study employs a cross-sectional research design and uses a quantitative approach with closed ended questionnaires as the main mode of data collection. The results show that interparental conflict tends to raise behavioural problems in adolescents by negatively impacting parent-child relationship. The results showed that the relationship between interparental conflict and adolescent behavior problems is partially mediated by parental rejection and parental emotional warmth. Where rejection by parents contribute to behavior problems, and emotional warmth buffers the impact of interparental conflict. The optimistic implication of this study is that even though at times conflict between couples may be inevitable, it may not necessarily lead to behavioural problems in adolescents as long as the parents can manage to not let the interparental conflict spill over into the parent-child relationship.

Keywords: Interparental Conflict, Behaviour Problems, Adolescents, Parent-Child Relationship, Mediation



PROCEEDING Emerging Scientist 2019



Relationship of Illness Cognition with Depression, Anxiety and Stress in Elderly Patients

Presenter

Ms. Shahida Perveen
University of Sargodha,
Pakistan

Perveen S., Najma I. M. and Mohsin A.

Department of Psychology, University of Sargodha, Pakistan

 **Live DNA**
92.27159

Type

Oral Presentation

Abstract

The present study focused on relationship of illness cognition with depression, anxiety and stress among purposively selected 120 elderly patients within the age range of 65 to 82 years. Illness Cognition Questionnaire-18 items (Evers & Kraaimaat, 1998) and Depression, Anxiety and Stress Scale (DASS-21, Lovibond & Lovibond, 1995) were used. The results revealed that illness cognition had significantly positive relationship with depression, anxiety and stress. Moreover, it was observed that depression, anxiety and stress were positively associated with each other. Linear regression analysis demonstrated that illness cognition was positive predictor of depression, anxiety and stress among elderly. Results further showed significant gender differences among illness cognition, and depression. Results of present study will help to improve mental well-being of elderly patients.

Track

Social Sciences

Keywords: Illness Cognition, Depression, Anxiety, Stress

Location

Meeting Room 1 - ADL

03 Conference Track

Environmental Sciences

Page 01 - 21

Session Chairs:



Dr. Ghulam Hussain
Ex-Water Expert (NCWTD), Pakistan



Dr. Muhammad Safdar Baloch
Gomal University, Pakistan



ES2019
— EMERGING SCIENTIST —

March 30-31, 2019 | Faisalabad, Pakistan



PROCEEDING Emerging Scientist 2019



Effect of Saline Irrigation on Growth and Biomass Yield of Landscape Trees in Saudi Arabia

Presenter

Dr. Ghulam Hussain
Ex-Water Expert
(NCWTD), Pakistan



Type

Distinguished Speaker

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Hussain G. and Ali A. A.

National Center for Wastewater Treatment and Desalination Technology, Saudi Arabia

Abstract

A filed experiment was carried to determine the effect of irrigation water salinity on growth and biomass yield of some promising landscape trees during 1999-2000. The experiment involved 9-different tree species, 4-irrigation water salinities and irrigated at 25 % depletion of available soil moisture. The effect of water salinity was highly variable among all the trees under investigation. The biomass yield of some tree species decreased significantly with an increase in irrigation water salinity, whereas some trees showed significant increase up to certain water salinity level, then showed decreasing trend and in some cases the biomass increased up to 12,000 mg L⁻¹ (TDS). This differential response of different tree species to different irrigation water salinity could be subjected to genetic variability and adaptability of individual tree species to saline growth conditions. The research findings provided an excellent opportunity for the selection and cultivation of appropriate tree species for promoting desert greenification in an arid environment.

Keywords: Saline Irrigation, Plant Height, Plant Girth, Biomass Yield, Landscape



PROCEEDING Emerging Scientist 2019



To Investigate the Developmental and Metabolic Networks for Determining Mature Bread Wheat Seed Composition Using Systems Biology Approach

Presenter

Dr. Muhammad Safdar
Baloch
Gomal University,
Pakistan

 **Live DNA**
92.27162

Type

Distinguished Speaker

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Baloch M. S.

Gomal University, Dera Ismail Khan, Pakistan

Abstract

The final and physiological maturity level wheat seed contents (proteins, carbohydrates and lipids) are determined by genetic, molecular and biochemical mechanisms that regulate seed metabolic and developmental networks. Although the modern era of omics made us understand the regulation of metabolic network without prior network's structural knowledge, most of the seed metabolism specific genes and metabolites have yet to be known. The main purpose of this study was to examine biochemical pathways linked to metabolome and transcriptome during development of bread wheat seeds by coupling transcriptomics, metabolomics and metabolic flux analysis technologies. The aforementioned technologies coupled with targeted statistical/bioinformatical and systems biology tools were used to gain detailed insights into the biochemical composition of bread wheat seed and its biochemical networks. The data related to metabolomics and transcriptomics was analysed using MetNet systems biology tool suit, whereas, the biochemical regulatory networks were visualized with help of MetNetDB, a graph based computational framework. The metabolomic and transcriptomic data integrated into k-medoids (Cytoscape) and Fisher exact test to determine and visualize the molecular interactions including metabolite-to-metabolite and gene-to-metabolite networks. The metabolic changes, various set of genes and genetic mechanisms associated with the developmental variations in bread wheat seed composition on five different time points were resolved by experimental data, system biology tools coupled with bioinformatic and statistical analysis.

Keywords: Bioinformatical Systems Biology Tools, Physiological Maturity Level, Omics, Transcriptome, Metabolome, Bread Wheat Seeds



Prevalence of Blood Protozoa and Impact of Chemotherapy in Exotic Cattle with Particular Reference of Hematological Values

Presenter

Dr. Asfand Yar Khan
University of Veterinary
and Animal Sciences,
Pakistan



Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

¹Khan A. Y., ²Muhammad A. Z., ¹Abdual S., ¹Amir N., ²Usman W., ¹Faran A. A.,
³Hafiz M. U. S. and ¹Syed S. A.

¹Department of Clinical Sciences, College of Veterinary and Animal Sciences, Jhang, Pakistan

²Department of Pathobiology, College of Veterinary and Animal Sciences, Jhang, Pakistan

³Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

This study was carried out to investigate prevalence of haemoprotozoan in exotic/crossbred cattle in Tehsil Jhang (Panjab- Pakistan) and clinical trial of I-DIMIN®, I-MEDO®, I-BUPARVA® (international pharma PVT, Ltd Pakistan) against these haemoprotozoan. The work was conducted during April-September, 2016. The prevalence were determined through blood examination of Two hundred (n= 200) apparently healthy cattle. At the time of blood collection, the cattle were also examined for tick infestation. For therapeutic trial, haemoprotozoan positive cattle were divided into 4 groups i.e. pure anaplasma (PA) (group A), mix infection of anaplasma and babesia (MAB) (group B), pure babesia (PB) (group C) and pure theleria (PT) (group D). Group A, and B were treated with I-MEDO® @ 2.5 ml/100 kg body weight i.m, C with I-DIMIN® @ 10ml/300kg, and D with I-BUPARVA® @ 1ml/20kg, respectively. To this end, (21.5%, 43/200) overall prevalence were notice including PA (7%, 14/200) followed in order by PB (5.5%, 11/200), MAB (4.5%,9/200) and PT (4.5%, 9/200). In therapeutic trials, the haemoprotozoan were found susceptible. PB were treated most successfully (81.8%), following PT (77.7%), MAB (77.7%) and PA (71.4%). Out of total cattle examined in this study, 20% were infested Boophilus,11% Hyalomma and 14.5% mix infestation of Boophilus and Hyalomma. In conclusion crossbred exotic cattle are prone to haemoprotozoan diseases and the above drugs are capable for effective control. The veterinary personnel and cattle farmers are recommended to use these drugs at initial stage of the disease.

Keywords: Prevalence, Clinical trial, Haemoprotozoan, Exotic/crossbred Cattle, Haematological values



PROCEEDING Emerging Scientist 2019



Tracheal Collapse in a Beetal Goat - First Case Report in Pakistan

Presenter

Dr. Muhammad Avais
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA
92.26284

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Avais M., Shoaib H., Jawaria A. K. and Syed S. A.

Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

A female Beetal goat, 4-years-old was brought to the outdoor Hospital of the University of the Veterinary and Animal Sciences Lahore, Pakistan. The animal when presented at the hospital was first seen restlessness and was unable to stand. Respiratory stridor were evident during respiration. There was severe dyspnea with temperature subnormal (98°F). There was foamy salivation and pupils were dilated. Mucous membrane and tongue were cyanotic. At postmortem, presence of foamy secretions in the cranial airways, including nostrils were evident. Lungs were congested and edematous. Most predominant finding was, tracheal rings with pronounced distance between their dorsal edges with cartilage damage and totally collapsed trachea extending up to bifurcation. This finding was corresponding to tracheal collapse grade IV. This is the first published report of tracheal collapse in goats in Pakistan.

Keywords: Beetal Goat, Dyspnea, Tracheal Collapse Grade IV



Seroprevalence and Risk Factors Survey of Brucellosis Among Ruminants in Skardu District of Gilgit-Baltistan

Presenter

Dr. Muhammad Avais
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA
92.26284

Type

Oral Presentation

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

¹S. Hussain, ¹Muhammad A., ¹J. A. Khan, ²I. Khan, ²K. Muhammad, ³A. Nasir, ⁴F. Melzer, ⁴H. El-Adawy and ⁴H. Neubauer

¹Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan

²College of Veterinary and Animal Sciences, Jhang, Pakistan

³Department of Microbiology, University of Veterinary and Animal Sciences, Lahore, Pakistan

⁴Friedrich-Loeffler-Institut, of Institute Bacterial Infections and Zoonoses, Naumburger, Germany

Abstract

Brucellosis is a global zoonotic disease associated with significant morbidity that can lead to increased rates of spontaneous abortions in livestock. The disease is widely distributed throughout the developing world, considered to be a serious problem. A prospective study on brucellosis was conducted in ruminants in Skardu district of Gilgit Baltistan to find out the seroprevalence and risk factors of brucellosis in ruminants. The Rose Bengal plate test and i-ELISA were used to screen 450 serum samples (Sheep n=150, goats n=150 and cattle n=150) investigated for the presence of Brucella. The overall seroprevalence found to be 13.8% and 1.8% by RBPT and iELISA, respectively. The prevalence in sheep was 12.7%, in goats 8.7% and in cattle 20% through RBPT while it was 1.3%, 0.6% and 3.3% through i-ELISA in sheep, goats and cattle, respectively. It was found that the occurrence of brucellosis was positively associated with animal age, sex, pregnancy, lactation and reproductive problems including abortion, retained placenta, metritis and repeat breeder. The prevalence was relatively higher in ewes than that in rams but, an insignificantly higher in does and significantly higher in bulls. The animals with the history of abortion and retained placenta were more seropositive than the animals without history of abortion and retained placenta. In conclusion, Brucellosis in Gilgit Baltistan in Pakistan is a serious problem among cattle, sheep and goat. The seroprevalence varies across animal species with important risk factors including herd size, abortion and age of animal. For effective control of brucellosis, an integrated approach seems mandatory involving all stakeholders working in public and animal health

Keywords: Brucella, RBT, ELISA, Bovine, Ovine, Risk Factors



PROCEEDING Emerging Scientist 2019



Current Scenario of Research on Plantation for 'Clean and Green Pakistan Movement'

Presenter

Dr. Muhammad Kabir
University of Sargodha,
Pakistan

¹Kabir M., ²Um e H., ³Muhammad Z. I., ³Muhammad S. and ³Zia U. R. F.

¹Department of Biological Sciences, University of Sargodha, Pakistan

²Department of Physics, University of Sargodha, Pakistan

³ Department of Botany, University of Karachi, Pakistan



Type

Oral Presentation

Abstract

Research activities are occurring in different fields and on different topics in all research organisations. Developments of new technologies and anthropogenic activities have affected environmental quality in a lot of ways. All organisms are mainly affected directly or indirectly due to environmental changes especially pollution. Environmental changes especially by industrial revolution is a major problem facing the world today and there is an increasing awareness of the fact that a clean environment is necessary for better health of living organisms. It is our top most priority to keep our country clean and green as cleanness is apart of our faith. The project of 'Clean and Green Pakistan Movement' is an initiative of our current government and different educational institutes lead in this project by planting a large number of plants inside their boundry walls. Universities students also take part in this activity very effectively, knowing the importance of trees in environment. As plants act as natural lungs of Universe and play key role in global environmental changes. This tree plantation campaign was started by all departments as, each one plant one having a slogans' Plant a tree and get oxygen for free' and 'Green revolution is the best solution to arrest the pollution'. We observed that climatic changes are very alarming for environmental conditions which are affecting the habitat of living organisms on surface of earth. It was concluded that plants can maintain the natural ecosystem. It is therefore necessary to select suitable tree species which could be able to absorb pollutants actively within their tissues. There is a need to develop green spaces within and around the polluted areas for the formation of better environmental conditions. Government should focus to plantation campaign on regular basis in order to find solutions of environmental issues with full satisfaction.

Track

Environmental
Sciences

Keywords: Anthoropogenic Activities, Disturbances, Environment Pollution, Government's Action, Plantation, Research

Location

Meeting Room 2 - ADL



PROCEEDING Emerging Scientist 2019



Groundwater Contamination from Environment and Urbanization and Protection of Groundwater from Urbanization

Presenter

Dr. Pervez Khalid
University of the Punjab,
Lahore, Pakistan

Khalid P., Sher M. and Zia U. D.

Institute of Geology, University of the Punjab, Lahore, Pakistan

 **Live DNA**
92.26773

Type

Oral Presentation

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Abstract

Groundwater is the largest freshwater source in most of the parts of Pakistan but unfortunately, urbanization, septic tanks, dumping of solid waste, landfills and other human activities badly contaminated this natural treasure. Point source and scattered source are two main sources of groundwater contamination. Landfills, leakage from septic tanks and gasoline storage tanks, industrial wastage dumping site are examples of point source whereas surface infiltration of runoff water with pesticides and fertilizers are example of scattered or non-point source of groundwater contamination. To clean local environment, the solid waste in cities has been dumping in the subsurface on landfills. In this work focus is on the contamination of groundwater by landfills. When landfill is situated near to porous and permeable strata and solid waste is decomposed, several types of liquids "called leachates" produced and migrate downward upto freshwater aquifer, thus contaminate it. Geophysical method "electrical resistivity sounding" was used to investigate and map these points in the landfills from which these leachates penetrate into the aquifer. Based on electrical resistivity and electrical conductivity values measured at different points different geo-electric layers were identified in the subsurface. Low resistivity points were declared leachates points. 10 water samples from the tubewells, boreholes and hand pumps were also collected for their physio-chemical analysis. The concentration of pollutants such as total organic carbon, arsenic, hardness and concentration of total dissolved solids were found very high in the vicinity of the dumping site where as the water samples taken away from the site were less contaminated by leachates. Precautionary measures should be taken to stop leaching into groundwater aquifer to protect people from different diseases.

Keywords: Groundwater Contamination, Landfills, Urbanization



PROCEEDING Emerging Scientist 2019



New Prospective in Fungal Engineering for Sustainable Green Environment

Presenter

Dr. Rafia Azmat
University of Karachi,
Pakistan

 **Live DNA**
92.11344

Type

Distinguished Speaker

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Azmat R.

Department of Chemistry, University of Karachi, Pakistan

Abstract

The current investigation opens the new horizon hidden in dual symbiosis which was already studied worldwide. These new prospective of dual symbiosis used as innovative fungal engineering for Sustainable green environment. The fungal engineering used to increase the capacity of natural 'Bio industry' or plant to assemble more carbon into glucose through regular redox reaction. The strategy used to maximize photosynthesis in *Conocarpus* Sp was the use of VAM fungus as a native plant species in relation to absorption of CO₂ from mega cities. The ability of the fungi to provide assistance in growth, increase in biomass, changes in the numbers of organ, initiation of new leaves and root were tested. These modifications in VAM associated plants indicate the direct linked with photosynthetic activity. It was suggested that in VAM engineered plants Photosynthetic Photon Flux Density (PPFD) reaching a unit surface per unit of time found to be enhanced. That was credited to the leaf area index and number of leaf in VAM plants which help in maximizing the plants access to available light. Light use efficiency by plants depends not only on the photosynthetic efficiency of plants, but also on the efficiency of the interception of light and efficiency with which light is converted to chemical energy in photosynthesis. Native plants species may be the probable solution of sinking CO₂ from the atmosphere via speedy photosynthesis in carbon concentrating plants, providing clean air for life on earth. It is the only natural processes, an ultimate source of life, can help in balancing the level of oxygen and carbon dioxide in the earth. It indicates that one should search in technologies which can be helpful in releasing the current excesses pressure of CO₂ from atmosphere in a cost effective way through internal modification of natural process of photosynthesis for better exchange rate in between CO₂ and O₂.

Keywords: VAM, *Conocarpus*, PPFD, Photosynthetic Activity, Sinking



PROCEEDING Emerging Scientist 2019



Recovery of Cadmium-Mediated Helianthus Annuus Plant by Fresh Tea Waste

Presenter

Dr. Sumeira Moin
University of Karachi,
Pakistan

¹Moin S., ²Rafia A., ¹Zamil M. and ¹Mahnoor K.

¹Department of Botany, Federal Urdu University of Arts, Science & Technology, Karachi, Pakistan

²Department of Chemistry, University of Karachi, Pakistan



Type

Oral Presentation

Abstract

The soil pollution is the specific challenge which directly belongs to human health. The soil amended with tea waste to achieve sustainable development of agronomy. Tea waste is economically being very effective for plant fertility but also have some pesticidal and herbicidal values. Helianthus annuus were cultivated in a three experimental sets of pots containing cadmium concentrations (i.e. 1-5 ppm), recovered with fresh tea waste and control under the natural environmental conditions. The toxicity of Cd was recovered by fresh tea waste which is significantly highly effective for the plant growth and developments. It is low cost-effective method which impact on both biophysical and biochemical growth parameters in 30 d study period. Results showed that the decrease in both shoot/root length and fresh/dry biomass was pragmatic when growing on 1-5ppm Cd, as compared to control while use of tea waste recovered the plant. The impact of tea waste monitored on photosynthetic apparatus where the concentrations of chlorophyll pigment also increases in Cd-contaminated soils plants. The aims of the studied showed that the directly use of fresh tea waste was most effective method to the check the mobility of metal in plants under abiotic stress. It was concluded that tea waste may be used to restore the soil fertility.

Track

Environmental
Sciences

Keywords: Cd, Tea Waste, Toxicity, Contaminated

Location

Meeting Room 2 - ADL



PROCEEDING Emerging Scientist 2019



Cross Sectional Study of Ecto-And-Endo Parasites and Associated Risk Factors of Wild Pigeons in Tehsil Jhang, Pakistan

Presenter

Dr. Syed Saleem
Ahmad
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA

92.27316

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Khan A. Y. and Syed S. A.

Clinical Medicine, University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

A total of 175 (n=175) pigeons of the wild breed were selected from a wild life park in Tehsil Jhang Pakistan and were examined. Out of this 89 (50.8%) were found positive for Ectoparasite and 55 (30.4%) were found positive for Endoparasite. *Columbicola columbae* (Lice), *Lipeurus caponis* (Lice), and *Menopon gallinae* (Lice) Ectoparasites were found in 41 (23.4%), 30 (17.14%), 18 (10.2%) pigeons. while the eggs of Ascaridai (Round worms) and Cotugnia (Cestode) species Endoparasites were founds in 30 (17.4%) and 25 (14.2 %) pigeons respectively.

Keywords: Prevalence, Ecto-parasites, Endo-parasites, Wildpigeons, Tehsil Jhang



PROCEEDING Emerging Scientist 2019



Sutlej River Running Dry.. A Myth or Reality?

Presenter

Eng. Tayyeba Suhail
Mehran University of
Engineering and
Technology, Pakistan



Live DNA
92.27190

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Ditta S. A., Shahtaj K., Tayyeba S. and Arjumand Z. Z.

Mehran University of Engineering and Technology, Jamshoro, Pakistan

Abstract

This study is an effort to evaluate the impact of water distribution through a link canal on agriculture in the areas near one of the abandoned rivers in eastern Punjab, Pakistan. Sutlej, the longest river of the Indus basin, originates from west of lake Rakashastal in Tibet and in Pakistan it enters at about 15km west of the Kasur District. After the partition of the subcontinent in 1947, the distribution of Indus water among the two newly born countries became a challenge given rise to many cross-border conflicts. Finally, the Indus Water Treaty(1960) was signed between the two countries and the eastern rivers- Sutlej, Ravi, and Bias were surrendered by Pakistan to India. The security of the fertile lands of eastern Punjab, including the districts of Pakpattan, Arifwala, Burewala, and Bahawalnagar was affected due to the drying of the rivers and their corresponding canals and distributaries as India diverted all of these waters to itself with the help of reserviors. It was decided in Article IV(1) of the Treaty that as an alternative to these rivers, Pakistan was to carve five new link canals to help ensure water provision to areas falling near them (The IWT, 1960). The Balloki-Sulemanki (B-S) link-canal was built for this purpose in 1951 and enlarged in 1960 under the treaty that connects the Ravi River to the Sutlej River. The main goal of this study is to ascertain if the link canal is playing its role in maintaining the fertility of eastern Punjab of Pakistan or not? Positive results in the temporal changes in the vegetation cover in the surrounding areas along a selected river reach are determined after the functioning of the link-canal. The study also identified the impact of river flows through the link canal on the vegetation cover.

Keywords: Sutlej River, Link Canal, Management, Agriculture, Indus Water Treaty, Temporal, GIS



PROCEEDING Emerging Scientist 2019



Probabilistic Seismic Hazard Analysis of Lahore, Pakistan

Presenter

Dr. Saman Shahid
NUCES - FAST, Lahore,
Pakistan

Ali. S, Saman S. and Abdul M. K.

Department of Civil Engineering/Sciences & Humanities, National University of
Computer & Emerging Sciences (NUCES),FAST,Lahore, Pakistan



Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Abstract

The main objective of the study was to assess the current seismic hazard posed to Lahore. In view of the history of earthquakes occurring in or around Lahore, it was evident that earthquakes occurring even in Kangra in 1905 were felt with a substantial damage potential. After the event of Muzaffarabad earthquake of 2005, the Building Code of Pakistan was revised and seismic provisions were added. This code kept Lahore in Zone-2A, based on peak ground acceleration observed. Seismicity monitoring time is clearly very short as compared with the geotectonic processes. This is quite a serious limitation, but there is no option to accept this. For compilation of composite earthquake catalogue, an area around Lahore, from latitude 28.79°N to 34.17°N and longitude from 71.61°E to 76.99°E, was considered and divided into four zones because of the tectonic settings around Lahore. These zones also included some parts of neighboring countries - Indian Occupied Kashmir and India as earthquakes occurrence is beyond national boundaries. The historic and instrumental earthquake catalogues were collected from different National and International bodies, articles, journals, reports etc. The instrumental catalogue was processed using CompiCat program that performed different operations like merging of catalogues, duplicates removal, etc. to arrive at zone-wise sub-catalogues. It was observed that most of the recorded earthquakes were shallow depth earthquakes. Even the large earthquakes including the Muzaffarabad earthquake were shallow earthquakes. Therefore, shallow earthquakes are expected with a higher probability. The next step involved related to the quality assessment of these catalogues for which magnitude frequency curves were plotted using MS Excel to find magnitude of completeness M_c . Then by using Gutenberg-Richter relation, the 'a' and 'b' parameters were concluded for each zone. The next step was to input these parameters and magnitude of completeness to EZ-FRISK program that has built-in approach devised by McGuire to perform probabilistic seismic hazard analysis (PSHA). The result was total hazard curve for Lahore. This curve was found to be in line with the results from previous researchers and Building Code of Pakistan provisions.

Keywords: Gutenberg-Richter Relation, Seismic Hazard, Magnitude Frequency Curves, Shallow Earthquakes



Does Lactic Acid Spray Influence Quality Parameters of Fresh and Aged Buffalo Meat under Modified Atmosphere Packaging?

Presenter

Mr. Adeel Manzoor
University of Veterinary
and Animal Sciences,
Pakistan



¹Manzoor A., ¹Muhammad H. J., ²Tahir Y., ¹Hafiz A.u.H., ¹Jamal N., ³Muhammad A., ¹Bilal A. and ¹Iftikhar H. B.

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Type

Oral Presentation

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Abstract

The present study was accomplished to determine the effect of lactic acid spray on micro-flora, instrumental color, shelf-life and sensory attributes of buffalo meat under modified atmosphere packaging. For this purpose, buffalo calf (n=6) carcasses weighing 130±10 kg were used. After slaughtering, carcasses were sliced into two equal sagittal halves, and one half of each carcass was sprayed with 2% lactic acid while the other half was left un-sprayed. Afterwards sirloin and tenderloin were selected and vacuum packed and stored at 0oC for 7 days. Afterwards, 2cm thick steaks were cut and packed in modified atmosphere packs with 80% O₂ and 20% CO₂. Microbial load, instrumental color, shelf-life and sensory attributes were evaluated at different days. Aerobic plate count of sprayed carcass and steaks was significantly lower (P=0.008) than un-sprayed control. Spraying the carcass significantly improved the redness (P=0.000) and chroma value (P=0.000) of meat up to 5 days of retail display. However, lactic acid sprayed meat did not differ in terms of flavor, odor and overall acceptability. It was concluded that spraying buffalo carcasses with 2% lactic acid after slaughter not only enhanced microbial quality but also improved instrumental color of meat.

Keywords: Lactic acid, Buffalo beef, Microbial load, Color, Sensory quality



PROCEEDING Emerging Scientist 2019



Effect of Latitudinal and Topographical Variation of Maximum and Minimum Temperature across Pakistan during Summer 2016

Presenter

Mr. Jahanzeb Qureshi
University of the Punjab,
Lahore, Pakistan

Qureshi J., Munir S., Syed A. M., Amer M. and Javed S.

Department of Space Science, Quaid-e-Azam Campus, University of the Punjab, Lahore, Pakistan



Live DNA
92.27121

Type

Oral Presentation

Abstract

To assess variations and trends in mean minimum and maximum temperatures across Pakistan, data from eight meteorological observatories with different latitudes and topography was collected for the year 2016. The objective of this study is to observe the variations in annual maximum and minimum temperatures across Pakistan during summer. The study revealed interesting results and showed there is a great difference of latitudes in all the stations. On the basis of latitude, all the stations showed normal trend except Karachi which is a coastal region. It shows relatively small difference between maximum and minimum temperature due to the Coastal/Maritime Effect. Similarly, the stations showing normal behaviour elevation wise except Karachi. Topography is the reason for large difference of Skardu from other stations As Sibbi is considered to be Extremely Arid region, there is relatively a big difference in its maximum and minimum temperatures.

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Keywords: Maximum temperature, Latitude, Maritime, Topography, Arid



Determination of Risk Factors Associated With Post parturient Udder Edema in Dairy Goats

Presenter

Mr. Muhammad Awais
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA
92.27295

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

¹Awais M., ¹Muhammad A., ¹Jawaria A. K., ¹Uzair A., ²Muti-ur-Rehman K. and ¹Muhammad H.R.

¹Department of Clinical Medicine and Surgery, University of Veterinary and Animal Sciences, Lahore, Pakistan

²Department of Pathology, University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

To determine risk factors associated with udder edema in dairy goats, Three hundred and fifty (n=350) dairy goats either pregnant, near to parturition or recently parturited were considered for this study. Udder edema was diagnosed on the basis of visible and palpable changes in the udder tissue. Goats with enlargement of udder with evident skin distension, fluid accumulation and retention of finger imprint were considered as case of udder edema Time to return to normal of fingerprint of the skin of the udder for more than 3 sec confirmed the diagnosis. Adjusted odds ratios (OR) and 95% confidence intervals (95% CI) was reported. Results demonstrated that goats having salt in their feed more than recommended amount during pregnancy have 18.08 (OR) times more likely to develop udder edema than goats not fed to salt. Goats having male kid are at greater risk. It was observed that recently parturited goats (1-2 day) were 1.18 times more susceptible to develop udder edema compared to goats 3-5 days after kidding. On the other hand, goats that were pregnant above 4.5 months (near to parturition) were 0.43 times more prone to udder edema than goats of <4 month pregnancy. Younger doe is 1.263 times more likely to develop udder edema than older doe (P>0.05). The doe in first Parity were 1.26 times more likely to develop udder edema than doe in 2nd parity and so on. Occurrence of udder edema was 1.54 times higher in doe kidding during the month of January compared to November "December and February" March. Doe having kidding difficulty (dystokia) were 3.60 times more likely to contract udder edema compared to doe having normal kidding (P<0.05). Doe having retained fetal membranes (RFM) after kidding were 2.27 times more prone to udder edema than without RFM and it was statistically significant (P<0.05). Goats having previous history of udder edema were 3.26 times more susceptible to develop udder edema than goats which did not develop udder edema previously (p<0.05). It was found that as the number of the offspring increased chances of udder edema were also increased. Results showed that if there were twins then chances of udder edema are increased by 0.65 times. It is also statistically significant when compared a single kid with twins (P<0.05) but it is statistically non-significant when twins and triplets were compared (P>0.05). It was concluded that several risk factors related to host, environment and housing are associated with udder edema in dairy goats.

Keywords: Dairy Goats, Udder Edema, Dystokia, Parturited Goats



PROCEEDING Emerging Scientist 2019



Status of Foot and Mouth Disease in Pakistan and its Effective Control by Modern Indigenous Vaccine Production

Presenter

Mr. Muhammad Bilal
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA
92.26910

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Bilal M., Anum F., Salman M. and Fawad K.

University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

Pakistan is an agriculture country. The livestock sector is sharing 58.8% in total GDP of Agriculture in Pakistan. As the livestock proved its worth in agriculture, Government is promoting livestock production to eliminate poverty. However, this sector is under threat of infectious diseases like Foot and Mouth Disease (FMD), Hemorrhagic septicemia and many others. These diseases are like a curse causing major economic losses in this sector. Among these, FMD is the most notorious one. Aphthovirus that belongs to Picornaviridae cause FMD. Most important strains of FMD in Pakistan are O, A, Asia-1. This problem leads to the loss of milk production, weight losses, calves mortality and treatment cost. This disease alone is causing an economic loss of 6.95 million USD to Pakistan each year. Moreover being transboundary disease, it is also an obstacle toward the export of livestock products to the foreign. By use of mass vaccination plan, Pakistan moved from stage zero to stage two in 2015 according to FMD progressive control program and now trying to reach stage 3 to make country FMD free. Being positive sense segmented RNA virus, it is highly mutable virus leading to the frequent vaccine failure. For effective control of FMD and quality production of the vaccine, local immunogenic isolates should be introduced. Main cumulative capacity of vaccine production in Pakistan is almost 20 million doses while total livestock population is 185 million. Current strategies are not meeting the demand of FMD vaccine in Pakistan. This gap is due to the technology being used for the production of the vaccine. In advance countries, the vaccine is being produced in fully automated cell suspension based bioreactor chain system. However, in Pakistan, we are still producing our vaccine on adherent culture. The solution to meet the indigenous demand of vaccine is to build the modern, suspension-based infrastructure for the biologics production. This effort is the only way out toward self-sustainability and opens up international markets for the export of meat and other livestock products.

Keywords: Foot and Mouth Disease, Pakistan Status, solution, Bioreactor, Indigenous Vaccine



PROCEEDING Emerging Scientist 2019



Constraints and Their Possible Solutions to Increase Livestock Production of Subsistence Livestock Holders in Bahawalpur District

Presenter

Mr. Muhammad Bilal
University of Veterinary
and Animal Sciences,
Pakistan



Live DNA
92.26910

Type

Oral Presentation

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Bilal M., Muhammad U., Fawad K. and Muhammad N.

University of Veterinary and Animal Sciences, Lahore, Pakistan

Abstract

A survey was conducted in Punjab area of Bahawalpur district to find and record the constraints for livestock production and their possible solutions mainly at the level of subsistence livestock holders. The study area was designed according to the location of villages in the whole district. To ensure proper sampling, multistage sampling procedure was adopted. The study zone consists of five tehsils divided into different villages and then livestock farmers in each village territory. Eight farmers were randomly selected from each village who participated in the study. Data collection was done using a Likert-type scales questionnaire as well as interviews by open-ended question method from the key respondents. Information collected includes Personal profile of farmers, Demographic profile of farm, Identification of Constraints, Possible solution strategies, and Management practices (feeding watering, health facilities, and breeding practices).

Keywords: Livestock Farmers, Bahawalpur, Constraints, Solutions



PROCEEDING Emerging Scientist 2019



To Investigate the Responses of *Helianthus annuus* under Cd Toxicity and Restoration by Dry Tea Waste

Presenter

Mr. Zamil Mateen
University of Karachi,
Pakistan

¹Mateen Z., ¹Sumeira M., ²Rafia A. and ¹Mahnoor K.

¹Department of Botany, Federal Urdu University of Arts, Science & Technology, Karachi, Pakistan

²Department of Chemistry, University of Karachi, Pakistan



Live DNA

92.27167

Type

Poster Presentation

Abstract

Heavy metals are a major group of pollutants which concern in their environment due to their toxicity. It needs to find out the low-cost and effective method for the removal of heavy metals from the contaminated soil. The special challenges regarding polluted soil is the most alarming one due to health associate problem. It was recognized that countries in situations of soil born problems also need special attention. This research will attain sustainable related to the healthy foods. *Helianthus annuus* were cultivated in a three sets of pots experiments containing cadmium concentrations (i.e. 1-5 ppm), recovered with dry tea waste and control under the natural environmental conditions. Dry tea waste is very effective for the plant growth and development. It is low cost-effective method were changed in both biophysical and biochemical parameters, which were studied in shoot, roots and leaves of 30-days *Helianthus annuus* plants as a result of Cd uptake. Results showed that the decrease in both shoot/root length and fresh/dry biomass was found to be significant only when growing on 1-5ppm Cd, as compared to control and recovered under dry tea waste whereas the concentrations of chlorophyll pigments also decreasing in Cd-contaminated soils plants. The aims of the comparative studied showed that contaminated soil with dry tea waste is effective and efficient can employed as a low cost-effective method in the treatment of contaminated soil for the removal of heavy metal.

Track

Environmental
Sciences

Location

ADL Auditorium

Keywords: Cd, Tea waste, Heavy Metals, Contaminated Soil



PROCEEDING Emerging Scientist 2019



Determination of Iodine Contents in the Marine Lands Plants *Ipomoea purpurea* Through Starch

Presenter

Ms. Asma
University of Karachi,
Pakistan

¹Asma, ¹Rafia A, ¹Summyia M and ²Rohi B

¹ Department of Chemistry, University of Karachi, Pakistan

²Department of Botany, University of Karachi, Pakistan



Type

Oral Presentation

Abstract

The marine reservoirs are the huge resources of important nutrients including iodine. This article aims to explore the plants growing in site of marine lands beach to check the presence of iodine in it. The significance of iodine is evident in regulating the Thyroid hormones. As Thyroid hormones in human are the key regulators of development, growth and metabolism. Appropriate thyroid hormone synthesis requires a normally developed thyroid gland, an intact hypothalamic pituitary thyroid axis, adequate iodine intake, and a series of regulated biochemical reactions within thyroid follicular cells. Thyroid hormone transporters and receptors are crucial factors that determine the biological effect of thyroid hormone. Iodine deficiency primary in life spoils perception and growth, nevertheless iodine prestige is also a crucial factor of thyroid disorders in adults. The current research is the search of iodine containing plants which are grown in sea side region. The selection of these plants due to the fact that sea is rich resource of iodine therefore the plant growing on this region must contain iodine. The depigmentation of leaves *Ipomoea purpurea* were conducted after collection for search of iodine. The iodine in these leaves tested through starch solution which showed blue colour. The blue colour indicates the formation of starch iodine complex. This is the clear evidence of presence of iodine in *Ipomoea purpurea* plant which can be used as herbal treatment in thyroid gland. The method is simple cost effective and helpful iodine rich plants

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

Keywords: Iodine, Marine, Starch, *Ipomoea purpurea*



PROCEEDING Emerging Scientist 2019



Assessment of Environmental Factors on Adaptation and Survival of Asian Sea Bass (*Lates calcarifer*) in Open Ponds and Aquariums

Presenter

Ms. Komal Shabbir
University of Karachi,
Pakistan



Type

Oral Presentation

Track

Environmental
Sciences

Location

Meeting Room 2 - ADL

¹Shabbir K., ²Rafia A., ¹Nuzhat A., ³Ghulam A., ^{3,5}Abdul M., ⁴Khalid M. and ¹Adil S. A.

¹Institute of Marine Sciences, University of Karachi, Pakistan

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³ Centre of Excellence in Marine Biology, University of Karachi, Pakistan

⁴ Fisheries development Board-Pakistan, Pakistan

⁵Livestock and Fisheries Department, Govt. of Sindh, Pakistan

Abstract

This study discloses the impact of change of change in environment from open ponds to aquarium on fish Sea bass (*Lates calcarifer*). The samples were collected from ponds of Ghahro where Asian Sea bass (*Lates calcarifer*) live in open ponds. The feeding of fish in ponds were based on live feed like zooplanktons, phytoplanktons etc along with some pelleted feed. The collected fish were transported in lab of Institute of Marine Science, by car using specific plastic bags which was filled with oxygen through oxygen pump/cylinder. The Asian Sea bass (*Lates calcarifer*) were kept in aquarium for culturing purpose. It was observed that the juveniles of Asian Sea bass couldn't survive in newly acquired environment where high mortality was observed. It was due to the habituate of Sea Bass that it was difficult to survive in different environment. Although the juveniles of fish was fed on live feed and also tried to feed them via pelleted feed, trash meat and earthworms.

Keywords: Sea bass (*Lates calcarifer*), Live Feed, Aquarium, Juveniles, Acquired Environment, Mortality



PROCEEDING Emerging Scientist 2019



Kinetics of Naphthalene Removal from Aqueous Media Using Polymeric Composites

Presenter

Ms. Tayyba Arooj
University of Agriculture
Faisalabad, Pakistan

 **Live DNA**
92.27317

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL Auditorium

Arooj T. and Haq N. B.

Department of Chemistry, University of Agriculture, Faisalabad, Pakistan

Abstract

Background and Objective: Naphthalene is a simplest polycyclic aromatic hydrocarbon (PAH) which can cause severe harmful effects for both terrestrial and marine life and it cannot be eliminated from environment easily so the present research was aimed to study the kinetics of naphthalene removal from aqueous media using polymeric composites. **Materials and Methods:** In the present work, naphthalene was removed from aqueous media using adsorption technique and RH (rice husk) was used as biosorbent. Optimization of different parameters like pH, contact time, sorbent dose and temperature was also carried out and the salts effect was also investigated in this study. Biosorbent composites were prepared for the comparative study and to increase the removal capacity. The rate and feasibility of adsorption process was investigated by kinetic and thermodynamic study of the data. Data was analyzed by regression model. **Results:** It was observed that for native rice husk and polypyrrole composite maximum adsorption was achieved at 4 pH value and other composites such as polyaniline and Na-alginate/RH demonstrated the best results at 5 and 6 pH respectively. The optimum biosorbent dosage and temperature for native and all three composites of rice husk was 0.05 g and 30°C respectively. The best fitted thermodynamic model was Langmuir isotherms based on the supposition that the saturated adsorbate (naphthalene) was stopped across the surface and process energy also becomes constant. The Langmuir isotherm, pseudo first-order and pseudo-second-order kinetic model best explained the naphthalene adsorption onto polymeric biocomposites. Thermodynamic parameters revealed the endothermic and spontaneous adsorption nature of naphthalene. **Conclusion:** From results, it was concluded that polymeric composites has potential for the adsorption of naphthalene and can be used for the removal of organic pollutants from industrial effluents.

Keywords: Biosorbent Composites, Naphthalene Biosorption, Rice Husk, Organic Pollutants, Biocomposites, Polycyclic Aromatic Hydrocarbon



Assessment of Entomopathogenic *Metarhizium anisopliae* Combined Effect with Some Botanical Extracts Against Aphid Infestation on Different Wheat Varieties

Presenter

Ms. Hina Kiran
University Of Agriculture,
Faisalabad, Pakistan

 **Live DNA**
92.28405

Type

Poster Presentation

Track

Environmental
Sciences

Location

ADL 5i X]rcf] a

Kiran H., Ahmed N., Muhammad Z. S., Muhammad U. A. and Namra S.

Department of Entomology, Faculty of Agriculture, University Of Agriculture, Faisalabad, Pakistan

Abstract

Wheat aphid is serious damaging insect pest of wheat and usually known as plant lice. Insecticides are mostly used to control this devastating pest. But these chemicals have hazardous effect on environment as well as on public health. Therefore, approaches for the use of biological control are being encouraged. This study was conducted to evaluate the effect of *Metarhizium anisopliae* alone and in combination with some plant extracts (Neem, Garlic and Aak) against wheat aphid. Experimental trials were conducted in pots with ten treatments each having three replications. The treatments included *M. anisopliae* (1*10⁸ conidia/ml), Neem, Aak, Garlic 5 percent each. Three different varieties of wheat (Faisalabad 2008, Galaxy 2013, Ujala 2015) were sown in Entomological research area University of Agriculture, Faisalabad. In first experiment, only seed dressing of wheat varieties was done with *M. anisopliae* alone and in combination with botanicals. In second experiment, after seed treatment, the foliar spray of same treatments was used once after 20-25 days of germination. All dependent parameters like aphid infestation and morphological characters of plants were subjected suitable statistical analysis. Maximum germination percentage was shown by T1, T3, T7 and T8 in Ujala 2015 as well as by T2 in Galaxy 2013 also by T1 and T8 in Faisalabad 2008 i.e., 100 percent after 10 days of sowing. Maximum control was shown by T2 (*M. anisopliae* and neem) 97.22 percent and T1 (*M. anisopliae*) 96.07 percent in case of aphid infestation reduction in Galaxy 2013. Maximum plant height (cm) was exhibited by T2 (*Metarhizium anisopliae* and Neem) in Galaxy 2013 that was 64.66cm as compared to T6 which exhibited 58cm. While minimum Plant Height was noted in T10 (controlled Treatment) in Ujala 2015 that was 43.66cm. While maximum number of tillers, number of grains, K grain weight and grain size exhibited by T2 i.e., 12.33, 47.33, 46.01g and 0.41cm respectively and T6 showed less effect i.e., 7.33, 37, 42.59g and 0.32cm respectively. This study can affectively help to minimize the wheat aphid infestation without using toxic chemicals.

Keywords: Wheat aphid, plant lice, *Metarhizium anisopliae*, Neem, morphological characters, aphid infestation

04 Conference Track

Computer Science, Engineering & IT

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Session Chairs:



Prof. Ateeq ur Rehman
University of Agriculture, Faisalabad, Pakistan



Dr. Nasir Ahmad
The University of Engineering and Technology
(Faisalabad Campus), Pakistan



ES2019
— EMERGING SCIENTIST —

March 30-31, 2019 | Faisalabad, Pakistan



PROCEEDING Emerging Scientist 2019



Synthesis and Characterization of Nickel Nanostructures Based Cathodic Electrode

Presenter

Prof. Ateeq ur Rehman
University of Agriculture,
Faisalabad, Pakistan



92.27252

Type

Distinguished Speaker

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

¹Rehman A. U., ²Amir R., ³Muhammad A. I. and ⁴Peng W.

¹Physics Department, University of Agriculture, Faisalabad, Pakistan

²Physics Department, COMSATS Institute of Information Technology, Lahore, Pakistan

³Chemistry Department, University of Agriculture, Faisalabad, Pakistan

⁴Physics Department, Shandong University of Science and Technology, Shandong

Abstract

To meet future energy demands, more efficient energy storage devices are required to be developed urgently. In this regards, supercapacitors are one of the main components of electronic circuitry. Capacitors have ability of fast charging and are one of the basic building blocks of various types of electrical circuits, but comparatively have small storage capacity compared to the conventional batteries. In this research work, we present some new nano-material systems which are used for electrochemical supercapacitors. It will be figure out how the material morphology, chemical and physical properties can be modified to provide increased performance. The Ni(OH)₂ nanoparticles has been prepared by using a very simple and economical hydrothermal method. Our electrochemical measurements indicate that the Ni(OH)₂ electrodes exhibit capacitance of 875 F g⁻¹ at current density of 2A g⁻¹ in 2 M KOH electrolyte. The energy density of nickel hydroxide nano-particles is circa 28.2 Wh kg⁻¹ at 0.28 kW kg⁻¹. In addition, its cycling behavior can be achieved 1000 times in 2M KOH electrolyte. This excellent performance demonstrate that Ni(OH)₂ nanoparticles will be of great promise for supercapacitors applied to large power devices such as electric vehicle.

Keywords: Supercapacitors, Ni(OH) Nano-Structures, Capacitance, Current Density, Energy Density



PROCEEDING Emerging Scientist 2019



Vitalizing Education and Research in Pakistani Engineering

Presenter

Dr. Nasir Ahmad
The University of
Engineering and
Technology , Pakistan



Live DNA
92.26046

Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Ahmad N. and Muhammad Z. U. R.

Department of Mechanical, The University of Engineering and Technology (Faisalabad Campus), Pakistan

Abstract

Innovation is of key importance for any society. Most of the innovations are realized through research institutes and universities. Therefore, innovation and engineering education are imperative for sustained development and society. With the constant increase in population, sustainability gets into forefront in societies like ours. What are the goals that should be achieved for sustainable development in the society? What are the hurdles in achieving these goals? What may be the strategies and possible actions for the achievement of an innovative, developed and sustained society? One of the important questions is the lack of planning in various field of life, particularly in education. This paper highlights some of the issues and suggests a few steps in the engineering education system, those may lead to sustainable development in the society.

Keywords: Research and Innovation, Engineering Education, Development, Sustainability, Strategies



PROCEEDING Emerging Scientist 2019



Investigating the Voltage Sags and Swell Issues in Distribution Substation

Presenter

Dr. Mansoor Soomro
Mehran University of
Engineering and
Technology, Pakistan



Live DNA
92.26291

Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Soomro M. A., Waqar A. J. and Zubair A. M.

Department of Electrical Engineering, MUET, Jamshoro, Pakistan

Abstract

Power quality of the electrical power system is affecting either by change of frequency or voltage. The power supply is not directly transmitted to the industrial, commercial and residential consumers. It requires the distribution substation for generally lowering the voltage and increasing the power supply feeders for diversified loads in the vicinity. Distribution feeders are severely affected by the power quality problems. In this scenario, the sudden injection or rejection of heavy electric loads like three phase induction motors, electric furnaces, air conditioners, refrigerators etc. Consequently, the voltage sags and swells arise as short and long interruptions in the electric supply. It is characterized by magnitude, duration and phase angle of the voltage dip. Voltage sag may bring huge economic loss to the normal work of new loads, resulting in severe reduction in the economic efficiency of the power grid. In this research voltage sags and swells are examined by the frequent use of vulnerable load like three phase induction motors installed with the motorized pumping stations of the drainage system. In this paper, the MATLAB/SIMULINK based simulation was performed and the results are observed at various loading conditions for voltage sag and swell detection in 11KV feeders. The test station for the research work was 132KV Substation Qasimabad which falls under the jurisdiction of Hyderabad electric supply company (HESCO).

Keywords: Diversified Loads, Short and Long interruptions, Power Grid, Substation Qasimabad, Hyderabad electric supply company (HESCO)



PROCEEDING Emerging Scientist 2019



Template Assisted Synthesis of Ni Nanorods

Presenter

Dr. Sammia Shahid
University of
Management &
Technology, Pakistan



Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Shahid S.

University of Management & Technology, Johar Town, Lahore, Pakistan

Abstract

Highly ordered one dimensional Ni nano rods were successfully fabricated through a simple and inexpensive method of electro-deposition of commercially available Nickel Nitrate powder $[\text{Ni}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}]$ inside the aluminium template. The aluminium template was prepared in the lab by two step anodization process by using 0.3M oxalic acid solution as an electrolyte and under a constant voltage of 40V. The electro-deposition process was carried out at a constant current density of 10mAcm^{-2} . The morphological and structural properties of grown Ni nanorods were characterized through Scanning Electron Microscopy (SEM), X-Ray Diffraction (XRD) and Atomic Force Microscopy (AFM). The SEM images showed the uniform growth of Ni nanorods and indicated the vertical alignment of nanorods on the aluminium substrate. The diameter of as-prepared Ni nanorods was 40 to 90 nm which is in agreement with the pore diameter of aluminium template. XRD analysis showed the face centered cubic structure of Ni nanorods and verifies the presence of Ni in the template. The topographical study and nano mechanical properties of nanorods were studied using atomic force microscope (AFM). Images taking by AFM indicated the average width and length of Ni nanorods to be 46 nm and 93nm, respectively. Densely assembled and uni-directionally arranged nanorods with diameters 35 nm to 95 nm and lengths of several micrometers are observed. Template directed synthesis of Ni nanorods indicate the suitability of Direct Current (DC) electro-deposition process as a successful route for template filling to synthesize various metal nanostructures.

Keywords: Electro-deposition, Topographical study, Anodization, Aluminium Template Scanning Electron Microscopy



PROCEEDING Emerging Scientist 2019



Mathematical Modeling to Re-Design the Cross-Sections of Irrigation Canal to Mitigate Sedimentation Problem

Presenter

Dr. Shahid Ali
NUCES, FAST, Lahore,
Pakistan

Shahid S., Shahid A. and Muhammad A. A.

Department of Sciences & Humanities and Department of Civil Engineering, National University of Computer & Emerging Sciences (NUCES), Lahore, Pakistan



Live DNA
92.27334

Type

Poster Presentation

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Abstract

Canal-design's objective is to ensure that the deposition of sediments or the erosion of sediments which occur in the canal network should be least. The influx of sediment in the canal arrangement ought to be either transported to the field or stored in particular areas. The BRBD link canal is an unlined channel. The location of falls and head regulators also affect the sedimentation. The design of the canal, using Physics based model resulted a stable cross-section and minimizes sedimentation and scouring. Sediment deposition is one of the main factors which causes hindrance in the canal operation and maintenance. In maintaining a canal bed, the silt or sediment removal is the expensive and laborious work, and also the canal operation has to be halted. The analysis of the results can help us to calculate the volume of the sedimentation and it can also help us to design a canal in which at the start no silting or no scouring condition is achieved, which means that the equilibrium is attained in that cross-section, i.e., the amount of sediment which will enter will equal the same of sediment it will leave the canal. Based on the analysis made on BRBD's current design and working, it is understood that the design of BRBD Link Canal is not an efficient one and when there is a slight fluctuation in the discharge, there are more changes in this deposition and also some scouring can be expected. The new cross-sections were designed by keeping the existing design and its problem regarding sedimentation in mind. By doing modification, the value of sedimentation dropped and the now excessive sedimentation was not observed.

Keywords: Irrigation Canal Design, Sediments in Irrigation Canal, BRBD (Bambawali Ravi Bedian Dipalpur), Simulation



PROCEEDING Emerging Scientist 2019



A Study of Ground Water Quality of Lahore (A Case Study of Allama Iqbal Town) Using GIS Techniques

Presenter

Mr. Amer Masood
University of the Punjab,
Pakistan

¹Masood A., ¹Sarmad U., ²Safder H., ¹Syed A. M., ¹Jahanzeb Q. and ¹Javed S.

¹Remote Sensing Group, Department of Space Science, Quaid-e-Azam Campus, University of the Punjab, Lahore, Pakistan

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Live DNA
92.27120

Type

Oral Presentation

Abstract

Ground water, that is aquifers underneath the earth's surface, is getting one of the country's most vital state resources. The country and city water departments supply approximately 33% of ground water to household and businesses. In the current study we have used GIS techniques for ground water quality analysis (spatial and temporal) for Lahore Metropolitan area (Allama Iqbal Town). GIS undoubtedly is a strong tool to study and conduct spatial and temporal analysis for ground water quality as well as quantity. In the foregoing research, we took twenty of ground water quality samples of the tube wells installed by WASA. Different parameters for example Cl, TDS, pH, Electric Conductivity and Ca of water samples have been examined. By using spatial interpolation technique Inverse Distance Weighted (IDW) we prepared maps of these parameters for our study area. We conducted classification of maps at equal interval standards, which generated five classes for each individual parameter. The analysis of the study marked the areas having contaminated water due to anthropogenic activities. So there is a need to take good steps to improve the quality of the underground water so that it can be used for local usage.

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Keywords: Ground water, Spatial, Temporal, IDW, Contaminated



PROCEEDING Emerging Scientist 2019



Environmentally Sustainable Design of Water Supply and Sewerage System for a Metropolitan Society

Presenter

Mr. Ammar Nasir
Mr. Asad Nawaz,
Mr. Syed Ilyas Ali Shah
Capital University of
Science and Technology,
Pakistan



Live DNA
92.27291

Type

Poster Presentation

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Nawaz A., Syed I. A. S., Ammar N., Ishtiaq H. and Aruba W.

Civil Engineering Department, Capital University of Science and Technology, Islamabad, Pakistan

Abstract

Water is the basic amenity for the survival of living being but continuously exploited since man occupied this earth. With the growing population and urbanization water demand is going to be increased resulting high wastewater generation in result of water consumption, that if not properly collected and disposed can be hazardous for environment as well human being. This study focuses on the planning and design of water supply and sewerage system to achieve sustainable water consumption and wastewater collection and disposal. Primary data was collected by conducting the survey and quantifying the parameters including source of water, population of the area, water demand and wastewater generation for the efficient design of intake structure, distribution networks, waste water collection, transport, treatment and disposal structures, respectively, in order to protect the environment by sustainable water resource management and ultimate disposal of wastewater.

Keywords: Water, Urbanization, Wastewater, Disposal, Sustainable



PROCEEDING Emerging Scientist 2019



Principal Component Analysis Face Recognition Using Wavelet with Fused Comparative Results

Presenter

Mr. M. Danish
PAF - Karachi Institute of
Economics and
Technology, Pakistan



Live DNA
92.27276

Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Danish M.

PAF-Karachi Institute of Economics and Technology, Karachi, Pakistan

Abstract

Face recognition is a problem of image analysis that involves the identification of human faces from a digital still image or a video sequence. The process involved consists of feature extraction, face segmentation, and finally recognition or identification. Moreover the face recognition task is complicated by factors such as variations in facial expressions, illumination changes and the orientation of the face of the subject. Also, affecting the accuracy of identification is the background and the inherent noise present during assessment of images. Therefore, in the past era, different researchers wrote different research paper in addition to contribute their effort and conclusion in the field of image processing to enhance the efficiency of different image processing algorithm. Such as PCA, PCA is being used extensively in face recognition, feature extraction and for the dimensional compression of different images. In this paper named Robust Principal Component Analysis Face Recognition using Wavelet with Fused Comparative Results with Application. Here I begin with applying principal component analysis (PCA) algorithm on different standard face databases, moreover implement the resultant PCA on different family member of wavelet digital signal processing and image compression tool then fused all the results with different normalizing techniques. Thus, it will ensure to construct a more robust and efficient PCA algorithm technique to get enhanced results of face recognition with variations in facial expressions, different orientation and illumination changes by applying different experiments, calculations and applications, also apply the techniques which make the image database will be safe and secure.

Keywords: Image processing, Principal component analysis, Wavelet transforms, Feature extraction, Face detection, Face recognition, Similarity measurement, Normalization techniques, Fusion techniques



PROCEEDING Emerging Scientist 2019



Online Teaching with Real Time Communication

Presenter

Mr. Muhammad
Abdullah
Air University, Pakistan



Live DNA
92.27401

Type

Poster Presentation

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Rehman H. U., Muhammad A., Usama S. and Imran I.

Air University, Pakistan

Abstract

Our main focus will be on real time communication where multiple of users will be able to listen to a lecturer through video conferencing and those listeners will be able to communicate and ask direct question from the lecturer during or at the end of the lecture. In some cases if someone is unable to attend the live lecture then the recorded video of the live lecture.

Project Features: Video Conferencing; One-to-One Video Call; Group Chatting; Screen Sharing; File Sharing; Recording

Keywords: E-learning, Collaborative Learning, Basics of WebRTC, Group Calling Architecture of WebRTC



PROCEEDING Emerging Scientist 2019



A Review for Decision System in Health Care for Heart Diseases Using Data Mining and Its Techniques

Presenter

Mr. Muhammad
Shahwaiz Hasan
PAF - Karachi Institute of
Economics and
Technology, Pakistan

 **Live DNA**
92.27278

Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Hasan M.S.

PAF-Karachi Institute of Engineering and Technology, Karachi, Pakistan

Abstract

Data Mining is one of the most motivating area of research that analyzing massive volume of data and helps to solve a problems, mitigate risks and opens a new option. Nowadays, health diseases are increasing day by day due to life style and unhygienic atmosphere. Especially, heart disease has become more common during these days. For this purpose, as analyzing of previous surveys and proposed systems that introduces and reviews many of the Techniques and approaches related to heart disease with in a boundary of healthcare. This paper is analyzed prediction systems for Heart disease and give some feedback about different classification techniques based on the human factors for example (blood groups, age, gender, cholesterol etc.) using Some techniques such as Naive Bayes, KNN, Decision Tree Algorithm, and Neural Network and furthermore enlist some open source prediction system software's in the healthcare domain at last It also highlights challenges and future work of Data Mining in healthcare.

Keywords: Datamining, Healthcare, Heart disease prediction, Datamining techniques



PROCEEDING Emerging Scientist 2019



Analyzing Pre-Published Research Articles

Presenter

Mr. Muhammad Umar
Nawaz
Air University, Pakistan

Ihsan I., Shahzaib T., Muhammad U. N. and Syed M. T. M.

Air University, Islamabad

 **Live DNA**
92.27254

Type

Poster Presentation

Abstract

Scientific Research is being carried out across the globe in numerous fields. Evaluation of a scientific research in a scholarly big data is reliant on bibliometric indicators or citations. For these indicators to work, the scientific research has to be published and indexed. The conferences and journals do not have such bibliometric indicators to measure the quality of a submitted research paper. Therefore, there is a need of an analytic system that can easily and quickly measure the quality of an un-published research paper before it goes in review process. This research paper defines an analytic scheme to measure the quality of a research paper by measuring the quality of references used within the paper. References are a list of sources that represents the best documents selected by the author to layout the foundation of his/her research paper. Thus, an initial check on the quality of references, selected by the author, can provide a valid indication about the submitted paper. The scheme measures the quality of references using the bibliometric indicators or citations, collected from different corpora such as Google Scholar, of the referenced and published work. For experiment, we have taken all the research papers from a local IEEE conference held in 2017 and evaluated each paper on the proposed analytic scheme and classifying them in high, medium and low impact papers.

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Keywords: Scientific Research, Scholarly Big Data, Bibliometric Indicators, Analytical Schemes



PROCEEDING Emerging Scientist 2019



Virtual Reality Used for the Education of Children (Special Children)

Presenter

Mr. Saad Ali Asif
PAF - Karachi Institute of
Economics and
Technology, Pakistan



Live DNA
92.27273

Type

Oral Presentation

Track

Computer Science,
Engineering & IT

Location

Meeting Room 3 - ADL

Asif S. A.

PAF - Karachi Institute of Economics and Technology, Karachi, Pakistan

Abstract

At least 20 million people in Pakistan have disabilities, making that 10 per cent of the country's population. These handicap children faces extreme problems in getting education. Virtual reality had made life easy and fast in doing every day's tasks. Virtual reality will help these children get education. In this research paper we will discuss the reviews about the problems accorded in the education of disable children. And how to meet the solution of these problems using Virtual reality technology.

Keywords: Virtual Reality Education, Education of Special Childern



PROCEEDING Emerging Scientist 2019



Use of Geo-spatial and BIM Technology for Artificial Groundwater Recharge: Case study of Islamabad

Presenter

Mr. Sharjeel Ismail
COMSATS University
Islamabad (Wah
Campus), Pakistan



Type

Poster Presentation

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Maqsoom A., Sharjeel I., Bilal A., Asim E. and Hassan B.R.

COMSATS University Islamabad, Wah Campus, Quaid i Azam University, Islamabad, Pakistan

Abstract

Water resource management is one of the biggest problems in current world as ground water is depleting rapidly with increase in population and water demand. Pakistan, among the other developing countries, is severely affected by this problem. Hence, to preserve groundwater it is mandatory to increase its recharging capacity. Previous literature suggests the use of Remote Sensing and Geographical Information System (RSGIS) in order to identify the potential groundwater recharge zones. The aim of this research is to identify the potential groundwater recharge zones using AHP technique in GIS environment. Currently, the research has almost achieved this objective and work is in process for the next objective i.e. to identify possible structures to recharge major zones in order to enhance the groundwater capacity. For this objective, authors are working on development of 3D model using BIM tool of recharge structures for recharging ground water table. GIS method used in our research proves to be efficient techniques in terms of cost and time. Geographical context makes it easier to understand the challenges faced by the field service teams and helps in better decision making on personnel and equipment deployment. The outcome of this research will provide a baseline for future water management research. Also, method applied in this research can be treated as a standard and can be applied to other water scarcity areas by adding the local information and data. Further, the benefits of using building information modeling (BIM) for groundwater recharge structure design have been well publicized and are fuelling its adoption rate amongst architects worldwide transforming their drawing-based processes.

Keywords: Water Resource Management, Remote Sensing, Geographical Information System, Groundwater Capacity



PROCEEDING Emerging Scientist 2019



Pharmaceutical Semantic Search Engine

Presenter

Mr. Sheheryar Ali
Air University, Islamabad

Ihsan I., Talha L. and Sheheryar A.

Air University, Islamabad, Pakistan

 **Live DNA**
92.27255

Type

Poster Presentation

Abstract

Biomedical information is developing at an unbelievable pace and requires considerable aptitude to arrange information in a way that makes it effortlessly findable, open, interoperable and reusable. Massive effort has been devoted to using Semantic Web standards and technologies to create a network of Linked Data for the life sciences, among others. In the pharmaceutical field, because of the enormous number and extensive variety of the medications available, a viable semantic recovery framework can bring great convenience to doctors and pharmacists. However, for doctors who have no background knowledge of semantic technologies, to write formal semantics search statement is still very difficult. Therefore, we propose a semantic AI based user friendly interface for querying Bio2RDF linked open data using natural language processing

Track

Computer Science,
Engineering & IT

Location

ADL Auditorium

Keywords: Semantic Web Standards, Linked Data, Viable Semantic Recovery Framework, Bio2RDF

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